BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION

AT NEW DELHI

PETITION NO. _____/GT/2025

IN THE MATTER OF: *Petition filed under Sections 62 and 79 of the Electricity Act, 2003, read with Regulation 15(a) of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 seeking:*

1. ***Truing up*** *of the generation tariff for the period FY 2019-20 to FY 2023-24 under Regulation 13 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 and Regulation 12 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).*
2. ***Determination*** *of the generation tariff for the period FY 2024-25 to FY 2028-29, under Regulation 10 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).*

AND

IN THE MATTER OF:

Maithon Power Limited ...Petitioner

Versus

Tata Power Delhi Distribution Limited & Ors. ...Respondents

INDEX

S. NO.	PARTICULARS	PAGES
1.	Index	**1-13**
2.	Memo of Parties	**14-15**
3.	Petition on behalf of Maithon Power Limited for Truing up of Tariff for the Period 01.04.2019 to 31.03.2024 and determination of Tariff for Maithon Right Bank Thermal Power Project for the period 01.04.2024 to 31.03.2029 with Affidavit.	**16-348**

4.	**ANNEXURE-P/1** A copy of the Order dated 08.01.2022 passed in Petition No. 408/GT/2020.	**349-526**
5.	**ANNEXURE-P/1A** A copy of the Review Order dated 13.12.2022 passed in Petition No. 4/RP/2022.	**527-540**
6.	**ANNEXURE-P/2** Tariff formats as prescribed by the Hon'ble Commission for 2019-24 Tariff Period.	**541-686**
7.	**ANNEXURE-P/3** Tariff formats as prescribed by the Hon'ble Commission for 2024-29 Tariff Period.	**687-740**
8.	**ANNEXURE-P/4** Audited financial statements for each of the Financial years during 2019-24 Tariff Period.	**741-1008**
9.	**ANNEXURE-P/5** A copy of Auditor's Certificate certifying package/ scheme wise addition to Property Plant and Equipment (PPE) & Right of Use Assets (ROU) for financial years ended 2019-20 to 2023-24.	**1009-1014**
10.	**ANNEXURE-P/6A (COLLY.).** A detailed account of the progress and reasons for the delay with respect to each parcel of land.	**1015-1079**
11.	**ANNEXURE-P/6B** A copy of the detailed Cost-Benefit Analysis and underlying calculations in relation to retaining wall construction.	**1080**
12.	**ANNEXURE-P/7A** A copy of the Eastern Railway's Letter No L/Lease License/19 Dated 09.04.2019 regarding renewal of land license and consequential fees.	**1081**
13.	**ANNEXURE-P/7B (COLLY).** A copy of the Lease Agreement dated 14.05.2010 alongwith copy of DVC bill of Rs. 324.07 lakh dated 29.10.2021.	**1082-1101**
14.	**ANNEXURE-P/7C** A copy of DVC bill of Rs. 220.55 lakh dated 11.09.2023.	**1102-1107**

15.	**ANNEXURE-P/8A (COLLY.).** A copy of the Letters dated 22.09.2020, 30.11.2020 and 18.12.2020 written by the Petitioner to local administration for providing support for carrying out the construction work.	**1108-1110**
16.	**ANNEXURE-P/8B (COLLY.).** True copies of the Orders dated 13.08.2020, 09.02.2021 and 30.03.2021 issued by MNRE.	**1111-1114**
17.	**ANNEXURE-P/8C** A true copy of the Report of ISM.	**1115-1120**
18.	**ANNEXURE-P/8D** A true copy of the Petitioner's letter dated 02.03.2021 to the Senior Divisional Commercial Manager, Eastern Railway.	**1121**
19.	**ANNEXURE-P/8E (COLLY).** True copies of the Orders dated 12.05.2021, 29.06.2021 and 15.09.2021 issued by MNRE.	**1122-1126**
20.	**ANNEXURE-P/8F** A true copy of Letter dated 10.05.2021 issued by Commissioner of Railway Safety, Eastern Circle.	**1127-1128**
21.	**ANNEXURE-P/8G** A true copy of Certificate dated 04.06.2021 for Track Fitness of Private Railway Siding under Asansol Division to serve the Generating Station.	**1129**
22.	**ANNEXURE-P/8H** A true copy of Eastern Railway sanction dated 18.08.2021.	**1130**
23.	**ANNEXURE-P/8I** A true copy of EIG sanction dated 31.08.2021.	**1131**
24.	**ANNEXURE-P/8J** A true copy of EIG sanction dated 31.08.2021.	**1132-1133**
25.	**ANNEXURE-P/8K (COLLY.).** A true copy of Joint Note for Engine Trial/OHE.	**1134-1137**
26.	**ANNEXURE-P/8L** A true copy of joint Compliance Report dated 18.09.2021.	**1138**

27.	**ANNEXURE-P/8M** A true copy of letter dated 06.10.2021.	**1139**
28.	**ANNEXURE-P/8N** A true copy of Letter dated 11.10.2021.	**1140**
29.	**ANNEXURE-P/8O** A true copy of Joint note dated 23.11.2021.	**1141**
30.	**ANNEXURE-P/8P** A true copy of provisional opening of Siding Notification dated 08.03.2022.	**1142**
31.	**ANNEXURE-P/8Q** A true copy of receipt confirmation letter dated 14.03.2022.	**1143**
32.	**ANNEXURE-P/8R** A true copy of the MoM dated 26.11.2021 issued for the meeting dated 24.11.2021.	**1144-1145**
33.	**ANNEXURE-P/8S** A true copy of the letter dated 26.11.2021 issued by Petitioner to Eastern Railway.	**1146-1150**
34.	**ANNEXURE-P/8T** A true copy of the Letter dated 03.12.2021 issued by DRM, Eastern Railway, Asansol.	**1151-1153**
35.	**ANNEXURE-P/8U** A true copy of GCT Policy 2021.	**1154-1229**
36.	**ANNEXURE-P/8V** A true copy of the Letter dated 05.01.2022 issued by Railway Board.	**1230**
37.	**ANNEXURE-P/W (COLLY.).** A true copy of Letter dated 25.01.2022 issued by Chief Transmission Planning Manager, Eastern Railway and GCT Policy 2021.	**1231-1275**
38.	**ANNEXURE-P/8X** A true copy of Letter dated 27.01.2022 written by the Petitioner to DRM, Eastern Railway, Asansol.	**1276**
39.	**ANNEXURE-P/8Y** A true copy of Letter dated 27.01.2022 written by DRM to the Petitioner.	**1277**

40.	**ANNEXURE-P/8Z** A true copy of Letter dated 28.01.2022 issued by the Petitioner to DRM, Eastern Railway.	**1278-1279**
41.	**ANNEXURE-P/8AA** A true copy of the Letter dated 28.01.2022 issued by the Petitioner.	**1280-1282**
42.	**ANNEXURE-P/8AB (COLLY.).** A true copy of Undertaking and MoA dated 16.02.2022.	**1283-1300**
43.	**ANNEXURE-P/8AC (COLLY.)** A true copy of Circular/Commercial Notification dated 22.02.2022 and FOIS message dated 22.02.2022.	**1301-1303**
44.	**ANNEXURE-P/8AD** A true copy of Circular dated 07.03.2022 issued by Railway Board.	**1304**
45.	**ANNEXURE-P/8AE** A true copy of Circular dated 08.03.2022 issued by Eastern Railway.	**1305**
46.	**ANNEXURE-P/8AF** A true copy of Letter dated 14.03.2022 issued by the Petitioner to Divisional Railway.	**1306**
47.	**ANNEXURE-P/8AG** A true copy of the Model Agreement issued by Railway Board on 07.07.2022.	**1307-1350**
48.	**ANNEXURE-P/8AH** A true copy of letter dated 04.08.2022 issued by Senior Divisional Commercial Manager, Eastern Railway.	**1351**
49.	**ANNEXURE-P/8AI** A copy of the summary of Capital Cost for Railway Project and corresponding Annual Fixed Charges under both the Scenarios.	**1352-1354**
50.	**ANNEXURE-P/9 (COLLY.).** True copies of the OEM letters dated 09.09.2019, 11.12.2020, 15.12.2020 and 09.07.2022 certifying the end of life/ obsolescence of the batteries.	**1355-1360**
51.	**ANNEXURE-P/10A** A true copy of Certificate of Obsolescence dated 05.09.2019 from the OEM for the CHP PLC upgradation.	**1361-1363**

52.	**ANNEXURE-P/10B** A true copy of the Compatibility Certificate dated 15.12.2021 for the Stacker Reclaimer PLC upgradation.	**1364**
53.	**ANNEXURE-P/11** A true copy of the Letter of obsolescence from OEM.	**1365-1366**
54.	**ANNEXURE-P/12A** A copy of the latest email communication dated 08.06.2022 from the supplier regarding the delivery delay.	**1367-1369**
55.	**ANNEXURE-P/12B** Supporting document to demonstrate the obsolescence or unavailability of spare parts and service support of screw compressors.	**1370**
56.	**ANNEXURE-P/13** A copy of the OEM recommendations dated 10.01.2022 as per the directions of Hon'ble Commission.	**1371**
57.	**ANNEXURE-P/14A** A copy of the said Obsolescence Certificate dated 10.06.2022 from the OEM.	**1372**
58.	**ANNEXURE-P/14B (COLLY.).** Copies of communications from the supplier regarding delivery challenges.	**1373-1376**
59.	**ANNEXURE-P/14C (COLLY.).** Copies of MoM dated 27.10.2022 and CEA direction on meeting dated 07.11.2023.	**1377-1381**
60.	**ANNEXURE-P/15** A copy of Notification dated 18.11.2009 relating to AAQI standard requirement issued by CPCB.	**1382-1383**
61.	**ANNEXURE-P/16** A copy of OEM's recommendation dated 13.06.2018.	**1384**
62.	**ANNEXURE-P/17** A copy of the Cyber Security in Power Sector Guidelines, 2021 issued by CEA.	**1385-1408**
63.	**ANNEXURE-P/18** A true copy of the obsolescence certificate dated 12.05.2021 pertaining to HMI.	**1409**

64.	**ANNEXURE-P/19** A copy of the obsolescence certificate dated 12.05.2021 from OEM.	**1410**
65.	**ANNEXURE-P/20A** A copy of the Central Ground Water Authority (CGWA) Norms dated 24.09.2020.	**1411-1412**
66.	**ANNEXURE-P/20B (COLLY.)** Copies of various correspondences exchanged with DVC regarding water supply.	**1413-1423**
67.	**ANNEXURE-P/20C** A true copy of the Agreement dated 15.05.2023 executed between Petitioner and DVC.	**1424-1445**
68.	**ANNEXURE-P/21** A copy of National Water Policy 2012 (relevant pages).	**1446-1447**
69.	**ANNEXURE-P/22A** A true copy of the MoM dated 11-12.11.2016 of meeting with BHEL.	**1448-1450**
70.	**ANNEXURE-P/22B** A true copy of MOM dated 13-14.06.2018 of meeting with BHEL.	**1451-1452**
71.	**ANNEXURE-P/23A** A copy of data on leakage and outage days.	**1453-1456**
72.	**ANNEXURE-P/23B** A true copy of the Report of Safety Audit dated 16-19.03.2021 conducted by National Safety Council.	**1457-1558**
73.	**ANNEXURE-P/24** A true copy of the obsolescence certificate dated 06.05.2022.	**1559**
74.	**ANNEXURE-P/25 (COLLY.).** A copy of the Lists of replaced switches at Petitioner's Plant and Notice of End of Sale and End of Life Announcement (for switches of four different series to be replaced) from the manufacturer.	**1560-1651**
75.	**ANNEXURE-P/26** A copy of the Letter dated 09.12.2019 of recommendation by OEM, M/S Shinkawa.	**1652**

76.	**ANNEXURE-P/27 (COLLY.).** A copy of the Guidelines for in-use Generator sets (Noise and Emission) issued by CPCB and a copy of Hon'ble National Green Tribunal's Order dated 11.03.2015.	**1653-1661**
77.	**ANNEXURE-P/28 (COLLY.).** A true copy of the relevant pages of the Notifications dated 06.03.2020 and 20.04.2020 issued by the Ministry of Transport and Highways along with Order dated 27.03.2020 passed by the Hon'ble Supreme Court.	**1662-1667**
78.	**ANNEXURE-P/29** A true copy of the IS Code 3034.	**1668-1685**
79.	**ANNEXURE-P/30** A copy of the Letter dated 30.03.2021 from CIF.	**1686**
80.	**ANNEXURE-P/31A** A copy of the Letter dated 24.01.2024 issued by the Chief Inspector of Factories.	**1687**
81.	**ANNEXURE-P/31B** A copy of Report of Safety Audit dated 14th – 15th June, 2024.	**1688-1748**
82.	**ANNEXURE-P/31C** A copy of the said directions dated 16.01.2021 issued by the Office of Chief Inspector.	**1749**
83.	**ANNEXURE-P/31D** A copy of recommendation letter dated 13.09.2022 issued by the Government approved third party agency.	**1750**
84.	**ANNEXURE-P/32** A copy of the Letter dated 14.02.2018 issued by POSOCO.	**1751**
85.	**ANNEXURE-P/33** A copy of the Auditor's Certificate certifying the details of decapitalization of Property, Plant & Equipment (PPE) during financial years 2019-20 to 2023-24 for the Petitioner Generating Station.	**1752-1763**
86.	**ANNEXURE-P/34 (COLLY.)** A copy of the Auditor's Certificate certifying the scheme wise closing UDL for the years 2019-20 to 2023-24 for the Petitioner's Generating Station.	**1764-1773**

87.	**ANNEXURE-P/35A (COLLY.).** A copy of the Auditor certificates certifying the quarterly Capital Work in Progress and Capital Advances for the period FY 2019-20 to FY 2023-24 for Capex Schemes with segregated closing balances for Railway System, FGD, Schemes other Railway Package etc.	**1774-1782**
88.	**ANNEXURE-P/35B** A copy of the Computation of Normative IDC for Capex Schemes (excluding Railway).	**1783**
89.	**ANNEXURE-P/36A (COLLY.).** Auditor certificates certifying quarterly Capital Works in Progress and Undischarged liabilities for the period since inception to March'22 for Railway Package.	**1784-1787**
90.	**ANNEXURE-P/36B** Computation of Normative IDC for Railway System.	**1788**
91.	**ANNEXURE-P/37A** A copy of the Auditor's Certificate certifying the loan movement with interest for the years 2019-20 to 2023-24 for the Petitioner's Generating Station.	**1789-1792**
92.	**ANNEXURE-P/37B (COLLY.).** Copies of the supporting documents of the cost of refinancing of Rs. 429.18 Lakh.	**1793-1798**
93.	**ANNEXURE-P/38** A copy of the Certificate from Statutory Auditors dated 12.12.2024 regarding Gross Block of the Assets as per depreciation schedule in Tariff Regulations 2019 for financial years of the Tariff Period 2019-24.	**1799-1803**
94.	**ANNEXURE-P/39A (COLLY.).** A true copy of the Letters dated 01.06.2017, 25.05.2017, 10.04.2017 and 26.09.2019.	**1804-1816**
95.	**ANNEXURE-P/39B** A true copy of the Report dated 09.10.2024 on performance test of boiler (Report No. CPRI/ERED/EA/225/24) conducted by Central Power Research Institute (CPRI).	**1817-1837**
96.	**ANNEXURE-P/39C (COLLY.).** A copy of the Letters dated 17.03.2023 issued by the Petitioner to beneficiaries respectively for seeking consent of the beneficiaries.	**1838-1843**

97.	**ANNEXURE-P/39D (COLLY.).** A copy of the Replies received from beneficiaries denying the consent for procurement of the imported coal.	**1844-1848**
98.	**ANNEXURE-P/39E** A copy of the table showing such difference/comparison of approved SHR between various thermal generating stations.	**1849**
99.	**ANNEXURE-P/40A** A copy of correspondences exchanged with DVC regarding raw water charges.	**1850-1854**
100.	**ANNEXURE-P/40B** A copy of the Auditor Certificate for O&M Expenses covering water charges, security expenses and Ash Disposal Expenses.	**1855-1858**
101.	**ANNEXURE-P/41A (COLLY.).** Copies of all the communications regarding the issue of disposal of ash.	**1859-1866**
102.	**ANNEXURE-P/41B (COLLY.).** Sample copy of Advertisements published in newspapers seeking for the interested bidders regarding.	**1867-1870**
103.	**ANNEXURE-P/42** A copy of the Email dated 06.05.2022 issued by OEM.	**1871-1873**
104.	**ANNEXURE-P/43** A copy of the correspondences exchanged between BHEL and the Petitioner regarding Turbine Bearing set.	**1874-1877**
105.	**ANNEXURE-P/44A (COLLY.).** A list of equipment along with available Certificate of Obsolescence issued by OEM in respect of Chemical Laboratory instruments.	**1878-1879**
106.	**ANNEXURE-P/44B** A copy of the list of calibration equipment.	**1880-1881**
107.	**ANNEXURE-P/45** A copy of the quotation given by the new supplier (Krishna Belt Pvt Ltd.).	**1882-1883**

108.	**ANNEXURE-P/46** A copy of the Report issued by the Exide Industries Limited dated 20.04.2023.	**1884-1885**
109.	**ANNEXURE-P/47** A copy of BHEL's Instruction Manual for O&M of Indoor Vacuum Switch Gear (relevant pages) showing life expectancy of 20000 switching operations.	**1886**
110.	**ANNEXURE-P/48** A copy of the GE Manual (relevant pages).	**1887**
111.	**ANNEXURE-P/49** copies of the Emails exchanged with OEM in respect of testing equipment for electrical equipment.	**1888-1890**
112.	**ANNEXURE-P/50** A copy of the IS 2190:2010 standard specifying life of CO2 extinguisher as 25 years (relevant pages).	**1891**
113.	**ANNEXURE-P/51** a copy of the CISCO's Obsolescence Notice of existing CISCO network switches.	**1892-1895**
114.	**ANNEXURE-P/52** A copy of the CEA Guideline 2021 (relevant pages) along with Grant Thornton's Audit Report dated 24.02.2023.	**1896-1902**
115.	**ANNEXURE-P/53A** A copy of the OEM letter dated 23.05.2022 on obsolescence of software.	**1903**
116.	**ANNEXURE-P/53B** A copy of Email Communication dated 01.03.2024 for obsolescence of Hardware.	**1904-1906**
117.	**ANNEXURE-P/54 (COLLY.)** Copies of the End of Sale Announcement/ Discontinuation/ Obsolescence documents of AP-10 and RV-100 services hardware/software.	**1907-1908**
118.	**ANNEXURE-P/55 (COLLY.)** Copies of the Obsolescence Letter dated 12.05.2021 and obsolescence letter dated 01.01.2024 issued by the respective OEM.	**1909-1910**
119.	**ANNEXURE-P/56** A copy of the OEM Letter dated 15.04.2024.	**1911**

120.	**ANNEXURE-P/57** A copy of the Heroin and Norgren (OEM) Recommendation dated 10.08.2022.	**1912**
121.	**ANNEXURE-P/58A** A copy of Recommendation Letter for obsolescence and upgradation of HMI-Max Stations dated 23.05.2022.	**1913**
122.	**ANNEXURE-P/58B** Copy of audit report conducted for Unit 1 dated 24.01.2023 and for Unit 2 dated 01.08.2023.	**1914-1920**
123.	**ANNEXURE-P/59** A copy of E-Mail communication dated 06.05.2022 regarding SCADA.	**1921**
124.	**ANNEXURE-P/60A** Copies of relevant Communication.	**1922-1923**
125.	**ANNEXURE-P/60B** A copy of the Minutes of 862nd Meeting of Sub-Group (IPPs) constituted by Infrastructure Constraints Review Committee dated 25.10.2024.	**1924-1929**
126.	**ANNEXURE-P/60C** A copy of MoP's Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants.	**1930-1932**
127.	**ANNEXURE-P/60D** A copy of Quotation dated 11.11.2020 issued by Elecon.	**1933-1954**
128.	**ANNEXURE-P/60E** A copy of Quotation received through Email dated 27.01.2025 issued by Thysssenkrupp India Ltd.	**1955-1956**
129.	**ANNEXURE-P/61A** A copy of JSPCB's Letter dated 13.03.2024.	**1957-1958**
130.	**ANNEXURE-P/61B** A copy of Solid Waste Management Rules, 2016 (dated 08.04.2016) (relevant pages).	**1959-2000**
131.	**ANNEXURE-P/62** A copy of the Communication dated 04.07.2023 issued by M/s CCI.	**2001**

132.	**ANNEXURE-P/63** A copy of the Railway Standards for Railroad Level Crossing (dated 1999) (relevant pages).	**2002-2010**
133.	**ANNEXURE-P/64** Detailed working for Decapitalization for the proposed Capital Expenditure Schemes.	**2011**
134.	**ANNEXURE-P/65 (COLLY.)** Calculation of projected Ash Disposal Expenses under both the Scenarios i.e. with and without having such Additional Capital Expenditure.	**2012-2013**
135.	**ANNEXURE-P/66** OEM Recommendation *vide* Email dated 08.02.2024.	**2014**
136.	**ANNEXURE-P/67** A copy of the Report (relevant pages) issued by the OES (M/s Siemens Ltd. India).	**2015-2018**
137.	**ANNEXURE-P/68** A copy of the relevant pages of OEM's recommendations.	**2019-2020**
138.	Vakalatnama along with Authorization.	**2021-2026**
139.	Form-1	**2027-2029**
140.	Proof of Service	**2030-2034**

FILED BY



SKV LAW OFFICES
Advocates for the Petitioner
B-50, Defence Colony, New Delhi-110024
Phone: 011-47099999
Email: lawyers@skvlawoffices.com

Place: New Delhi
Date: 26.02.2025

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION

AT NEW DELHI

PETITION NO. _____/GT/2025

IN THE MATTER OF: *Petition filed under Sections 62 and 79 of the Electricity Act, 2003, read with Regulation 15(a) of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 seeking:*

1. ***Truing up*** *of the generation tariff for the period FY 2019-20 to FY 2023-24 under Regulation 13 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 and Regulation 12 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).*
2. ***Determination*** *of the generation tariff for the period FY 2024-25 to FY 2028-29, under Regulation 10 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).*

AND IN THE MATTER OF:

Maithon Power Limited ...Petitioner

Versus

Tata Power Delhi Distribution Limited & Ors. ...Respondents

MEMO OF PARTIES

IN THE MATTER OF:

Maithon Power Limited
Through its CFO
Having its registered office at Corporate Center,
34 Sant Tukaram Road, Carnac Bunder, Mumbai,
Maharashtra- 400009 ...Petitioner

Versus



1. Tata Power Delhi Distribution Limited,
NDPL House, Hudson Lines,
Kingsway Camp, Delhi-110 009,

2. Damodar Valley Corporation,
DVC Towers, 1st Floor Commercial, VIP Road,
Kolkata, West Bengal-700054

3. West Bengal State Electricity Distribution Company Limited,
Vidyut Bhavan, Block-DJ,
Sector-II, Salt Lake, Kolkata-700091,
West Bengal-700091

4. Kerala State Electricity Board Limited
Tariff Regulatory and Affairs Cell,
Vydyuthi Bhavan, KSEB Ltd.,
Thiruvananthapuram, Kerala-695004

5. Tata Power Trading Company Ltd.
B-12/13, Sector 4, 2nd Floor, Noida ,
NOIDA (Gautam Budh Nagar),
Uttar Pradesh – 201301 ...Respondents

FILED BY

SKV LAW OFFICES
Advocates for the Petitioner
B-50, Defence Colony, New Delhi-110024
Phone: 011-47099999
Email: lawyers@skvlawoffices.com

Place: New Delhi
Date: 26.02.2025

MAITHON POWER LIMITED

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION

AT NEW DELHI

PETITION NO. _____/GT/2025

IN THE MATTER OF: *Petition filed under Sections 62 and 79 of the Electricity Act, 2003, read with Regulation 15(a) of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 seeking:*

1. ***Truing up** of the generation tariff for the period FY 2019-20 to FY 2023-24 under Regulation 13 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 and Regulation 12 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).*
2. ***Determination** of the generation tariff for the period FY 2024-25 to FY 2028-29, under Regulation 10 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).*

AND

IN THE MATTER OF:

Maithon Power Limited ...Petitioner

Versus

Tata Power Delhi Distribution Limited & Ors. ...Respondents

PETITION ON BEHALF OF MAITHON POWER LIMITED FOR TRUING UP OF TARIFF FOR THE PERIOD 01.04.2019 TO 31.03.2024 AND DETERMINATION OF TARIFF FOR MAITHON RIGHT BANK THERMAL POWER PROJECT FOR THE PERIOD 01.04.2024 TO 31.03.2029.

A. EXECUTIVE SUMMARY OF THE PETITION

A.I. BRIEF BACKGROUND OF THE PETITIONER

1. Maithon Power Limited ("**MPL**"/"**Petitioner**"), a Generating Company within the meaning of Section 2(28) of the Electricity Act, 2003 ("**Act**"), is a 74%-26% joint

venture between the Tata Power Company Ltd. ("**Tata Power**") and Damodar Valley Corporation ("**DVC**"/"**Respondent No.2**"). The Petitioner has set up and operates the Maithon Right Bank Thermal Power Project in Jharkhand ("**MRBTPP**" or "**Station**" or "**Project**") with an installed capacity of 1050 MW (2x525 MW).

A.II. BRIEF BACKGROUND OF THE RESPONDENTS

2. The Respondents are the beneficiaries of the Petitioner. Notably, the Petitioner had executed a long-term Power Purchase Agreements ("**PPA**") with DVC and Kerala State Electricity Board Limited (**"KSEBL"/ "Respondent No.4"**), for supply of 300 MW and 150 MW, respectively. Subsequently, DVC's share of 300 MW was revised to 150 MW following surrender of 150 MW by DVC and KSEBL share was revised to 300 MW from 150 MW consequent to fresh tie-up of the surrendered quantum with KSEBL.

3. The remaining 600 MW capacity has been tied up with the Tata Power Trading Company Ltd. (**"TPTCL"/ "Respondent No.5"**) which in turn has entered into a back to back arrangement through Power Sale Agreement ("**PSA**") with Tata Power Delhi Distribution Ltd (**"TPDDL"/ "Respondent No.1"– formerly known as NDPL**) and West Bengal State Electricity Distribution Company Ltd. (**"WBSEDCL"/ "Respondent No.3"**), for 300 MW capacity each. As on date, the long-term Power Sale arrangement for the station is as shown below:

(a) 150 MW with Respondent No. 2, i.e. DVC, vide PPA dated 28.09.2006 read with Supplementary Agreement dated 24.01.2017.

(b) 300 MW with Respondent No. 1, i.e. TPDDL, through Respondent No. 5 i.e. TPTCL vide Tri-partite PPA dated 10.09.2009.

(c) 300 MW with Respondent No. 3, i.e. WBSEDCL, through TPTCL vide PSA

dated 24.12.2008 and Supplementary PSA dated 19.02.2013.

(d) 300 MW with Respondent No. 4, i.e. KSEBL, vide PPAs dated 30.12.2013 and 29.06.2015.

A.III. BRIEF BACKGROUND OF THE MATTER

RE: GENERATING STATION/UNIT, TRANSMISSION LINE /ASSET AS THE CASE MAY BE

4. MRBTPP, conceived in 1998, originally intended as a collaboration between DVC and BSES, saw the incorporation of the Petitioner in 2000 under the Companies Act, 1956. Environmental clearance was obtained in 2004 from the Ministry of Environment & Forests. However, the envisaged joint venture with BSES failed to materialize. In 2005, discussions commenced between Tata Power and DVC for a joint venture, subsequently approved by the Ministry of Power. The Shareholders Agreement ("**SHA**") was executed in 2005, with Tata Power holding 74% equity and DVC holding 26%. Board approval was granted in 2007, marking the Project's Zero Date. Unit 1 achieved Commercial Operation Date ("**COD**") in 2011, followed by Unit 2 in 2012.

5. The Petitioner entered into long-term Power Purchase Agreements ("**PPAs**") with DVC and Kerala State Electricity Board Ltd. (KSEBL) for 300 MW and 150 MW, respectively. DVC's allocation was reduced to 150 MW following a surrender of 150 MW, while KSEBL's allocation was increased to 300 MW through a revised agreement. The remaining 600 MW capacity was contracted with Tata Power Trading Company Ltd. (TPTCL), which facilitated Power Sale Agreements (PSAs) with Tata Power Delhi Distribution Ltd. (TPDDL) and West Bengal State Electricity Distribution Company Ltd. (WBSEDCL), allocating 300 MW each.

6. The Hon'ble Commission has notified the Central Electricity Regulatory

Commission (Terms & Conditions of Tariff) Regulations, 2019 (hereinafter '**Tariff Regulations 2019**') which came into force from 1.4.2019, specifying the terms & conditions and methodology of True-up of Tariff for the period 01.04.2019 to 31.03.2024 and also the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2024 (hereinafter '**Tariff Regulations 2024**') which came into force from 01.04.2024, specifying the Terms & conditions and methodology of determination of Tariff for the period 01.04.2024 to 31.03.2029.

A.IV. BRIEF DESCRIPTION OF IMPORTANT EVENTS RELEVANT TO THE PETITION

Re. Filings under Tariff Period 2009-14:

7. On 22.10.2010, the Petition No. 274/2010 was filed by the Petitioner for the approval of the Capital Cost and the Generation Tariff for the power sold from 525 MW Unit 1 of Project to DVC for the period commencing from the anticipated revised COD of 15.06.2011.

8. On 19.11.2014, this Hon'ble Commission after following due legal and regulatory process has issued the Tariff Order from the respective COD of the Generating Units till 31.03.2014 on 19.11.2014. The Hon'ble Commission through the Order allowed the Capital Cost for Unit 1 at Rs. 244839.00 lakh and for Unit 2 at Rs. 137002.00 lakh as on the respective COD of the Units and Rs. 517025.00 lakh for the Generating Station, including Unit 1 and Unit 2, as on 31.03.2014.

9. It is further submitted that the Petitioner had challenged the Order passed by the Hon'ble Commission dated 19.11.2014 before the Hon'ble Appellate Tribunal for Electricity ("**Hon'ble Tribunal**") in Appeal No. 48 of 2015 on the following issues arising out of the same, viz.

   (a) Disallowance of Interest during Construction ("**IDC**") while refusing to condone the delay on account of the handover of Raiyati Land and Non-



availability of Construction Power which are beyond the control of the Petitioner;

(b) Disallowance of the cost of Light Diesel Oil ("**LDO**") which has been used in addition to the Heavy Fuel Oil ("**HFO**") as Secondary Fuel Oil for start-up and shutdown of the Units post the declaration of the Commercial Operation of Unit 2.

10. The Hon'ble Tribunal disposed of the Appeal on 10.05.2016 upholding the findings of the Hon'ble Commission in Order dated 19.11.2014. Aggrieved by the judgment of the Hon'ble Tribunal, the Petitioner has filed a Civil Appeal having No. 9208 of 2016 before the Hon'ble Supreme Court of India on 05.09.2016 which is currently sub-judice.

Re. Filings under Tariff Period 2014-19

11. On 01.06.2015, the Petitioner filed Petition No. 152/GT/2015 for the truing-up of Tariff for the Tariff Period 2011-14 and determination of Tariff for the Tariff Period 2014-19.

12. On 26.12.2017, this Hon'ble Commission passed its Order in Petition No. 152/GT/2015, allowing the Capital Cost for the Generating Station at Rs. 416490.69 lakh as on 31.03.2014. The Hon'ble Commission further allowed Projected additional capitalisation of Rs. 25958.00 lakh and Rs. 9116.00 lakh during FY 2014-15 and FY 2015-16 respectively, thereby allowing the Capital Cost for the Generating Station at Rs. 451564.69 lakh as on 31.03.2019.

13. On 09.02.2018, the Petitioner filed Review Petition No. 16/RP/2018 before this Hon'ble Commission seeking review of certain claims not considered in the Tariff Order dated 26.12.2017.

14. This Hon'ble Commission disposed of the Review Petition No. 16/RP/2018 vide

MAITHON POWER LIMITED

its Order dated 25.4.2019. Since the issue of Additional interest was not allowed in favour of the Petitioner, the Petitioner has filed Appeal No. 405 of 2019 and the same is still pending for consideration before the Hon'ble Tribunal.

15. On 09.08.2018, the Petitioner filed Petition No. 285/MP/2018 before this Hon'ble Commission furnishing complete details regarding recovery of Liquidated Damages ("**LD**") and its adjustment in books of account and further seeking inclusion of LD deducted from Capital Cost and consequent revision of Trued-up Tariff. This Hon'ble Commission allowed LD amounting to Rs.16000.00 Lakh to be included in the Capital Cost and due to the impact of the same for the period 2011-14 and 2014-19, revised Tariff has been determined by Hon'ble Commission *vide* Order dated 01.10.2019 in Petition No. 152/GT/2015.

16. On 17.05.2019, the Petitioner filed Petition No. 152/MP/2019 for in-principle approval for the installation of Flue Gas Desulfurization (FGD) system to meet new environment norms prescribed by the Ministry of Environment, Forest and Climate Change ("MoEFCC") vide its notification dated 27.12.2015.

17. On 11.11.2019, this Hon'ble Commission disposed of the Petition No. 152/MP/2019.

Re. Filings under Tariff Period 2019-24:

18. The Petitioner had filed Petition No.408/GT/2020 for truing-up of ARR for the Tariff Period 2014-19 and the determination of ARR and Generation Tariff for the Tariff Period 2019-24.

19. On 08.01.2022, this Hon'ble Commission, after following due legal and regulatory process has passed the final Order in Petition No. 408/GT/2020. The Hon'ble Commission, through the Order, allowed the Capital Cost for the Generating Station at Rs. 478969.24 lakh as on 31.03.2019. A copy of the Order dated

08.01.2022 passed in Petition No. 408/GT/2020 is annexed hereto and marked as **ANNEXURE P/1**.

20. The Petitioner filed the Review Petition No. 4/RP/2022 before this Hon'ble Commission seeking review of claims related to the enhancement of security not considered in the Tariff Order dated 08.01.2022.

21. On 13.12.2022, this Hon'ble Commission, after following due legal and regulatory process has passed the final Order in Review Petition No. 4/RP/2022 in Petition No. 408/GT/2020. This Hon'ble Commission, through the Order, allowed expenditure for Gate House near JNT, Boom Barrier, E-security, CCTV Camera, etc. and allowed the Capital Cost for the Generating Station at Rs. 479376.83 lakh as on 31.03.2019. A copy of the Review Order dated 13.12.2022 passed in Petition No. 4/RP/2022 is annexed hereto and marked as **ANNEXURE P/1A**.

22. Further, the Petitioner has also filed an Appeal bearing Appeal No. 12 of 2023 before the Hon'ble Tribunal against the Order dated 08.01.2022 in Petition No. 408/GT/2020 and Review Order dated 13.12.2022 on the following grounds:

(a) Issues involving wrongful disallowance of the following legitimate claims:

i. Operation and Maintenance ("**O&M**") Expenses for Reverse Osmosis ("**RO**") Plant for Tariff Period 2019-24

ii. Rental and Conveyance Expenses in Lieu of 2nd Township for the Tariff Periods 2014-19 and 2019-24

iii. Unrecovered Depreciation on De-Capitalisation for the Tariff Periods 2014 -19 and 2019-24

iv. Additional Tax on Income Due to Adoption of Indian Accounting Standard System ("**Ind AS**") for the Tariff Periods 2014-19 and



2019-24

v. Grossing up of Return on Equity ("**RoE**") for Additional Capitalisation for the Tariff Period 2019-24

vi. Relaxation of Station Heat Rate ("**SHR**") for the Tariff Period 2019-24

vii. Normative Interest During Construction ("**IDC**") on Opening/Closing Capital Work in Progress ("**CWIP**")

viii. Wrongful findings on gain from Refinancing.

(b) Issues involving disallowance of the following Additional Capital Expenditure.

i. IT Equipment for the Tariff Period 2014-19 and 2019-24.

ii. Augmentation of Track Hopper Shed for the Tariff Period 2014-19

iii. Re-Heater Modification & MTM Installation for the Tariff Period 2014-19 and Tariff Period 2019-24

iv. Fabrication of Expansion Bellow for the Tariff Period 2014-19

v. Augmentation of store area for the Tariff Period 2014-19 and 2019-24

vi. Safety related expenditure for the Tariff Period 2014-19 including Cup-lock scaffolding in 2014-19 period, Construction of high-rise maintenance platform, for the Tariff Period 2014-19

vii. Minor items for the Tariff Period 2019-24

23. The Petitioner would like to bring to the kind attention of the Hon'ble Commission that some of the issues mentioned below, which were earlier disallowed and are under consideration before the Hon'ble Tribunal are being claimed in the instant Petition alongwith additional documentation in support of the claim and certain

MAITHON POWER LIMITED

new developments which are discussed in the subsequent paragraphs.

i. Relaxation of Station Heat Rate for Control Period 2019-24

ii. Normative Interest During Construction ("IDC") on Opening/Closing Capital Work in Progress ("CWIP")

iii. Grossing up of Return on Equity for Additional Capitalisation for Control Period 2019-24.

iv. IT Equipment (Infrastructure-IT)

v. Re-Heater Modification & MTM Installation (Re-heater Upgradation)

vi. Fabrication of Expansion Bellow

vii. Augmentation of Store Area (Store Renovation)

viii. Cup-lock scaffolding of 2014-19 period carried forward to 2019-24

ix. Construction of high-rise maintenance platform, for the Tariff Period 2014-19 carried forward to 2019-24

Upon approval of the above claims by Hon'ble Commission, the Petitioner shall withdraw the issues from the pending Appeal before Hon'ble Tribunal.

24. As regards the other issues pending before Hon'ble Tribunal but not being claimed in the instant petition, the Petitioner reserves the right to claim the same for both 2019-24 and 2024-29 period in case the Hon'ble Tribunal passes any further order regarding the reliefs sought.

A.V. SUMMARY OF CLAIMS

25. The actual additional capitalisation, excluding Normative IDC (except Railway project, discharges and decapitalisation) claimed for 2019-24 is summarised below:

MAITHON POWER LIMITED

Table 1: Additional Capitalisation claimed for 2019-24 (Rs. lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Within Original Scope						
Approved Schemes	1231.19	496.17	75420.33	1164.46	5585.11	**83897.26**
New Schemes	450.09	1133.77	1077.31	1383.04	2143.70	**6187.92**
Sub Total-1	**1681.28**	**1629.94**	**76497.64**	**2547.50**	**7728.81**	**90085.18**
Beyond Original Scope						
Approved Schemes	97.87	658.77	823.00	519.83	761.39	**2860.85**
New Schemes	371.89	152.67	111.13	86.98	950.07	**1672.73**
Sub Total-2	**469.76**	**811.44**	**934.13**	**606.81**	**1711.46**	**4533.58**
Grand Total	**2151.04**	**2441.38**	**77431.77**	**3154.31**	**9440.27**	**94618.77**

26. The projected additional capitalisation excluding Normative IDC and decapitalisation for 2024-25 to 2028-29 is as follows:

Table 2: Projected Additional Capitalisation claimed for 2024-29 (Rs. lakh)

	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Within Original Scope	6806.02	7800.55	3900.00	5675.00	2350.00	26531.57
Beyond Original Scope	1852.26	2239.00	863.61	13518.86	475.00	18948.73
Total	**8658.28**	**10039.55**	**4763.61**	**19193.86**	**2825.00**	**45480.30**

27. Capital Spares claimed (Rs. Lakh) for 2019-24 and 2024-29 are as follows:

Table 3: Capital Spares claimed for 2019-24 and 2024-29 (Rs. lakh)

Financial Year	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Capital Spares claimed (Net of residual value)	381.60	613.70	1262.40	2647.89	909.73	**5815.31**
Financial Year	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Total**
Capital Spares claimed (Net of residual value)	3565.46	1282.50	1917.67	1039.50	360.00	**8165.12**

MAITHON POWER LIMITED

28. Annual Fixed Charges claimed for 2019-24 and 2024-29 is as follows:

Table 4: Annual Fixed Charges claimed for the period 2019-24 (Rs. lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	23564.71	23678.33	25256.89	27271.52	27773.39
Interest on Loan	13292.43	11086.83	10855.94	11535.36	10450.13
Return on Equity	27064.28	27175.33	29346.67	31543.12	31689.17
Interest on Working Capital	8964.43	7999.84	7225.41	7831.82	9131.21
O&M Expenses	29224.98	31407.51	32679.97	35496.78	37451.36
AFC	**102110.83**	**101347.86**	**105364.88**	**113678.60**	**116495.25**

Table 5: Annual Fixed Charges claimed for the period 2024-29 (Rs. lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Depreciation	16507.85	17189.94	17797.66	18873.71	20066.93
Interest on Loan	8855.54	7916.25	6801.23	5899.73	4841.27
Return of Equity	31993.97	32412.00	32731.28	33235.97	33712.01
Interest on Working Capital	9218.15	9287.65	9395.49	9514.17	9601.97
O&M Expenses	42445.27	42486.26	45181.79	46832.09	47368.09
AFC	**109020.79**	**109292.10**	**111907.45**	**114355.67**	**115590.26**

29. Duly filled tariff formats as prescribed by the Hon'ble Commission for 2019-24 Tariff Period and 2024-29 Tariff Period are annexed herewith as **ANNEXURE P/2** and **ANNEXURE P/3**, respectively. The audited financial statements for each of the Financial years during 2019-24 Tariff Period are enclosed as **ANNEXURE P/4**.

B. DETAILED PETITION

B.I. Previous Orders issued having a bearing on the present Petition

RE: APPROVAL OF CAPITAL COST AND DETERMINATION OF GENERATION TARIFF FOR THE FY 2011-12, FY 2012-13 AND FY 2013-14 AND FINAL

MAITHON POWER LIMITED

TARIFF ORDER

30. The Petitioner filed Petition No. 274/2010 for approval of Capital Cost and ARR for the period 2011-14. On 19.11.2014, this Hon'ble Commission after following due legal and regulatory process has issued the Tariff Order from the respective CoDs of the Generating units till 31.03.2014 on 19.11.2014.

31. It is submitted that the Petitioner had challenged the Order passed by the Hon'ble Commission dated 19.11.2014 before the Hon'ble Tribunal in Appeal No. 48 of 2015 on two issues arising out of the same. The Hon'ble Tribunal disposed of the Appeal on 10.05.2016 upholding the findings of the Hon'ble Commission in Order dated 19.11.2014. Aggrieved by the judgment of the Hon'ble Tribunal, the Petitioner has filed a Civil Appeal having No. 9208 of 2016 before Hon'ble Supreme Court of India on 05.09.2016 which is currently sub-judice.

Re. Truing-up of ARR for the period 2011-14 and Determination of ARR and Generation Tariff for the control period 2014-19

32. The Petitioner filed Petition No. 152/GT/2015 for Truing-up of ARR for the period 2011-14 and determination of ARR and Generation Tariff for the Control Period 2014-19. This Hon'ble Commission passed an Order on 26.12.2017.

33. Subsequently, the Petitioner filed a Petition before Hon'ble Commission against Order dated 26.12.2017 vide Review Petition No. 16/RP/2018 dated 09.02.2018 seeking review of certain claims not considered in said Order. This Hon'ble Commission disposed of the Review Petition No. 16/RP/2018 vide its Order dated 25.04.2019. Since, the issue of Additional interest was not allowed in favour of the Petitioner, the Petitioner has filed Appeal No. 405 of 2019 and the same is still pending for consideration.



34. In Petition No. 285/MP/2018 filed on 09.08.2018, this Hon'ble Commission allowed Rs.160 Crore LD to be included in the Capital Cost and due to the impact of the same for the period 2011-14 and 2014-19, revised tariff has been determined vide Order dated 01.10.2019 in Petition No. 152/GT/2015.

35. It is further relevant to state that the Petitioner had also filed a Petition for in principle approval for installation of FGD System being Petition No. 152/MP/2019 which has been disposed of by Hon'ble Commission vide Order dated 11.11.2019.

Re. Truing-up of ARR for the period 2014-19 and Determination of ARR and Generation Tariff for the control period 2019-24

36. The Petitioner had filed Petition No. 408/GT/2020 for Truing-up of ARR for the period 2014-19 and determination of ARR and Generation Tariff for the Control Period 2019-24. This Hon'ble Commission passed an Order on 08.01.2022.

37. Subsequently, the Petitioner filed a Review Petition before Hon'ble Commission against Order dated 08.01.2022 vide Review Petition No. 04/RP/2022 dated 24.02.2022 seeking review of certain claims not considered in said Order. This Hon'ble Commission disposed of the Review Petition No. 04/RP/2022 vide its Order dated 13.12.2022. Since, certain issues were not allowed in favour of the Petitioner, the Petitioner had filed Appeal No. 12 of 2023 challenging the Order dated 08.01.2022, and the same is still pending for consideration.

38. The present Petition is being filed before this Hon'ble Commission without prejudice to the rights of the Petitioner pending adjudication before various forums.

B.II. ISSUE WISE SUBMISSION(S) WITH REGARD TO EXPENDITURE CLAIMED ALONG WITH JUSTIFICATION FOR VARIATIONS WITH THE NORMS/

MAITHON POWER LIMITED

PREVIOUSLY APPROVED TARIFF/CHARGES (IN CASE OF TRUING UP)

Re. TRUING UP OF 2019-24

Re. Capital Cost of the Project

39. Unit 1 at MPL was commissioned on 01.09.2011 and Unit 2 was commissioned on 24.07.2012.

40. The Petitioner had filed Petition No. 408/GT/2020 for Truing-up of ARR for the Tariff Period 2014-19 and determination of ARR and Generation Tariff for the Tariff Period 2019-24. This Hon'ble Commission, after following due legal and regulatory process has passed the final Order on 08.01.2022. The Hon'ble Commission, through the said Order, allowed the Capital Cost for the Generating Station at Rs. 478969.24 lakh as on 31.03.2019. The Petitioner aggrieved by the Order filed a review Petition No. 4/RP/2022 in Petition No. 408/GT/2020. The Hon'ble Commission vide Order dated 13.12.2022 allowed the revised Capital Cost as follows:

Table 6: Capital Cost Approved by the Hon'ble Commission till FY 2018-19 (Rs. Lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	432039.88	463204.76	474874.98	475058.38	475895.66
Add: Net Additional capitalisation allowed on cash basis	25567.49	11407.19	100.98	649.07	3421.87
Add: Discharges allowed	4980.50	391.10	72.03	162.07	0.00
Normative IDC allowed	760.89	221.46	10.39	26.14	59.30
Less: IDC capitalised on Books excluding Railways	144.00	349.53	0.00	0.00	0.00
Closing Gross Block	**463204.76**	**474874.98**	**475058.38**	**475895.66**	**479376.83**

41. Capital Cost approved by the Hon'ble Commission for 2019-24 vide Order dated 08.01.2022 in Petition No. 408/GT/2020 is as follows:



Table 7: Capital Cost approved for 2019-24 (Rs. Lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	478969.24	484317.13	553551.06	552899.60	552788.32
Net additional capital expenditure allowed within original scope of work of the project	3353.30	66290.72	-1523.46	-526.55	-255.19
Net additional capital expenditure allowed beyond the original scope of work of the project	1896.33	1850.00	850.00	400.00	350.00
Normative IDC allowed	98.26	1093.21	22.11	15.27	12.65
Total net additional capital expenditure allowed	5347.89	69233.93	-651.46	-111.28	107.46
Capital Cost as on 31st March of the year	**484317.13**	**553551.06**	**552899.60**	**552788.32**	**552895.78**

42. Further, the Hon'ble Commission approved the following Annual Fixed Charges and Ash Disposal Expenses for 2019-24:

Table 8: Annual Fixed Charges for 2019-24 (Rs. Lakh)

Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Return on Equity	27109.00	29153.01	31044.64	31005.56	30994.24
Interest on Loan	14094.35	14216.55	14014.45	11573.71	9133.87
Depreciation	24588.73	26492.50	28243.13	28223.66	28223.56
O & M Expenses	26373.72	27463.83	28611.06	29817.26	31082.31
Interest on Working Capital	8912.61	8424.18	7949.95	7969.34	7992.01
Annual Fixed Charges	**101078.41**	**105750.08**	**109863.23**	**108589.54**	**107425.98**
Ash Disposal Expenses	3425.52	3416.16	3416.16	3416.16	3425.52

MAITHON POWER LIMITED

43. Accordingly, the closing Capital Cost of Rs. 479376.83 lakh as on 31.03.2019 as approved by the Hon'ble Commission *vide* Order dated 13.12.2022 in Review Petition No. 4/RP/2022 has been considered as opening Capital Cost as on 01.04.2019.

Re. Additional Capital Expenditure

44. The details of the Additional Capital Expenditure (ACE) incurred within the Original Scope of Work and the Additional Capital Expenditure (ACE) beyond the Original Scope of Work including justifications to incur the same are explained in the following paragraphs. A copy of Auditor's Certificate certifying package/ scheme wise addition to Property Plant and Equipment (PPE) & Right of Use Assets (ROU) for financial years ended 2019-20 to 2023-24 is annexed herewith and marked as **ANNEXURE P/5**.

Table 9: Summary Table for Additional Capital Expenditure (ACE) incurred during the Tariff Period FY 2019-20 to FY 2023-24 (Rs. Lakh)

Sr. No	ACE	Actual/ Approved	Regulation	2019-20	2020-21	2021-22	2022-23	2023-24	Total
A.	**Additional Capital Expenditure within original scope of work after Cut-off Date**								
a.	**Approved in Order dated 08.01.2022**								
i	Cost of Land and site	Approved	25(1)(a) and 25(1)(e)	3881.64	0.00	0.00	0.00	0.00	3881.64
		Actual	25(1)(a) and 25(1)(e)	0.00	126.77	0.00	0.00	0.00	126.77
ii	Right of use Assets	Actual	25(1)(a) and 25(1)(e), 76			325.25		4869	5194.25
iii	General Civil works-Boundary wall	Approved	25(1)(a)	160.00					160.00
		Actual	25(1)(a)	163.27	83.47				246.74
iv	Railway package* (Inclusive of IDC)	Approved	25(1)(a) and 25(1)(e)		68506.24				71367.80
		Actual #	25(1)(a) and 25(1)(e)			74191.39	52.79		74244.17
v	Laboratory instruments	Approved	25(2)(c)		21.94	57.08	52.90	22.11	154.03
		Actual	25(2)(c)	2.30			31.60	121.93	155.83
vi	MAX DCS Version up-gradation(Xp) Unit 2	Approved	25(2)(c) and 25(2)(d)	450.00					450.00
		Actual	25(2)(c) and	440.31					440.31



			25(2)(d)						
vii	Replacement of Battery	Approved	25(2)(a)		80.00	80.00	90.00		250.00
		Actual	25(2)(a)			243.95	696.43	412.44	1352.83
viii	Upgradation of CHP Main PLC	Approved	25(2)(c)		60.00				60.00
		Actual	25(2)(c)			116.09	7.49		123.59
ix	DM Plant and Raw water PLC Upgradation	Approved	25(2)(c)		100.00				100.00
		Actual	25(2)(c)				68.48	7.66	76.14
x	Augmentation of Ash Handling Plant	Approved	25(1)(a)	1416.80	500.00				1916.80
		Actual	25(1)(a) and 25(2)(b)	633.04	285.93	543.64	305.30	125.66	1893.57
xi	Centrifugal compressor and motor for BTG	Approved	25(2)(c)		350.00	400.00	0.00	0.00	750.00
		Actual	25(2)(c)						0.00
xii	Centrifugal Compressors for Ash Plant /(RCC)	Approved	25(2)(c)		300.00	300.00	300.00	300.00	1200.00
		Actual	25(2)(c)				2.36	48.43	50.79
xiii	ID fan motor with VFD replacement	Approved	25(2)(c)		450.00	450.00	450.00	450.00	1800.00
		Actual	25(2)(c)						0.00
xiv	Spare GT								
		Actual	25(2)(a)	(-) 7.74					(-) 7.74
	Sub-Total			**1231.19**	**496.17**	**75420.33**	**1164.46**	**5585.11**	**83897.26**
b.	**New Expenditure**								
i.	Infrastructure – Admin	Actual	25(2)(a) & 76	26.95	13.64	8.19	45.59	52.94	147.30
ii	Infrastructure – IT	Actual	25(2)(a) & 76	37.88	39.76	5.22	63.48	42.89	189.24
iii	Dust suppression system	Actual	25(1)(b)	38.02	-1.36	0.46	3.80		40.92
Iv	SWAS Silica Analyzer Upgradation	Actual	25(2)(c)				28.39	21.59	49.98
V	Unified PI System	Actual	25(1)(b)		47.97	8.47	4.74		61.18
vi	Upgradation of AHP PLC	Actual	25(2)(c)			59.00	2.37		61.37
vii	Upgradation of Fire PLC	Actual	25(2)(c)					59.47	59.47
viii	End of life (Decentralized AC System)	Actual	25(2)(a) and 25(2)(c)	3.04	6.72		0.46	70.94	81.16
ix	Water Supply Township	Actual	25(1)(b)					66.41	66.41
x	Track Hopper End Wall	Actual	25(1)(b) & 25(1)(e)					98.93	98.93
xi	Flow Meter installation (Water Meter)	Actual	25(1)(b)				64.45	5.32	69.77
xii	Track Hopper Ventilation System	Actual	25(1)(b)& 25(1)(e)					204.39	204.39
xiii	Yard Sprinkling System	Actual	25(1)(b)	-2.96					-2.96

MAITHON POWER LIMITED

xiv	Ceramic Lining of Coal Mill	Actual	25(2)(a)& 25(2)((b)				70.24	249.72	319.96
xv	Reheater upgradation	Actual	25(2)(a)& 25(2)(b)	201.30	986.99	486.57	500.37	505.47	2680.69
xvi	ESP Internals	Actual	25(1)(b) and 25(2)(a)			293.42	342.33	170.61	806.36
xvii	ESP Wear Resist Pipes	Actual	25(1)(b) and 25(2)(a)			108.93	38.41	2.52	149.87
xviii	Fabric Expansion Bellows	Actual	25(2)(a)& 25(2)(b),76	46.92	40.04				86.96
xix	Fire Hydrant System	Actual	25(1)(b) & 26(1)(d)			87.75	115.44	99.34	302.52
xx	Distributed Control System (Upgradation Of LVS)	Actual	25(2)(a)& 25(2)(c)					160.03	160.03
xxi	Network Equipment	Actual	25(2)(c)			18.36	4.21	51.87	74.45
xxii	Main Turbine & TDBFP TSS	Actual	25(2)(c)				98.76	141.20	239.96
xxiii	DG Set	Actual	25(1)(b) & 25(2)(c)					38.71	38.71
xxiv	Fire Tender	Actual	25(1)(b)					101.36	101.36
xxv	Refurbishment of Economiser Coil	Actual	25(2)(a)& 25(2)(b)	98.93		0.94			99.87
	Sub-Total			**450.09**	**1,133.77**	**1,077.31**	**1,383.04**	**2,143.70**	**6,187.92**
B.	**Additional Capital Expenditure beyond original scope of work**								
a.	**Approved in Order dated 08.01.2022 and Review Order dated 13.12.2022**								
i	Boundary Wall (under pass)	Approved	26(1)(d)		100.00				100.00
		Actual	26(1)(d)			13.66	104.51		118.17
ii	Road along boundary wall (Periphery Road)	Approved	26(1)(d)		150.00	150.00	100.00	50.00	450.00
		Actual	26(1)(d)	51.30	27.66		98.62	344.49	522.08
iii	Implementation of AGC	Approved	26(1)(a)	80.00					80.00
		Actual	26(1)(a)		49.91			30.00	79.91
iv	Coal Pit Run-off Mechanized Drainage system	Approved	26(1)(c)	399.53					399.53
		Actual	26(1)(c)	10.92					10.92
v	Mini-fire tender	Approved	26(1)(d)		25.00				25.00
		Actual	26(1)(d)				24.97		24.97
vi	Economizer platform	Approved	26(1)(b)& 26(1)(d)		350.00				350.00
		Actual	26(1)(b)& 26(1)(d)		530.01	490.99	159.29	280.98	1461.27
vii	Soak Pit	Approved	26(1)(a) & 26(1)(b)	40.00					40.00
		Actual	26(1)(a) & 26(1)(b)					15.00	15.00

MAITHON POWER LIMITED

viii	E-security	Approved	26(1)(d)	269.69	300.00	200.00	150.00		919.69
		Actual	26(1)(d)	35.64	51.19	318.35	132.44	90.92	628.55
	Sub-Total			**97.87**	**658.77**	**823.00**	**519.83**	**761.39**	**2860.85**
b.	**New Expenditure**								
i	Safety (Permanent platform in coal mill	Actual	26(1)(d)	115.40	37.60	84.76	17.62	5.86	261.24
ii	Interconnection of Chutes from BCN 4A/B-	Actual	26(1)(c)&76				49.98		49.98
iii	Ash Wharf	Actual	26(1)(b) & 26(1)(e)				11.81	190.01	201.82
iv	MVWS System	Actual	26(1)(d) & 26(1)(b)					97.28	97.28
v	Reliability (Structural Strengthening of BTG, CHP)	Actual	26(1)(d)					443.92	443.92
vi	Field Hostel	Actual	25(1)(b) & 26(1)(b)	1.02	89.71				90.73
vii	Fire door for MCC Room	Actual	26(1)(b)					19.84	19.84
viii	SCADA Upgradation	Actual	26(1)(b)	20.50					20.50
ix	Extension of Store	Actual	26(1)(b) and 26(1)(d)	215.25	25.31	9.78		90.72	341.06
x	Ash Weigh Bridge (100 MT)	Actual	26(1)(e)					64.03	64.03
xi	Solar Panel	Actual	26(1)(b)					38.40	38.40
xii	Upgradation of protection system	Actual	26(1)(b)		0.05				0.05
xiii	Testing Instruments	Actual	26(1)(b)	20.15					20.15
xiv	Augmentation of Fire detection System	Actual	26(1)(b)	-0.43		16.58	7.57		23.72
	Sub-Total			**371.89**	**152.67**	**111.13**	**86.98**	**950.07**	**1672.73**
	Grand Total#			**2151.03**	**2441.37**	**77431.76**	**3154.32**	**9440.28**	**94618.77**

#including IDC of Rs. 18391.61 lakh in Railway System. For all other schemes, the ACE is without IDC and Normative IDC has been shown separately in the Tariff Forms and in the section dealing with Normative IDC.

** Rs. 71367.80 lakh in Railway System includes ACE of FY 2015-16*

B.II.A. ADDITIONAL CAPITAL EXPENDITURE WITHIN THE ORIGINAL SCOPE OF WORK, BUT AFTER THE CUT-OFF DATE

B.II.A. a. Expenditure approved in Order dated 08.01.2022

i. Cost of Land and Site

45. This Hon'ble Commission, in its Order dated 08.01.2022 in Petition No.

408/GT/2020, approved an expenditure of Rs. 3881.64 lakh in 2019-20 towards the cost of 'Land & Site'. The projected expenditure was envisaged for the payment of the revised demand for 114.95 acres GM land as per the then available 2018 circle rate at Rs.3358.00 lakh (i.e. net of revised demand of Rs. 3528.00 lakh and already paid amount of Rs 170.00 lakh) and balance Rs. 524 Lakh was towards remaining 20% payment demand for land acquired for railway corridor with following break-up:

- Rs. 60 lakh for 4.81 acres of Krishi farmland.
- Rs. 125.00 lakh for 6.96 acres of GM Land (Stage 1).
- Rs.129.00 lakh for 6.01 acres of GM Land (Stage 2). and
- Additional contingency expenditure of approximately Rs. 210.00 lakh.

46. The relevant extracts of the Order dated 08.01.2022 are reproduced below for ready reference-

> *"For these reasons, the projected additional capitalization of Rs.68506.24 lakh for 'Railway Infrastructure Package' in 2020-21 and* ***the projected additional capitalization of Rs.4041.64 lakh (Rs.3881.64 lakh for cost of Land and Site and Rs.160.00 lakh for General Civil Works) in 2019-20 is allowed under Regulation 25(1)(a) of the 2019 Tariff Regulations****. However, the total cost including cost disallowed for the year 2015-16 on Railway Package shall be considered and dealt on merits, after prudence check, at the time of truing-up."*
>
> [***Emphasis Supplied***]

47. The Petitioner submits that despite taking adequate precautions and diligently following up with the relevant Government Authorities, including the Land and Revenue Department of the Government of Jharkhand (GoJ), the Petitioner has not received the revised or balance payment demand for the parcels of land under consideration. Consequently, the Petitioner has not claimed any expenditure against the approved amount of Rs. 3882 Lakh for the period 2019-24. A detailed

account of the progress and reasons for the delay with respect to each parcel of land is annexed hereto and marked as **ANNEXURE P/6A (COLLY)**.

48. It is further submitted that the delay in the issuance of revised or balance payment demand is primarily attributable to the following uncontrollable factors:

(a) The pending disposal of Suit No. 2091 of 2020 before the District Court of Dhanbad.

(b) The inter-departmental transfer of agricultural land.

(c) The computation of the balance 20% payment by the appropriate authority.

(d) These factors, as elaborated in the foregoing paragraphs and aforesaid Annexure, are entirely beyond the control of the Petitioner.

49. The Petitioner respectfully submits that the delays arise from uncontrollable/force majeure conditions. Accordingly, the Petitioner humbly requests this Hon'ble Commission to grant liberty to update and claim the actual costs towards the revised or balance payment demand for the said parcels of land during the True-Up process for the period 2024-29 as elaborated under Right of Use Assets in-line with IND AS 116 which prior to 1.04.2019 were categorized under leasehold lands.

Actual Additional Capitalization of Rs. 126.77 lakh in FY 2020-21 towards purchase of Rayati (Private) Land for MPL Railway Project (Rs. 83.40 lakh included under approved Railway Project cost and additional purchase of 0.64 Acres of land for Rs. 43.37 lakh)

50. The Petitioner submits that there was delay in handover of clear lands due to wrong claim settlement by government authorities, which was condoned in Order dated 08.01.2022, and Petitioner received access of disputed land parcels in FY

2020-21. Due to the deviation between the actual site conditions and the design estimations it was observed that owing to the uneven terrain retaining walls were required to be constructed between bridge no BR 11- BR 12 of the original route for which access was possible only after the filing of the Tariff Petition No. 408/GT/2020 in January 2020 and, hence, said cost could not be factored/projected at that time.

51. It was observed that the cost for construction of the retaining wall would be Rs. 275.37 Lakh. Owing to the already delayed commissioning and associated increase in cost, the Petitioner being a prudent utility analysed alternative methods for resolution and it was observed that with slight change in the original route, requiring buying of additional land parcels and then filling the same with Sand/Soil/Compaction/civil construction for required elevations, would result in cost savings to the tune of Rs. 232.00 Lakh compared to the cost of retaining wall in the original route. A copy of the detailed Cost-Benefit Analysis and underlying calculations in relation to retaining wall construction are attached as **ANNEXURE P/6 B**.

52. Accordingly, the Petitioner in order to resolve the issue, reduce the scope of work and duly considering the cost benefit analysis procured the additional parcels of land which costed about Rs. 43.37 lakh in FY 2020-21 and this increase was beyond the control of the Petitioner as it could not assess the exact requirement in absence of access of disputed parcels of land. Therefore, the Petitioner humbly requests the Hon'ble Commission to allow capitalization towards the land cost of Rs. 126.77 Lakh during the year 2020-21.

ii. Right of Use Assets:

Actual Additional Capitalization of Rs. 326.86 lakh in FY 2020-21, Rs. 325.25

lakh in FY 2021-22 and Rs. 4869 lakh in FY 2023-24 towards leasehold lands.

53. The Petitioner has capitalized following amounts under Right of Use assets in the books of accounts during the period 2019-24:

(In Rs. Lakh)

FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
0.00	326.86	325.25	0.00	4869.00

54. These assets, which prior to 1.4.2019 were categorized under leasehold lands are now categorized as Right of Use assets in line with IND AS 116 implemented on 1.4.2019 and, accordingly, these assets are identified as leasehold land. Out of the expenditure shown above Rs. 326.86 lakh pertains to renewal of land license for 8.04 hectare of land provided by Eastern Railway for Petitioner's Railway infrastructure project and, accordingly, has been claimed under 'Railway System'. A copy of the Eastern Railway's Letter No L/Lease License/19 Dated 09.04.2019 regarding renewal of land license and consequential fees is enclosed hereto and marked as **ANNEXURE-P/7 A**.

55. The amount of Rs. 325.25 lakh in 2021-22 and Rs. 1229.64 in FY 2023-24 (part of Rs. 4869 lakh) was recognized towards past/future liabilities arising on account of revised lease rent by DVC towards land license in connection with Water withdrawal from Maithon Reservoir as per the Clause - 01(a)(iii) of executed agreement dated 14.05.2010.

56. With regard to revised lease rent by DVC, it is humbly submitted that Petitioner executed an agreement with Damodar Valley Corporation (DVC) on 14.05.2010 for withdrawal of water from Maithon Reservoir including leasing of DVC land measuring 5,62,736.69 Sq. Ft for intake structure and pipeline etc for period of 35

years. MPL had initially paid rental charges of Rs 1,96,95,784.15/- for land license from 15.03.2009 to 14.03.2044 (total 35 years) at erstwhile rate of Rs 1/ Sq. Ft (for 12 months period)

57. Subsequent to above, DVC has revised land license rate @ Rs 6.00/- per sq. ft for each term of license i.e. 11 (eleven) months vide DVC office memorandum no. Sectt/LA/Rent (Pt)/2011/1004 dated 03.09.2012 and, accordingly, requested to pay the differential lease rent in terms of clause 01 (a) (iii) of the aforesaid executed agreement. Relevant extract of the agreement is reproduced below:

> *"....The rent is subject to change as and when revised by the 'The Corporation' during the pendency of the lease period and the 'Second Party' is liable to pay the balance admissible amount",*

58. Pursuant to above, DVC vide invoice number CE (C) Tariff/Land-Rental MPL/127/BILL (Lease of DVC Land)-18 dated 20-07-2021 has claimed Rs 3,24,06,514.00/- (Rs Three Crore Twenty-Four Lakh Six Thousand Five Hundred Fourteen Only) for period of 03.09.2012 to 31-01-2022. The Petitioner, accordingly, calculated present value of future liabilities from 01.02.2022 till 14.03.2044 and recognised it in books for 2021-22 as Rs. 325.25 lakh. Further, amount of Rs. 324.07 lakh as raised by DVC for differential lease rental for the period 03.09.2012 to 31-01-2022 has been discharged in FY 2021-22. A copy of the Lease Agreement dated 14.05.2010 alongwith copy of DVC bill of Rs. 324.07 lakh dated 29.10.2021 is enclosed as **ANNEXURE-P/7B (COLLY)**.

59. In furtherance to above, DVC, vide invoice number MRO/Water Tariff Cell/Land/MPL/127/407 dated 11-09-2023 has claimed additional Rs. 2,20,55,408/- (Rupees Two Crore Twenty Lakh Fifty Five Thousand Four Hundred Eight Only) as arrears of lease rent upto 31.10.2024. Accordingly, the Petitioner paid arrears aggregating to Rs. 2,20,55,408/- towards lease rent for the

arrears for period 03.09.2012 to 31.10.2024. Noting the revised lease rate with escalation of 7% each year, the Petitioner in accordance with the accounting practices re-calculated the present value of future liabilities from 01.11.2024 till 14.03.2044 as per new revised rate and, accordingly, revised recognition in books from Rs. 325.25 lakh to Rs. 1554.88 Lakhs towards the future liabilities towards revised lease rent payment to DVC. Consequently, adding Right of use assets of Rs. 1229.64 Lakh in 2023-24 (1554.88 lakh less 325.25 lakh) which is part of Rs. 4869.00 lakh as reflected in books. A copy of DVC bill of Rs. 220.55 lakh dated 11.09.2023 is annexed herewith and marked as **ANNEXURE-P/7C**.

60. In FY 2023-24, the Petitioner in accordance with the accounting practices has recognized Right of use assets amounting to Rs. 4869.00 lakh. Out of Rs. 4869.00 lakh, amount of Rs. 1229.64 lakh is towards the payment of land rent to DVC in forthcoming years for land license as discussed above and balance amount of Rs. 3639.36 lakh is in respect of pending/balance demand/ lease rent payable to the Government of Jharkhand towards leasing of following parcels of land in future.

Land Parcel (Acres)	**Net Est. Demand (less earlier payment) (Rs Lakh)**	**Authority**
114.95 GM Land	3054.47	L&R Department/ GoJ
4.81 Krishi Farm Land-Railway	51.79	
6.96 GM Land-Railway	103.84	
6.01 GM Land -Railway	429.26	
Sub-Total-Payable to GoJ	**3639.36**	
12.919-DVC lease land for intake chamber	1229.64	DVC
Sub-Total-Payable to DVC	1229.64	
Grand Total	**4869.00**	As per Books in 2023-24

61. It is noteworthy to mention that these land parcels have been utilized for the Project and for which balance demand/ rent bill is awaited from the concerned authorities. It is pertinent to mention here that aforesaid amounts recognized

under RoU assets are provisional and subject to actual demand/ bill from GoJ/DVC respectively. Further, for the aforesaid RoU assets, consequential lease liabilities have also been recognized in books.

62. Further, the actual payments made against the aforesaid capitalisation towards ROU Assets that have been claimed for computation of Tariff are as follows:

(In Rs. lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
ROU Assets	0.00	326.86	325.25	0.00	4869.00
Actual payments claimed in Tariff	0.00	326.86	324.07	0.00	220.55

63. Against above payments claimed in tariff, Rs, 326.86 lakh is claimed under Railway project as stated earlier and for the balance amount, the Petitioner would further like to bring to the notice of the Hon'ble Commission that under Regulation 25(2)(e) of the Tariff Regulations, 2024; the Hon'ble Commission has allowed additional capital expenditure towards renewal of lease of leasehold land recognizing the need of capitalization of same. The Hon'ble Commission may, thus, allow the capital expenditure for the arrear of leasehold land payment towards the bills raised by DVC dated 29.10.2021 & 11.09.2023, already enclosed as Annexure-P/7B and P/7C as being claimed by the Petitioner.

64. The balance lease rental payable to the GoJ (i.e. Rs. 3639.36 Lakh) as recognized in books in terms of accounting practice has already been allowed by the Hon'ble Commission in Tariff Order dated 08.01.2022, however, the said expenditure is yet to be incurred pending demand from Land and Revenue Department, GoJ as elaborated above. The Petitioner humbly requests this Hon'ble Commission to grant liberty to update and claim the actual costs towards the revised or balance

payment demand for the said parcels of land during the True-Up process for the period 2024-29.

65. Considering the above, the Hon'ble Commission may kindly allow the above actual capital expenditure towards the leased land/ROU Assets under Regulation 76, Power to Relax of the Tariff Regulation 2019. Alternatively, the Hon'ble Commission may allow the above cited expenditure towards lease rent payment to DVC for intake chamber land over and above the AFC allowed by the Hon'ble Commission under Regulation 76 of Tariff Regulation 2019.

iii. General Civil Work

66. The Petitioner respectfully submits that the Hon'ble Commission, through its order dated 08.01.2022 in Petition No. 408/GT/2020 (Para 185), had approved an additional capital expenditure of Rs. 160 lakh during FY 2019-20 for General Civil Works under Regulation 25(1)(a) of the Tariff Regulations 2019. It is further submitted that the actual expenditure incurred for the said works amounts to Rs. 246.73 lakh, which is higher than the estimated cost considered in Petition No. 408/GT/2020.

67. It is submitted that this variance arose due to higher actual rates and increase in scope of work as per actual site conditions, which were beyond the control of the Petitioner. In light of the above, the Petitioner respectfully requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 246.74 lakh under Regulation 25(1)(a) read with Regulation 76 of the Tariff Regulations 2019.

iv. Railway System

68. The Petitioner humbly submits that this Hon'ble Commission *vide* order dated 08.01.2022 in Petition No. 408/GT/2020 had allowed additional capital expenditure of Rs. 68506.24 lakh during FY 2020-21 towards the Railway Project

under Regulation 25(1)(a) of the Tariff Regulations 2019. Further, the Hon'ble Commission in the said order also observed that total expenditure towards the Railway Project shall be considered including the cost of Rs. 2861.56 lakh disallowed in FY 2015-16 at the time of Truing-up. The cost disallowed in 2015-16 was towards certain civil assets viz., over-bridges & under passes pertaining to Railway Project for which capitalization was not considered then though these assets were being utilized for smooth movement of public transport since complete work of Railway infrastructure was not over.

69. It is submitted that while appreciating the submissions made by the Petitioner, the Hon'ble Commission held that the delay in Railway Project is on account of events which are not attributable to the Petitioner. The relevant extract of the Tariff Order dated 08.01.2022 in Petition No. 408/GT/2020 has been reproduced below:

> *"185.*
>
> *...*
>
> *We have, in paragraph 38 to paragraph 46 of this Order, examined the submissions of the Petitioner with regard to the delay in the availability of land & site and the delay in execution of the General Civil Works, consequent upon the non-availability of land, attributed to the change in policy of State Government and Order of the Hon'ble High Court, and allowed the additional capitalisation of the expenditure claimed by the Petitioner for the period 2015-19 under Regulation 14(3)(i) of the 2014 Tariff Regulations, for compliance with the Orders of the Hon'ble Court. Considering the fact that these are balance works which have spilled over from 2018-19 and keeping in view that the Railway Infrastructure Package, being an interdependent activity, contingent upon the clearance of land acquisition issues,* ***we hold, that the delay is on account of events which are not attributable to the Petitioner. In our considered view, the delay due to non-availability of land & site, which has caused the delay in the execution of the General Civil Works for the period 2015-19, holds good for the delay in the completion of Railway Infrastructure Package for the period 2019-21 also. For these reasons, the Projected additional capitalization of Rs.68506.24 lakh for 'Railway Infrastructure Package' in 2020-21*** *and the Projected additional capitalization of Rs.4041.64 lakh (Rs.3881.64 lakh for cost of Land and Site and Rs.160.00 lakh for General Civil Works) in 2019-*

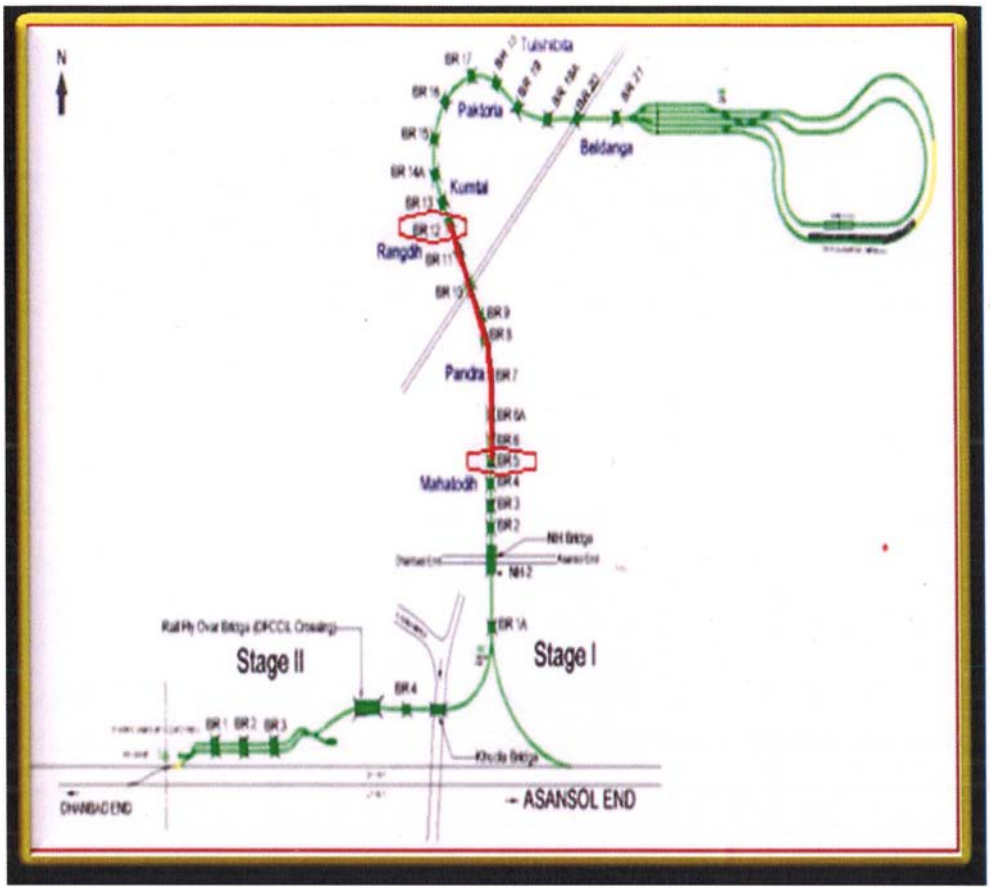


20 ***is allowed under Regulation 25(1)(a) of the 2019 Tariff Regulations. However, the total cost including cost disallowed for the year 2015-16 on Railway Package shall be considered and dealt on merits, after prudence check, at the time of Truing-up.***"

[*Emphasis Supplied*]

70. The Railway Infrastructure Project, planned for commissioning by 31.03.2021 as per the Order dated 08.01.2022, faced delays due to uncontrollable factors despite the completion of siding works by March 2021. Consequently, the project could only be operationalized on 10.03.2022, due to reasons beyond the Petitioner's control. These uncontrollable factors/reasons after filing of Petition No. 408/GT/2020 on 30.01.2020 are summarised below:

(a) **Land acquisition issues:** The Petitioner suffered severe Right of Way (RoW) issues while acquiring the land for the Railway Project, major challenge was to complete project activities on plots referred to Land Acquisition (LA) Court in Pandra village, particularly, the 2.3 km long stretch from Bridge 5 to Bridge 12 (The affected portion is depicted in the schematic diagram below). Even after identifying the rightful owners by District Administration on 132 plots, various claimants of other disputed plots continued to keep resisting works in various plots on various pretexts. On several occasions, the Petitioner requested for local administration support to execute work on plots referred in LA Court acquired in railway corridor. A copy of the Letters dated 22.09.2020, 30.11.2020 and 18.12.2020 written by the Petitioner to local administration for providing support for carrying out the construction work are annexed hereto and marked as **ANNEXURE P/8-A (COLLY).**



(b) **Covid 19 Pandemic (First Wave):** Government of India imposed Lockdown due to Covid 19 pandemic with effect from 23.03.2020 and subsequently extended it till 17.05.2020. Covid 19 situation was unprecedented and had wide-spread ramifications. Entire rail infrastructure Project work was also interrupted. The restrictions were gradually lifted, and as a result, the Project's work also progressed gradually along with getting peaceful possession of land parcels in a piecemeal manner. The Central Government has recognised Covid 19 Pandemic as a *Force Majeure* event affecting various procurement and project activities. The Petitioner's Railway Project being no exception also deserves to be granted condonation for delay on account of Covid 19 being Force Majeure event beyond the control of the Petitioner. In fact, Ministry

MAITHON POWER LIMITED

of New and Renewable Energy ("**MNRE**") *vide* its O.M. dated 13.08.2020, 09.02.2021 and 30.03.2021 granted a blanket extension of five months (six months on case-to-case basis) to the Renewable Energy implementing agencies considering the devastating impact of the Covid 19. At this stage, the Petitioner is not enclosing the trail of containment Orders issued by Central/State Government that are available on their website and shall submit the same if required by this Hon'ble Commission. True copies of the Orders dated 13.08.2020, 09.02.2021 and 30.03.2021 issued by MNRE have been annexed hereto and marked as **ANNEXURE P/8-B (COLLY)**.

(c) **Land subsidence:** On 08.06.2020, land subsidence was noticed wherein significant collapse of land below the ground level between the chainage +550 to + 600 was observed. This resulted in damage of 1000 sqm area in vicinity and the Petitioner's railway line. Railways also acknowledged land subsidence which was just 25 m away from down grand chord line of eastern railway near Thapar Nagar and sought to take necessary action. Indian School of Mines ("**ISM**") conducted Electrical Resistivity Tomography ("**ERT**") for mapping of possible void/illegal mining zones and its horizontal extension geometry and depth extension along railway line Thapar Nagar. This unforeseen geological surprise caused work to get delayed in the affected patch of land by about 3-4 months and cumulatively with First Wave of Covid 19 caused work to get resumed gradually only at the end of September 2020. A true copy of the Report of ISM is enclosed as **ANNEXURE P/8-C .**

(d) **Covid 19 Pandemic (Second Wave):** After gradual removal of restrictions and with the support of local administration, the Petitioner had completed

the siding works and had applied for approval of Commissioner of Railway Safety (CRS) on 18.11.2020. The Petitioner had, therefore, on 02.03.2021 requested Senior Divisional Commercial Manager, Eastern Railway to allot ALPHA and NUMERICAL Code to the Petitioner's Railway Siding so that connectivity work may be taken up immediately after CRS approval. A true copy of the Petitioner's letter dated 02.03.2021 to the Senior Divisional Commercial Manager, Eastern Railway has been annexed herewith and marked as **ANNEXURE P/8-D.**

(e) However, the Second Wave of Covid 19 Pandemic hit the country in March 2021, which was much more widespread and devastating. State Governments under Guidelines from Government of India had to, therefore, impose restrictions again with effect from 23.03.2021 that were subsequently extended in phases till 31.07.2021. The restrictions were again removed in phases and, accordingly, the approval of various components of the Project from Railways could also be obtained gradually. In fact, MNRE issued O.M. dated 12.05.2021, 29.06.2021, and 15.09.2021 after taking into account the impact of the second wave of COVID-19, allowing the period from 01.04.2021 to 15.06.2021 or 2.5 months for blanket extension of time in the SCOD of the RE Projects. True copies of the Orders dated 12.05.2021, 29.06.2021 and 15.09.2021 issued by MNRE have been annexed herewith and marked as **ANNEXURE P/8-E (COLLY).**

(f) **Long and protracted procedure of approval by Railways:** After completion of siding and electric traction work, the Petitioner had to take approval of various Railway authorities. The approval process took much longer than expected due to Covid 19 restrictions and also the cumbersome

time-consuming process of sequential approvals followed by Railways. For each of these clearances/approvals, Railways used to nominate its representative and schedule a visit of the site, which itself was very much time consuming.

(g) The clearance was further delayed if certain observations for modification were made during the visit and entire process had to be repeated after addressing the observations. Accordingly, the approvals for notification of siding were in place on 16.09.2021 but due to notification of GCT Policy on 15.12.2021, the siding notification could finally take place on 08.03.2022. The following Table captures the dates of various approvals:

S. No.	Approval Required	Date of Completion
1.	**CRS sanction:** Commissioner of Railway Safety, Eastern Circle *vide* its letter to DRM, Eastern Railway, Asansol division in response to the Application no: SH-I/Pt.XX/Drg./TNW dated 18.11.2020 of the Petitioner accorded Sanction subject to some stipulations for Rail infrastructure of the Petitioner at Thapar Nagar Asansol division. A true copy of Letter dated 10.05.2021 issued by Commissioner of Railway Safety, Eastern Circle is annexed herewith and marked as **ANNEXURE P/8-F**	10.05.2021
2.	**Track Fitness Certificate:** Track fitness certificate of private railway siding under Asansol division to serve the Generating Station was provided by Sr. Section Engineer, Eastern Railways.	04.06.2021



S. No.	Approval Required	Date of Completion
	A true copy of Certificate dated 04.06.2021 for Track Fitness of Private Railway Siding under Asansol Division to serve the Generating Station has been annexed herewith and marked as **ANNEXURE P/8-G**	
3.	**Overhead Equipment (OHE) Checking:** After completion of construction work for connectivity of newly erected 25 kV OHE line and joint inspection on 12.06.2021 and 22.07.2021, on 27.07.2021, the Petitioner requested for Sanction of EIG for opening of newly erected 25 kV OHE line taking off with Y connection from Mugma and Thaparnagar station. On 18.08.2021 Eastern Railway intimated granting sanction for the same. A true copy of Eastern Railway sanction dated 18.08.2021 has been annexed herewith and marked as **ANNEXURE P/8-H**	18.08.2021
4.	**Electrical Inspector (EIG) Clearance:** EIG sanction was accorded for energization and commissioning of new switching post at Mugma (SS) AT 25 kV AC 50 Hz single phase. A true copy of EIG sanction dated 31.08.2021 has been annexed herewith and marked as **ANNEXURE P/8-I** On the same date, EIG sanction for 25 kV AC 1 Phase charging of newly erected traction Overhead Equipment (OHE) of the lines for the Petitioner's Generating Station was granted to the Petitioner.	31.08.2021



S. No.	Approval Required	Date of Completion
	A true copy of EIG sanction dated 31.08.2021 has been annexed herewith and marked as **ANNEXURE P/8-J**	
5.	**Engine Trial Run/25 kV OHE Charging:** Joint note in connection with electric engine trial run from Thapar Nagar to MPL and OHE fitness was prepared, giving observations/ shortcomings if any in presence of MPL/L&T and Railway representatives. A true copy of Joint Note for Engine Trial/OHE has been annexed herewith and marked as **ANNEXURE P/8-K (COLLY)**	03.09.2021
6.	**OHE Fitness Joint Note:** With reference to the joint note issued on 03.09.2021, compliance to the observation made attained and complied for OHE were reported. A true copy of joint Compliance Report dated 18.09.2021 has been annexed herewith and marked as **ANNEXURE P/8-L**	18.09.2021
7.	**Eastern Railway asked to rectify the Deficiencies noted in 03.09.2021 loco trial:** With reference to the joint note issued for LOCO trial TNW-MPL siding line conducted on 03.09.2021, Eastern Railway on 06.10.2021 asked the Petitioner for its rectification and compliances. A true copy of letter dated 06.10.2021 has been annexed herewith and marked as **ANNEXURE P/8-M**	06.10.2021
8.	**The Petitioner requested for approval after removal of deficiencies in letter dated**	11.10.2021



S. No.	Approval Required	Date of Completion
	06.10.2021 including OHE fitness joint note: In response to letter dated 06.10.2021, the Petitioner submitted its observation status on 11.10.2021 and requested Railways for review and accordingly provide acceptance. A true copy of Letter dated 11.10.2021 has been annexed herewith and marked as **ANNEXURE P/8-N**	
9.	**Joint Note: TI/GC, CLI Side:** With reference to Joint note dated 03.09.2021 in connection with electric engine trial run on track for the Petitioner's railway siding, compliance report was issued from TR/GC and CLI side. A true copy of Joint note dated 23.11.2021 has been annexed herewith and marked as **ANNEXURE P/8-O**	23.11.2021
10.	**Provisional opening of Siding Notification:** Provisional opening of GCT of the Petitioner served by Thapar Nagar station was allowed. A true copy of provisional opening of Siding Notification dated 08.03.2022 is annexed herewith and marked as **ANNEXURE P/8-P.**	08.03.2022
11.	**Placement of Rake:** With the receipt of first coal Rake, Rake operation commenced at the Private Siding of the Petitioner. A true copy of receipt confirmation letter dated 14.03.2022 is annexed herewith and marked as **ANNEXURE P/8-Q.**	10.03.2022

(h) On 24.11.2021, a meeting was held between the officers of Eastern Railway and the Petitioner regarding operationalisation of the Petitioner's private

siding, pending completion of works at Mugma station and Wagon Tippler at Generating Station as these works were no more required. In the meeting, Petitioner stated that earlier maximum amount of coal linkage was scheduled from BCCL sources (from Thaparnagar side) and a only a small volume from ECL sources (from Mugma side), however, contrary to earlier plan, all of the coal rakes intended for the Generating Station are currently sourced from BCCL. Therefore, there was no need for the proposed loop at Up-side of Mugma Station. In this regard, it was apprised by GM, Eastern Railway that in the present Policy of Railway Board there is no provision to issue provisional notification for opening of the siding pending some works. Therefore, the siding may be opened once completion certificate for Phase- I works is issued by the Division.

(i) For the approval of deviation in DPR by Railway Board, GM, Eastern Railways advised the Petitioner to write to Divisional Railway Manager ("**DRM**"), Eastern Railway, Asansol giving reasons for delay in completion of Phase-I work and for deviation from DPR with proper justification. DRM, after examination of the issue, would forward it to Railway Head Quarter for getting dispensation of Railway Board and once dispensation is issued from Railway Board, the issue of pending works can be proceeded accordingly. The relevant extract of the MoM dated 26.11.2021 issued for the meeting dated 24.11.2021 has been reproduced below:

> *"8. General Manager was kind enough to address the meeting. He mentioned that* ***there is no provision in the Policy framed by RB to issue provisional notification for opening the siding pending some works****. In the instant case since Ph-II, Ph-III works are not coming in recent times, the siding may be opened once completion certificate for Ph-I works is issued by Division.....*
> ***He advised MPL authorities to write to DRM giving reasons of***

delay in completion of Ph-I work and deviation from project report with proper justification. *Division after examining the issue, would forward it to HQ for getting dispensation from Railway Board. Once dispensation is issued from Railway Board, the issue will be suitably appreciated."*

[Emphasis Supplied]

A true copy of the MoM dated 26.11.2021 issued for the meeting dated 24.11.2021 has been annexed herewith and marked as **ANNEXURE P/8-R.**

(j) Accordingly, on 26.11.2021, the Petitioner vide its letter to DRM, Eastern Railway, Asansol, informed that entire stretch of Railway line as per Phase-I is ready for operation (out of 13 works 11 essential works had been completed) and, hence, a formal request for notification of siding had already been submitted. The Petitioner through the letter sought dispensation from two works that were no more required, viz. (i) Wagon Tippler and (ii) additional loop line at Mugma Station, which were part of original DPR on the following grounds:

(k) **Wagon Tippler**: Adequate provision for unloading of coal through Track Hopper and Wharf in lieu of Tippler has already been made by the Petitioner and, therefore, the installation of Wagon Tippler was not required now.

(l) **Mugma Loop Line**: The Mugma Up loop line was proposed in the DPR with the assumption that coal rakes would come from ECL, i.e. Mugma side. However, after the FSA signed with BCCL and CCL, which is valid until the years 2030 and 2032, respectively, the Petitioner would only receive rakes from Thaparnagar end. Therefore, the entire rake movement shall be on downside of Pradhankhunta to Sitarampur Section. Therefore, the requirement of Mugma Up loop line becomes redundant and, hence, not required.



(m) Accordingly, the Petitioner sought the above deviations/dispensations from the original DPR on the ground of redundancy of the Wagon Tippler and Mugma Loop Line and requested for the issuance of Siding Notification to start the receipt of Rakes to meet the coal requirement of the Generating Station. A true copy of the letter dated 26.11.2021 issued by Petitioner to Eastern Railway has been annexed herewith and marked as **ANNEXURE P/8-S.**

(n) On 03.12.2021, DRM, Eastern Railway, Asansol *vide* its letter to Principal Chief Operations Manager, Eastern Railway, while appropriately dealing with modification in the original DPR, recommended the proposal of the Petitioner for issuance of siding Notification. A true copy of the Letter dated 03.12.2021 issued by DRM, Eastern Railway, Asansol has been annexed herewith and marked as **ANNEXURE P/8-T.**

(o) In the meanwhile, on 15.12.2021, Ministry of Railways, Government of India issued a Master Circular on GCT Policy 2021 to boost investment from industry in development of additional terminals for handling rail cargos. According to the Master Circular, all new as well as under-construction/ under-approval Cargo Terminals shall be covered by GCT Policy 2021. The Petitioner's siding being under construction/under-approval Cargo Terminal was squarely covered under the GCT Policy 2021. It should be noted that, the bottleneck of DPR approval was removed in the GCT Policy 2021. However, there was a requirement to transfer ownership of all assets on Railway land created at the cost of Gati Shakti Multi-Modal Cargo Terminal Operator ("**GCTO**") (Petitioner in this case) to the Railways and for this purpose an Agreement is required to be signed. A true copy of GCT

Policy 2021 is annexed hereiwht and marked as **ANNEXURE P/8-U.**

(p) On 05.01.2022, Railway Board addressed to Principal Chief Operations Manager, Eastern Railway and issued the clarification on Private Siding Policy regarding modification in DPRs of ongoing proposals where DPR was approved prior to issuance of FM Circular no. 11 of 2016 and stated that:

> *"... As per Para 1.1 of GCT Policy,* ***all new as well as under-construction/under-approval Cargo Terminals (approved/proposed under the 'Private Siding' or ' Private Freight Terminal' policies) shall be covered by the GCT policy****.*
> *It may further be noted that the GCT Policy 2021 has no provision of Detailed Project Report and any further action regarding notification and commissioning of the Terminal may be taken as per the provisions of paras 10.1, 11 & 11. 1 of 'Schedule-1' of the Policy."*

(q) Accordingly, the Petitioner's Railway Project being under-construction/under-approval was categorically said to be covered under GCT Policy 2021. Also, there was no provision of DPR in the new Policy, which meant that there was no need of getting any approval for deviations. A true copy of the Letter dated 05.01.2022 issued by Railway Board is annexed herewith and marked as **ANNEXURE P/8-V**

(r) In response to Petitioner's letter dated 26.11.2021 and DRM, Eastern Railway letter dated 03.12.2021, Chief Transmission Planning Manager, Eastern Railway vide letter dated 25.01.2022 advised DRM, Eastern Railway that representation of the Petitioner may be dealt as per GCT Policy 2021 and forwarded the letter dated 05.01.2022 from Railway Board for taking further necessary action. Pertinently, a copy of Letter dated 25.01.2022 was marked to the Petitioner to approach the Division on this issue. A true copy of Letter dated 25.01.2022 issued by Chief Transmission Planning Manager, Eastern Railway and GCT Policy 2021 is



annexed herewith and marked as **ANNEXURE P/8-W (COLLY).**

(s) On 27.01.2022, the Petitioner *vide* its letter to DRM, Eastern Railway, Asansol requested to migrate to the revised policy of GCT Policy 2021 as per Railway Board Guidelines. The Petitioner further stated in the letter that there are some changes from the earlier DPR submitted and, therefore, in terms of Clause 11 and 11.1 of GCT Policy 2021, the Petitioner submitted revised Engineering Scale Plan ("**ESP**") for approval of DRM. A true copy of Letter dated 27.01.2022 written by the Petitioner to DRM, Eastern Railway, Asansol has been annexed herewith and marked as **ANNEXURE P/8-X**.

(t) On the same day, i.e. on 27.01.2022, DRM responded to the request of the Petitioner and *inter alia* directed the Petitioner to pay security deposit and submit revised ESP for scrutiny to the Division and, accordingly, after approval of ESP, further action regarding Notification of siding would be undertaken. A true copy of Letter dated 27.01.2022 written by DRM to the Petitioner has been annexed herewith and marked as **ANNEXURE P/8-Y.**

(u) With reference to DRM, Asansol letter dated 27.01.2022, the Petitioner reverted vide letter no: MPL/FY22/22-01/026 dated 28.01.2022 and submitted the information pertaining to the compliances as per the new GCT Policy 2021 with regard to the security deposit, clearance of dues and submission of revised ESP. A true copy of Letter dated 28.01.2022 issued by the Petitioner to DRM, Eastern Railway has been annexed herewith and marked as **ANNEXURE P/8-Z.**

(v) On 28.01.2022, the Petitioner vide its letter No: MPL/FY22/22-01/026 also submitted the justifications for the revised ESP. A true copy of the Letter dated 28.01.2022 issued by the Petitioner is annexed herewith and

marked as **ANNEXURE P/8-AA**.

(w) On 16.02.2022, the Petitioner executed an undertaking that it will abide by all the provisions of the GCT Policy 2021 in terms of Master Circular dated 15.12.2021. On the same day, a Private Siding Memorandum of Agreement ("**MoA**") was executed between the Petitioner and Indian Railways, which primarily incorporated all provisions of GCT Policy 2021. It was mentioned at Clause 5.2 of the Agreement that ownership of infrastructure including the track, signalling equipment and OHE created on Railway land shall belong to Railways, even though the Capital Cost for these shall be borne by the GCTO (Petitioner in this case). A true copy of Undertaking and MoA dated 16.02.2022 is annexed herewith and marked as **ANNEXURE P/8-AB (COLLY.).**

(x) On 22.02.2022, DRM, Eastern Railway, Asansol Division vide a Circular/Commercial Notification declared provisional opening of GCT siding served by Thapar Nagar Station over Asansol division w.e.f. 23.02.2022. However, on the same day at 22:36 hrs, a Freight Operations Information System (**"FOIS"**) message was issued stating that opening of GCT siding issued by Commercial Notification dated 22.02.2022 to be kept on hold till compliance of observation of Chief Engineer (P&D) Eastern Railway. Therefore, the Commercial Notification was 'kept in abeyance' by the FOIS dated 23.02.2022. A true copy of Circular/Commercial Notification dated 22.02.2022 and FOIS message dated 22.02.2022 are annexed herewith and marked as **ANNEXURE P/8-AC (COLLY.).**

(y) On 07.03.2022, Railway Board issued a circular to all Zonal Railways and observed that as per provision of Para No. 18.1 of GCT policy 2021, an



Agreement for GCT shall be signed before the issue of Commercial Notification and operation of the GCT by Railway. It was further clarified by the Railway Board that all new as well as under construction/under approval cargo terminals shall be covered by GCT Policy 2021. Further,

(z) Standard Agreement is under the process of finalisation and approval. Therefore, the commissioning of new Terminals shall not be delayed on account of non-availability of Standard Agreement and Zonal Railways may notify new Terminals by issuing, on ad-hoc basis, comprehensive Notifications having details of the relevant provisions of the GCT Policy 2021.

(aa) Thus, pending finalisation and signing of Standard Agreement as per Clause 18.1 of the GCT Policy 2021, the Divisions were permitted to issue Commercial Notifications for new sidings. A true copy of Circular dated 07.03.2022 issued by Railway Board is annexed herewith and marked as **ANNEXURE P/8-AD**.

(bb) Upon the above relaxation, on 08.03.2022, 'Kept in abeyance' status was withdrawn by Eastern Railway and provisional opening of GCT of the Petitioner served by Thapar Nagar station was allowed with w.e.f. 09.03.2022. A true copy of Circular dated 08.03.2022 issued by Eastern Railway is annexed herewith and marked as **ANNEXURE P/8-AE.**

(cc) On 10.03.2022, with the receipt of first coal Rake, Rake operation commenced at the Private Siding of the Petitioner. Accordingly, India's first GCT, since publication of Master Circular on GCT Policy 2021 in December 2021 was made operational by the Indian Railways at Thaparnagar.

(dd) On 14.03.2022, the Petitioner intimated Divisional Railway about

successful operationalisation of India's first private siding under GCT Policy 2021 and receipt of first coal rake on 10.03.2022. It may be noted that even after completion of Project certifications/clearances in November 2021 and repeated follow ups, internal procedures of Railways took almost 3 months to declare the Petitioner's siding commercially open, which was completely beyond the reasonable control of the Petitioner. A true copy of Letter dated 14.03.2022 issued by the Petitioner to Divisional Railway is annexed herewith and marked as **ANNEXURE P/8-AF**.

(ee) On 07.07.2022, Railway Board, Ministry of Railways issued model Agreements under GCT Policy 2021 for GCT on Private Land and for GCT entirely/partially on Railway Land. A true copy of the Model Agreement issued by Railway Board on 07.07.2022 is annexed herewith and marked as **ANNEXURE P/8-AG**.

(ff) On 04.08.2022, Senior Divisional Commercial Manager, Eastern Railway requested the Petitioner for execution of GCT standard agreement with reference to Railway Board's Notification dated 07.07.2022. A true copy of letter dated 04.08.2022 issued by Senior Divisional Commercial Manager, Eastern Railway is annexed herewith and marked as **ANNEXURE P/8-AH.**

(gg) As the ownership of infrastructure including the track, signalling equipment and OHE created on Railway land by the Petitioner needs to be transferred to Indian Railways, hence, the Petitioner filed the Petition No. 11/MP/2023 for seeking approval of this Hon'ble Commission to enter into an Agreement with the Railways.

71. In view of the above, it is submitted that in spite of completion of Railway Package siding works till March 2021, the clearances/approvals could only be obtained in

November 2021 (i.e. on 23.11.2021). Further, due to Notification of GCT Policy 2021 in December 2021, the Railway Project could finally be made operational on 10.03.2022.

72. As evident from above, the Railway Infrastructure Project of the Petitioner got delayed on the account of several uncontrollable factors which were beyond the control of the Petitioner including Covid 19 pandemic and cumbersome approval process. From the background given above, it may be seen that the Petitioner was ready with all approvals/clearances in place on 23.11.2021 and was awaiting final notification of siding by Railways. This was about 7.5 months beyond the approved dated 31.03.2021 granted by the Hon'ble Commission vide its Order dated 08.01.2022 in Petition No. 408/GT/2020. Notably, 7.5-8.5 months is also the period waived by MNRE for RE Projects under blanket extension for Covid 19 pandemic (first and second wave).

73. In addition to the foregoing, it is submitted that after 23.11.2021 Railways took its own time to finally apprise the Petitioner on 25.01.2022 that its Project would now fall under the GCT Policy 2021 notified on 15.12.2021. As a result of the uncontrollable delays, the Petitioner's Project falls under GCT Policy 2021, and compliance with the same is required. The various reasons for the delay would be classified as force majeure, and the Petitioner's mandate to be covered under GCT 2021 would be classified as compliance with existing law/change in law.

74. The GCT Policy 2021 simplified the application and approval process, promoting investment and improving cargo terminals. The policy requires the Petitioner to bear the cost of assets on railway land and transfer ownership to Indian Railways. This transfer does not affect the Petitioner's right to use the assets for railway transportation and does not impact the Tariff determination by Hon'ble

MAITHON POWER LIMITED

Commission. The new policy facilitated quicker approvals without the need for previously required assets, allowing the Petitioner to expedite the Project. The Hon'ble Commission *vide* Order dated 20.01.2024 in Petition No. 11/MP/2023 observed that the Petitioner is mandated to comply with the provisions of the prevailing GCT Policy 2021. Accordingly, the Hon'ble Commission allowed the Petitioner to sign an agreement with the Indian Railways and transfer ownership rights of its infrastructure, including the track, signalling equipment and OHE created on Railway land to Indian Railways. Further, the Hon'ble Commission granted the Petitioner the liberty to transfer railway assets created on non-railway land based on its own cost-benefit analysis, in terms of GCT Policy 2021.

75. With regard to capitalization of Railway Assets in books, it is submitted that the Petitioner had capitalized the assets amounting to Rs. 2524.68 lakh in 2019-20, Rs. 60883.18 lakh (Rs. 51947.42 lakh as hard cost & Rs. 8935.76 lakh as IDC) in 2020-21 and Rs. 52.79 lakh in 2022-23 in terms of the Accounting Standards. In addition to above, amount of Rs. 2861.56 lakh (Rs. 2412.62 lakh as hard cost and Rs.448.94 lakh as IDC) was capitalized in FY 2015-16 which is required to be considered at the time of truing-up of the cost in terms of liberty granted by the Hon'ble Commission in the Order dated 08.01.2022 as explained in the preceding paragraphs. Accordingly, total hard cost as per books works out to Rs. 56884.71 lakh (Rs. 2412.62 lakh + Rs. 2524.68 lakh + Rs. 51947.42 lakh) and IDC as per books comes out to Rs. 9384.70 lakh (Rs.448.94 lakh + Rs. 8935.76 lakh) till FY 2020-21.

76. Accordingly, the additional capital expenditure towards Railway Project as per books is Rs. 66269.42 lakh (Rs. 56884.71 lakh towards hard cost and Rs. 9384.70 lakh as IDC) till March'21 and Rs. 52.79 lakh in 2022-23. However, since Railway

MAITHON POWER LIMITED

Project got operational on 10.03.2022 post all clearances from Railways as discussed above, the Petitioner for the purpose of Tariff has claimed the capitalization of the Railway Package in FY 2021-22 in terms of above total capitalizations of Rs. 66269.42 lakh as per books plus normative IDC of Rs. 9006.91 lakh upto 10.03.2022 and adjusting inbuilt cost of funding of Rs. 1084.94 lakh in hard cost of Rs. 56884.71 lakh as per Auditor Certificate in accordance with approach approved by the Hon'ble Commission in the Tariff Order dated 08.01.2022. The computation of Normative IDC for Railway Package has been elaborated in section of Normative IDC on Additional Capitalization later and, therefore, it is not repeated herein for sake of brevity. Further, since capitalization towards Railway Package is being claimed in FY 2021-22, the capitalizations and liabilities of Railway Package for financial years prior to FY 2021-22 have been considered under exclusions for the purpose of Tariff up to FY 2020-21. Detailed explanation in this regard is provided in section dealing with Exclusions later and the same may kindly be referred to.

77. The Hon'ble Commission may kindly note that against the total of approved cost and deferred cost of FY 2015-16 of Rs. 71367.80 lakh (i.e. Rs. 68506.24 lakh + Rs. 2412.62 lakh + Rs.448.94 lakh) the Petitioner in the instant Petition is claiming Rs. 74244.18 lakh towards the 'Railway Infrastructure Package'. The total cost of Rs. 71367.80 lakh in FY 2020-21 comprised of hard cost of Rs 55938.42 lakh and IDC of Rs. 15429.38 lakh, which excluding the Capitalization claimed by the Petitioner in FY 2015-16 of Rs. 2412.62 lakh (hard cost) + Rs.448.94 lakh (IDC) was approved as Rs. 68506.24 lakh whereas the actual cost of Rs. 74244.18 lakh comprises of hard cost of Rs. 55799.78 lakh (Rs. 56884.71 - 1084.94 lakh) in FY 2020-21 and Rs. 52.79 lakh in FY 2022-23 i.e. Rs. 55852.57 lakh and IDC of Rs. 18391.61 lakh

which includes IDC of Rs. 9384.70 lakh as per books of accounts and normative IDC of Rs. 9006.91 lakh. The resulting variation in cost of Rs. 2876.39 lakh (i.e. Actual Cost of Rs. 74244.18 lakh less Commission approved cost of Rs. 71367.79 lakh) is due to the increase in IDC by Rs. 2962.23 lakh (Rs. 18391.61 lakh less Rs. 15429.38 lakh) and minor reduction in hard cost by Rs. 85.85 Lakh (Rs. 55852.57 lakh against Rs 55938.42 lakh approved by Hon'ble Commission) is basically the cost towards procurement of Rayati (private) land and is claimed under the head of cost of land and site. The Petitioner humbly submits that increase in the IDC of Rs. 2962.23 lakh is mainly on account of increase in the normative IDC in FY 2021-22 (i.e. Rs. 2670.24 lakh), arising out of the delay in capitalisation of Railway Assets in FY 2021-22 instead of 31.03.2021 (FY 2020-21) which was beyond the control of the Petitioner as specified due to reasons cited above and balance minor variation in IDC is due to change in rate and phasing of expenditures compared to earlier projections.

78. It is noteworthy here to mention that capitalization of Railway Project claimed in FY 2021-22 instead of FY 2020-21 would in-fact reduce the AFC burden of the procures by about 100 Crores between FY 2020-21 and FY 2021-22. The summary of the reduced AFC burden on the procurers has been summarized in the table below:

Capitalization of Railway Project Claimed in FY 22 (In Rs. Lakh)			Capitalization of Railway Project Claimed in FY 21 (In Rs. Lakh)			Reduced AFC Burden (In Rs. Lakh)
2020-21	2021-22	Total	2020-21	2021-22	Total	
1	2	3=1+2	4	5	6=4+5	7=3-6
0.00	5824.72	5824.72	5294.36	10653.34	15947.70	**-10122.98**

79. In other words, since benefit of delayed capitalization by a year is already available

MAITHON POWER LIMITED

with the procurers, impact of IDC of Rs. 2670.24 lakh in FY 2021-22 would be justified to be considered and allowed. Moreover, such delay is mainly for reasons beyond the control of the Petitioner as detailed herein above. A copy of the summary of Capital Cost for Railway Project and corresponding Annual Fixed Charges under both the Scenarios have been provided in **ANNEXURE P/8-AI** for kind reference of the Hon'ble Commission.

80. It may kindly be noted that out of total cost of Rs. 74244.18 lakh claimed on accrual basis, the undischarged liability as on 31.03.2022 of Rs. 1680.24 lakh has been deducted while claiming cash capitalization. The undischarged liability as on 31.03.2024 stood at Rs. 1115.18 lakh. The relevant extracts of the order dated 08.01.2022 in Petition No. 408/GT/2020 regarding approval of cost of Rs. 68506.24 lakh in FY 21 towards the Railway Infrastructure Package including IDC as observed by the Commission in para 185 of the order and direction for approval regarding the capitalisation towards Railway Bridge etc. (i.e. Rs. 24.13 crore + IDC of Rs.4.49 crore) in FY 2015-16 are extracted as under:

> *"180. As regards cost overrun of the Railway Infrastructure Package, the Petitioner has submitted that the same was beyond the control of the Petitioner and the increase in the Railway Infrastructure Package cost forced the Petitioner's Board to re-allocate the project cost. In addition, the Petitioner has stated that the Railway Infrastructure Package contract which was initially awarded to M/s L&T had to be split into three parts, on account of the unforeseen delays and was reallocated among the initial contractor M/s L&T, and the new contractors M/s Amex and M/s Kanwar. The Petitioner's Board in its meeting dated 16.3.2019 had approved the cost and internal allocations under the 'Railway Infrastructure cost' for Rs.574.66 crore excluding IDC. It has further stated that during the execution of the packages identified under Railway infrastructure, the cost allocation was changed and approved by the Board for revised allocation, keeping the overall cost of Railway Infrastructure package within the approved budget of Rs.574.66 crore in the Board meeting dated 16.10.2019. The Petitioner has submitted that the total IDC is Rs.152.75 crore on Railway Infrastructure Package. We note that the total Railway Infrastructure Package cost*



approved by the Board works out to Rs.712.14 crore (Rs.559.38 crore + Rs.152.75 crore) ***out of which the Petitioner has capitalized and claimed Rs.28.13 crore (Rs.24.13 crore + Rs.4.49 crore of IDC) during 2015-16*** *which has not been allowed (as discussed in earlier part of this order) as the Railway Package could not be put to use during 2015-16."*

[***Emphasis Supplied***]

81. Accordingly, the Petitioner requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 55799.78 lakh (Rs. 56884.71 lakh as per books less Rs. 1084.94 lakh cost of funding inbuilt in Capex) in FY 2021-22 as per Auditor Certificate and Rs. 52.79 lakh in FY 2022-23 incurred towards hard cost and IDC of Rs. 18391.61 lakh in FY 2021-22 which includes IDC of Rs. 9384.70 lakh as per books and normative IDC of Rs. 9006.91 lakh for Railway Siding under Regulation 25(1)(a) of the Tariff Regulations 2019.

v. Laboratory Instruments

82. The Petitioner submits that the scheme for laboratory Instruments was approved by the Hon'ble Commission in the Tariff Order dated 08.01.2022 with the approved cost of Rs. 154.03 Lakh under regulation 25 (2)(c) of Tariff Regulations 2019 and the aforesaid scheme was duly carried out and executed with an insignificant escalation from the approved cost. Since such minor deviations are inevitable in such schemes the Hon'ble Commission is requested to allow the aforesaid scheme with the actual expenditure of Rs. 155.83 lakh against the approved cost of Rs. 154.03 lakh.

vi. MAX DCS Version upgradation (XP) UNIT 2

83. The Petitioner humbly submits that the Hon'ble Commission *vide* Order dated 08.01.2022 in Petition No. 408/GT/2020 had allowed additional capital expenditure of Rs. 450 lakh during FY 2019-20 towards the MAX DCS Version upgradation (XP) for Unit 2 Platform under Regulations 25(2)© and 25(2)(d) of

MAITHON POWER LIMITED

the Tariff Regulations 2019. It is submitted that the Digital Control System (DCS) is the automated intelligence of any thermal power generating station running on the Windows XP operating system.

84. The Windows XP operating system was the most popular and reliable Windows platform provided by all the leading industrial automation companies for their control system. However, from 08.04.2014, Microsoft has completely withdrawn the support for Windows XP Operating System. With the end of the support by Microsoft for Windows XP operating system, it also stopped developing Security Patches for Windows XP, non-security hot fixes, online technical content updates and telephone support. Hence, the operating system became more vulnerable to malware attacks and subsequently became outdated.

85. The Petitioner managed the system with existing inventories and support from BHEL until mid-2016. However, after that, BHEL expressed its inability to provide further support and recommended a complete upgradation of the existing DCS to a higher version of the Windows operating system with an upgraded version of MAX DNA DCS for the Petitioner's Units to ensure continued services and necessary spares.

86. The scheme is approved by the Hon'ble Commission and the Petitioner has been able to manage the upgrade to Windows 7 within the approved budget. Accordingly, the Petitioner humbly requests the 'on'ble Commission to allow the additional capital expenditure of Rs. 440.31 lakh in FY 2019-20 under Regulation 25(2)(c) and 25(2)(d) of the Tariff Regulations 2019.

vii. Replacement of Battery

87. The Petitioner humbly submits that the Hon'ble Commission *vide* order dated 08.01.2022 (Para 241) had allowed additional capital expenditure of Rs. 80 lakh



during FY 2020-21, Rs. 80 lakh during FY 2021-22 and Rs. 90 lakh in FY 2022-23 towards the Replacement of Battery under Regulation 25(2)(a) of the Tariff Regulations 2019. The approved replacement of the balance of plant batteries (BOP) undertaken are as follows-

(a) 2 nos banks of 220V 600AH coal handling plant,
(b) 2 nos banks of 220V 800AH Switchyard control room,
(c) 2 nos banks of 220V 250AH AHP,
(d) 2 nos banks of 220V 250AH plant water system,
(e) 2 nos banks of 220V 100AH main silo area,
(f) 2 nos banks of 220V 100AH Raw water pump,
(g) 48V 500AH Switchyard control room

88. The Petitioner humbly submits that the cost estimation submitted for the approval did not envisage for the replacement of one bank of 220V 100 AH CHP UPS batteries and it was later discovered during the testing that the 220V UPS batteries and 4 numbers of station batteries (Unit 1 and Unit 2) that there was further deterioration in the performance. Therefore, along with approved BOP batteries, order for UPS batteries was also in placed on OEM. The cost of actual procurement was Rs. 450 Lakh against approval of Rs. 250 Lakh, which is mainly due to increase in cost of lead and addition of UPS Batteries.

89. It was also noted that Unit batteries (4 banks of 220V, 2x1500 AH) and station batteries (4 banks of 220V, 2000 AH) were also underperforming and needed replacement owing to the technical wear and tear over the time, which the Petitioner could not apprehend during the estimation of the cost in the Tariff Petition filed on 30.01.2020. Since Unit Batteries needed immediate replacement they have been procured in FY 2023-24 and Station Batteries, which have also deteriorated, are being proposed to be procured in next Tariff Period in 2024-29.



Accordingly, the following table shows the actual and approved cost of batteries in period 2019-24.

Battery Replacement details	Approved Capex for 2019-24 In (Rs. Lakh)	Actual Expenditure in (Rs. Lakh)			
		2021-22	2022-23	2023-24	Total
Replacement of approved BOP batteries [CHP (220 V DC), Switchyard 220 V DC, RWPH 220VDC, AHP IM silo 220 V DC, CWPH, Switchyard 48V, Plant Water System]	250	113.23	159.59	127.70	400.53
UPS Batteries	-	-	-	45.16	45.16
Replacement of Unit 1 & 2 battery 8 sets	0	130.72	536.84	239.59	907.15
Total	250	243.95	696.43	412.44	1352.83

90. As per letter dated 09.09.2019 by the OEM of these battery sets, the serviceable life of these batteries under normal usage is 8 to 10 years. Further, vide letters dated 11.12.2020, 15.12.2020 and 09.07.2022, the OEM has also certified that the Unit batteries and UPS batteries have become obsolete. The relevant extracts of OEM recommendations dated 09.09.2019, 11.12.2020, 15.12.2020 and 09.07.2022 are mentioned below :

> ***Excerpts from Report on Health Survey of Battery Banks:***
> ***Letter dated: 11.12.2020 (Unit 2 batteries)***
> *"Recommendation: Condition of the Battery is alarming and under present condition, it will not be possible to revive the Battery Bank, hence should be replaced by a new one."*
> ***Letter dated: 15.12.2020 (Unit 1 batteries)***
> *"Recommendation: As an immediate precautionary measure Overhauling of the Battery Bank should be carried out, however considering the condition of*

MAITHON POWER LIMITED

Battery Bank replacement of the same by a new one in the near future is required to achieve a trouble free service ."

Letter dated: 09.07.2022 (CHP UPS batteries)

"Recommendation: The Battery Bank has completed its normal Service life. Present condition of the Battery Bank is alarming and under present condition it will not be possible to revive the Battery Bank. Hence should be replaced by a new one at the earliest."

Excerpts from life Recommendation Letter:

Letter dated: 09.09.2019 (Life of batteries)

"life of tubular battery manufactured by Exide is 8-10 years under normal float application under 27 Degree Celsius temperature ."

[***Emphasis Supplied***]

True copies of the OEM letters dated 09.09.2019, 11.12.2020, 15.12.2020 and 09.07.2022 certifying the end of life/ obsolescence of the batteries are annexed herewith and marked as **ANNEXURE P/9 (COLLY).**

91. In this context, the execution of the aforesaid scheme was inevitable and necessary for the overall plant reliability leading to increase in the number of the batteries replaced with new ones coupled with the increase in the cost of Lead used in batteries had a cumulative effect of increased cost from the approved cost of Rs. 250 lakh to Rs. 1352.83 lakh. In the light of the above circumstances the cost increase was beyond the control of the Petitioner. Therefore, the Petitioner request the Hon'ble Commission to allow the Additional Capital Expenditure for Rs. 1352.83 lakh under Regulation 25(2)(a) of Tariff Regulations 2019.

viii. Upgradation of CHP Main PLC:

92. The Petitioner respectfully submits that the Hon'ble Commission, in its order dated 08.01.2022, had approved additional capital expenditure of Rs. 60 lakh for FY 2020-21 towards the upgradation of the CHP Main PLC under Regulation 25(2)(c) of the Tariff Regulations 2019. It is further submitted that in Petition No. 408/GT/2020, the Petitioner had planned for the upgradation of the CHP PLC

MAITHON POWER LIMITED

without considering the upgradation of the Stacker Reclaimer PLC. However, during the execution of the scheme, the Petitioner encountered a technical constraint wherein the new version of the CHP PLC was found to be incompatible with the existing Stacker Reclaimer PLC.

93. Since the Stacker Reclaimer is an integral part of the CHP system and cannot operate in a standalone mode, it was deemed essential, from the perspective of reliable operation and safety, to upgrade the Stacker Reclaimer PLC along with the CHP PLC. This resulted in an additional expenditure of Rs. 63.59 lakh.

A true copy of Certificate of Obsolescence dated 05.09.2019 from the OEM for the CHP PLC upgradation is annexed herewith and marked as **ANNEXURE P/10-A**. A true copy of the Compatibility Certificate dated 15.12.2021 for the Stacker Reclaimer PLC upgradation is annexed herewith and marked as **ANNEXURE P/10-B.**

94. It is also submitted that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations including the CEA (Cyber Security in Power Sector) Guidelines, 2021 ("**CEA Cyber Security Guidelines, 2021**") dated 07.10.2021 [***Refer: Annexure P/17***]. Further, CEA Guidelines, 2021 in its Article 7 clearly mandate the Responsible Entity to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded and those nearing end of life or left without support from OEM should be replaced. The relevant regulation is presented below for reference-

> *"Article 7 Phasing out of Legacy System*
>
> *(a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.*
>
> *(b) The Responsible Entity shall ensure that the Information Security*

MAITHON POWER LIMITED

Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors".

95. In light of the above, the technical constraint was beyond the Petitioner's control, and the ancillary cost was incurred to effectively execute the scheme. Therefore, the Petitioner humbly requests the Hon'ble Commission to approve the additional capital expenditure of Rs. 123.59 lakh under Regulation 25(2)(c) of the Tariff Regulations 2019.

ix. DM Plant and Raw Water PLC upgradation

96. The Petitioner humbly submits that the Hon'ble Commission *vide* order dated 08.01.2022 in Petition No. 408/GT/2020 had allowed additional capital expenditure of Rs. 100 lakh (Rs. 50 lakh during FY 2020-21 towards the Upgradation of DMP PLC and Rs. 50 lakh during FY 2020-21 towards the Upgradation of Raw Water PLC under Regulation 25(2)(c) of the Tariff Regulations 2019. It is submitted that the scheme has been completed within the approved additional capital expenditure with no cost escalation. A true copy of the Letter of obsolescence from OEM is attached herewith and marked as **ANNEXURE P/11**.

97. It is also relevant to note that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations including the CEA Cyber Security Guidelines, 2021 dated 07.10.2021 [***Refer: Annexure P/17***]. Further, CEA Guidelines, 2021 in its Article 7 clearly mandate the Responsible Entity to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded and those nearing end



of life or left without support from OEM should be replaced. The relevant regulation is presented below for reference -

"Article 7 Phasing out of Legacy System

(a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.

(b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors".

"

98. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 76.14 lakh (Rs. 68.48 Lakh in FY 2022-23 and Rs. 7.66 Lakh in FY 2023-24) under Regulation 25(2)(c) of the Tariff Regulations 2019.

x. Augmentation of Ash Handling Plant

99. The Petitioner humbly submits that the Hon'ble Commission *vide* order dated 08.01.2022 in Petition No. 408/GT/2020 had allowed additional capital expenditure of Rs 1917 Lakh i.e. Rs. 1417 lakh during FY 2019-20 and Rs. 500 lakh during FY 2020-21 towards the Augmentation of Ash Handling System under Regulation 26(1)(a) of Tariff Regulations 2019. However, in Review Petition No. 04/RP/2022, the Petitioner had submitted that the applicable Regulations were Regulation 25(1)(a) and 25(2)(b) of the Tariff Regulations 2019 and Hon'ble Commission in interim order dated 26.05.2022 granted liberty to the Petitioner to claim the same at the time of true-up. It is submitted that the scheme has been completed at Rs. 1893.57 Lakh within the approved additional capital expenditure with no cost escalation.



100. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 1893.57 lakh (Rs. 633.04 Lakh, Rs. 285.93 Lakh, Rs. 543.64 Lakh, Rs. 305.30 Lakh and Rs. 125.66 Lakh respectively in each financial year of 2019-24 period) under Regulation 25(1)(a) and 25(2)(b) of the Tariff Regulations 2019.

xi. Centrifugal Compressors and Motor for BTG

101. The Petitioner humbly submits that the Commission *vide* order dated 08.01.2022 in Petition No. 408/GT/2020 had allowed additional capital expenditure of of Rs. 350.00 lakh during FY 2020-21 and Rs. 400.00 lakh during FY 2021-22 towards replacement of Centrifugal Compressors for BTG under Regulation 25(2)(c) of Tariff Regulations 2019. The relevant extract of the order is as follows:

> *"191....*
>
> *However, after examining the justifications furnished by the Petitioner, it is observed that in case of Centrifugal Compressor & motor for Boiler Turbine Generator and Centrifugal Compressors for Ash Plant, the OEM has suggested the replacement owing to the obsolescence/ unavailability of spares/ service support by OEM. In view of this, the projected additional capitalization of Rs.750.00 lakh (Rs.350.00 lakh in 2020-21 and Rs.400.00 lakh in 2021-22) for Centrifugal Compressor & motor for Boiler Turbine Generator and Rs.1200.00 lakh (Rs.300 lakh during each year from 2020-24) is allowed under Regulation 25(2)(c) of the 2019 Tariff Regulations. The Petitioner is however, directed to furnish the recommendations of OEM at the time of truing-up of tariff."*

102. The Petitioner states that the order for the BTG compressor was placed on channel partner of a new OEM in FY 2022-23 with delivery schedule for FY 2024-25. All the engineering documents and specifications were passed to the bidder before order finalization and, after receiving their acceptance, formal order was placed. But in due course of time, it has been observed that the vendor was not able to comply with the accepted specification and sought multiple deviation points and



associated extension in executing the order. A copy of the latest email communication dated 08.06.2022 from the supplier regarding the delivery delay is annexed herewith and marked as **ANNEXURE P/12-A** .

103. Due to this gross deviation from the engineered specifications, matter has been escalated to their management level but they expressed their inability to execute this order in its original form and content. In such condition, the order could not be completed in due time. Now re-bidding is required to be done to execute the project at the earliest. Further, as required by the Hon'ble Commission, the supporting document to demonstrate the obsolescence or unavailability of spare parts and service support of screw compressors have been annexed herewith and marked as **ANNEXURE P/12-B**.

104. Since the initial price was estimated in 2019, Petitioner is requesting for raising the total expenditure to Rs. 1000 Lakh in FY 2026-27. Accordingly, the Petitioner has provided the expenditure in 2024-29 period

105. Accordingly, the Petitioner in not claiming any expenditure during 2019-24 as the same has been shifted to FY 2025-26.

xii. Centrifugal Compressors for Ash Plant

106. The Petitioner humbly submits that the Commission vide order dated 08.01.2022 in Petition No. 408/GT/2020 had allowed additional capital expenditure of Rs. 300 lakh during FY 2020-21, Rs. 300 lakh during FY 2021-22, Rs. 300 lakh during FY 2021-22, Rs. 300 lakh during FY 2022-23 and Rs. 300 lakh during FY 2023-24 towards 4 Centrifugal Compressors for Ash Plant under Regulation 25(2)(c) of Tariff Regulations 2019. The relevant extract of the order is as follows:

"191....

However, after examining the justifications furnished by the Petitioner, it is observed that in case of Centrifugal Compressor &



motor for Boiler Turbine Generator and Centrifugal Compressors for Ash Plant, the OEM has suggested the replacement owing to the obsolescence/ unavailability of spares/ service support by OEM. In view of this, the projected additional capitalization of Rs.750.00 lakh (Rs.350.00 lakh in 2020-21 and Rs.400.00 lakh in 2021-22) for Centrifugal Compressor & motor for Boiler Turbine Generator and Rs.1200.00 lakh (Rs.300 lakh during each year from 2020-24) is allowed under Regulation 25(2)(c) of the 2019 Tariff Regulations. The Petitioner is however, directed to furnish the recommendations of OEM at the time of truing-up of tariff."

107. It is submitted that the Petitioner had installed total 14 nos of screw compressors for Ash handling Plant ("**AHP**"), which were planned to be replaced in phased manner. In terms of the above approval, the Petitioner has placed the order for replacement of 6 nos. of screw compressors with 4 centrifugal air compressors on 08.06.2024, which will be installed in 2025-26. Replacement of balance 8 screw compressors with equivalent 4 centrifugal air compressors is being proposed during 2024-29.

108. It is submitted that the Petitioner followed competitive bidding process for selection of vendor. However, there was delay in finalization of the Bid Documents due to modifications done based on vendors' feedback. Further, during specification finalization, most of the prospective bidders could not meet the required air discharge capacity per compressor. As a result, there was delay in order placement.

109. Further, the Hon'ble Commission vide Tariff Order dated 08.01.2022, at Paragraph 191, had directed the Petitioner to furnish the OEM recommendations to demonstrate the obsolescence or unavailability of spare parts and service support. A copy of the OEM recommendations dated 10.01.2022 as per the directions of Hon'ble Commission are being annexed herewith and marked as **ANNEXURE P/13**.

MAITHON POWER LIMITED

110. In addition to the above, the Petitioner submits that the Centrifugal Compressors are bigger in size than that of the installed screw compressors and for the same, to make arrangement of centrifugal compressor's RCC structure/foundation was made and auxiliary units of existing compressed air system were shifted to newly made RCC structures, and hence these assets were put to use and being claimed.

111. Since this scheme of Centrifugal Compressor is proposed to be carried forward to Tariff Period 2024-29 for reasons explained above that are beyond the control of the Petitioner, (where this incidental expenditure on these structures is not being proposed) the Petitioner requests the Hon'ble Commission to approve the Additional capitalization of Rs 2.36 Lakh for FY 2022-23 and of Rs 48.43 Lakh for FY 2023-24 towards above stated incidental expenditure under Regulation 25(2)(c) of Tariff Regulations 2019. This expenditure is shown as "RCC Structure" in Auditor's Certificate.

112. Further, the Petitioner has shifted the expenditure on approved Centrifugal Compressors, for which order has been placed on 08.06.2024, to FY 2025-26.

xiii. ID Fan Motor with VFD Replacement

113. The Petitioner submits that Hon'ble Commission has approved Rs. 18 Crore towards ID Fan Motor with Variable Frequency Drive (VFD) under Regulation 25(2)(c) of the Tariff Regulation 2019 in the Tariff Order dated 08.01.2022. It may be noted that approval was based on the technological obsolescence, supported by the recommendation of OEM for upgradation and to address issue of present unreliability of the system. A copy of the said Obsolescence Certificate dated 10.06.2022 from the OEM is annexed herewith and marked as **ANNEXURE P/14-A**.

114. After above approval, the said scheme was awarded to the supplier on 01.03.2022

MAITHON POWER LIMITED

through competitive bidding process for supply till 31st January 2023. This was planned for installation in Unit 1 with outage planned in February 2023. As outage of each unit of Petitioner's Plant is taken in alternate years, Unit 2 VFD installation was planned in 2024 outage.

115. It may also be noted that post the actual bid process the actual cost discovered was Rs. 2451.55 Lakh against approved cost of Rs 1800 Lakh with details as hereinunder and, hence, cost escalation was beyond the control of Petitioner -:

Sr No	Description	Cost (Rs. Lakh)	Cost (Rs. Lakh)
1	Drive cost all 4 Drives (8 Channels) with Mandatory spares	1744	2057
2	Expert services	32.70	38.58
3	News paper advertisement	0.86	1.01
4	Misc Cable and other	9.16	11.35
5	Commissioning of LCI charges Unit 1 & 2	90.40	106.67
6	Control and monitoring from control room charges	200.00	236.00
	Total	2077.12	2451.55

116. However, on 15.11.2022 the supplier issued a letter to the Petitioner which stated that due to external factors like war impact is beyond the control of the suppliers the delivery of the drive would not be completed in original timeframe and the corresponding works have to be deferred by 150 days i.e. by June 2023. After lot of persuasion, by its email dated 02.01.2023, the supplier updated its request for extension to April 2023. However, by this new date the actual outage period during February 2023 for Unit 1 was over and installation was pushed to next outage of Unit 2 planned in 2024 and in 2025 for Unit 1. The actual supplies were made in June and August 2023. As Unit 2 outage was taken in February 2022, next

MAITHON POWER LIMITED

outage could be taken only after 2 years i.e. March 2024 onwards. Copies of communications from the supplier regarding delivery challenges are annexed hereto and marked as **ANNEXURE P/14-B (COLLY)**.

117. Since, the beneficiaries do not agree to outages from February to June due to high demand, it could be planned only from July 2024 onwards. The MoM dated 27.10.2022 with one of the beneficiaries in this regard specifically records that from next financial year onwards, the overhauling of the units shall be completed within the month of January as February to June are very high demand months. Further, CEA referring to the review meeting chaired by Hon'ble Minister of Power & NRE on 07.11.2023 to meet the power demand during November 2023 to June 2024 directed that *"(ii) No planned maintenance during March 2024 to May 2024"*. The Petitioner, therefore, could not plan shutdown of Unit 2 from February to June 2024. Copies of MoM dated 27.10.2022 and CEA direction on meeting dated 07.11.2023 are annexed hereto and marked as **ANNEXURE P/14-C (COLLY)**.

118. As per directions of Hon'ble Commission in Order dated 16.12.2022 in Petition No. 606/MP/2020, the Petitioner carried out re-bidding of its De-NOx system which was to be commissioned by 04.02.2025 for Unit 2 and by 31.12.2025 for Unit 1 by the successful bidder. The relevant extract of the order is as follows:

> *"As the hard cost of NOx control system claimed by the Petitioner is much higher, we are not inclined to approve the same at this stage. The Petitioner is directed to adopt prudent methods of transparent competitive bidding and arrive at more economical and reasonable capital/hard cost of the NOx control system in the interest of beneficiaries and the consumers".*

119. Since De-NOx installation for Unit 2 necessarily required shutdown around December 2024-January 2025, separate shutdown for installation of VFD was not taken during July to November 2024 as two shutdowns of Unit 2 in the same year would neither be economical nor agreed by beneficiaries. It was, therefore,



planned to be commissioned along with De-NOx shutdown. The installation of VFD for Unit 2 was therefore, done in the shutdown of November-December 2024. Unit 1 installation shall, therefore, take place in next shutdown in 2025.

120. In the above context, the time overrun and cost overrun are due to the factors which are beyond the control of the Petitioner.

121. It is estimated that the Capital expenditure required for procurement and commissioning of this equipment is Rs. 2451.55 lakh through an open tendering process and it will be executed in FY 2024-25 (Rs 1200 lakh) and FY 2025-26 (Rs. 1251.55 lakh). Accordingly, this expenditure is being claimed in the period 2024-29 and no expenditure is being claimed in 2019-24.

xiv. Spare GT

122. Spare GT was approved in True-up of 2014-19 in Tariff Order dated 08.01.2022. There is minor reversal of Rs. 7.74 lakh in FY 2019-20, which is proposed to be adjusted from asset base.

B.II.A. b. New Additional Capital Expenditure

i. Infrastructure - Admin

123. The Petitioner submits that the guest house infrastructure, categorized under minor assets, plays a crucial role in the smooth functioning and management of the power plant. An expenditure of Rs. 147.30 lakh was incurred during the tariff period 2019–24 for its upkeep and maintenance. However, the Hon'ble Commission disallowed this expenditure in the Tariff Order dated 08.01.2022 on the grounds that it was minor in nature and lacked a direct connection to the generating station's operations.

124. Aggrieved by this disallowance, the Petitioner filed a Review Petition, which was dismissed by the Hon'ble Commission through its Order dated 26.05.2022.



Consequently, the Petitioner filed Appeal No. 12 of 2023 before the Hon'ble Tribunal *inter alia*, challenging this disallowance, which is pending adjudication.

125. The Petitioner respectfully submits that the expenditure incurred is essential for maintaining and preserving the assets created under the original scope of the project as it is not being claimed or allowed elsewhere.

126. In view of the above, the Petitioner requests the Hon'ble Commission to approve the additional capital expenditure of Rs. 147.30 lakh under Regulation 25(2)(a) and Regulation 76 of the CERC Tariff Regulations 2019. Further, the Petitioner shall withdraw this issue from the Appeal No. 12 of 2023 upon approval of this claim by the Hon'ble Commission.

ii. Infrastructure - IT

127. The Petitioner submits that this scheme is grouped under minor assets and are important for power plant and significant cost of Rs 189.24 Lakh was incurred as expenditure in the Tariff Period 2019-24. However, the aforesaid scheme was disallowed by the Hon'ble Commission in the Tariff Order dated 08.01.2022 on two accounts that is being minor in nature and no relation with the operations to the generating station.

128. The Petitioner being aggrieved by the disallowance filed a review which was dismissed vide Order dated 24.02.2022 and subsequently filed an Appeal No. 12 of 2023 before Hon'ble Tribunal, which is pending adjudication.

129. It is also relevant to note that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations including the CEA Cyber Security Guidelines, 2021 [***Refer: Annexure P/17***]. Further, CEA Guidelines, 2021 in its Article 7 clearly mandate the Responsible Entity to ensure that its IT technologies in the Power System

MAITHON POWER LIMITED

Equipment/System have the ability to be upgraded and systems nearing end of life should be replaced. The relevant regulation is presented below for reference -

> *"Article 7 Phasing out of Legacy System*
> *(a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.*
> *(b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors. "*

130. The additional capital expenditure includes new laptops, desktops and printers, tailored to meet the specific technical requirements of the departments and according to the Petitioner's Policy for robust cyber security. Therefore, the Petitioner requests that the Hon'ble Commission approve the aforesaid additional capital expenditure of Rs 189.24 Lakh for 2019-24 under Regulation 25(2)(a) and Regulation 76 of the Tariff Regulations 2019. Thus, this expenditure is essential for successful and efficient running of the plant and is not being claimed/allowed elsewhere.

131. It is further submitted that the Petitioner shall withdraw this issue from the Appeal No. 12 of 2023 upon approval of this claim by the Hon'ble Commission.

iii. Dust Suppression system

132. The Petitioner humbly submits that an Ash Pond is basically a polluting zone and has been causing the spread of fugitive dust to the surroundings of the ash pond area, thereby deteriorating the Ambient Air Quality Index ("**AAQI**") of the nearby villages, particularly during the dry season. This issue has been a frequent complaint from local villagers, especially in the afternoon. Due to frequent local agitation and after evaluating other options, dust suppression system was opted.



A copy of Notification dated 18.11.2009 relating to AAQI standard requirement issued by CPCB is annexed herewith and marked as **ANNEXURE P/15**.

133. Further, MoEF&CC team in its report given in FY 2015-16 has recommended as follows "*Project should implement suitable measures to reduce the emissions from the place where fly ash is removed from the ash pond and transported through trucks to abandoned mines site. The water sprinkling arrangement at the evacuation site should be made immediately*".

134. In order to meet the AAQI Standard at all times, the Petitioner implemented the Ash Pond Dust Suppression System at the ash pond area to manage fly ash primarily in dry mode (with a provision for wet disposal) and bottom ash in wet mode using either lean slurry disposal or disposal through hydrobins. To address the problem of fugitive emissions from ash, it was proposed to install a water sprinkling arrangement/dust suppression system in the ash pond. Each sprinkler will cover a 45-meter projectile radius, with 18 fixed sprinklers and 18 branch sprinklers installed.

135. In view of the above requirement and considering environmental cleanliness, the Petitioner humbly requests that the Hon'ble Commission to approve the additional capital expenditure of Rs. 40.92 lakh incurred towards the said work spread during 2019-24 under Regulation 25(1)(b) of the Tariff Regulations 2019.

iv. SWAS Silica Analyzer Upgradation

136. The Petitioner respectfully submits that the silica analyzer system, along with its associated instrument packages, was supplied by M/s HACH Service Plus. This system is a continuous reading, wet-chemical, colorimetric analyzer designed to measure silica concentration in water within a range of 0 to 5,000 micrograms per liter (µg/L or ppb) silica (SiO2). The silica analyzer features a programmable, fully

MAITHON POWER LIMITED

automatic calibration system to ensure continuous accuracy and reliability. Its primary function is to measure and display process parameters at the Workstation, which is critical for monitoring and maintaining plant efficiency.

137. However, over time, issues such as silica deposition, obsolescence of spare parts, and non-availability of service support for the existing silica analyzer have severely impacted its functionality. Based on these challenges, the OEM, M/s HACH Service Plus, recommended the upgradation of the silica analyzer to ensure the continued availability, reliability and accuracy of the control system. A copy of OEM's recommendation dated 13.06.2018 is annexed herewith and marked as **ANNEXURE P/16**.

138. In compliance with the OEM's recommendations, the Petitioner undertook the upgradation of the silica analyzer to maintain the reliability of the control system and ensure the plant's ability to meet generation requirements as per schedule. This upgradation was essential for preventing operational disruptions caused by inaccurate or unavailable silica measurements.

139. It is respectfully submitted that the Petitioner incurred a total expenditure of Rs. 49.98 lakh for the upgradation, comprising Rs. 28.39 lakh in FY 2022-23 and Rs. 21.59 lakh in FY 2023-24. In view of the above, the Petitioner humbly requests the Hon'ble Commission to approve the said expenditure as additional capital expenditure under Regulation 25(2)(c) of the Tariff Regulations, 2019.

v. Unified PI System

140. It is submitted that CEA by its Guidelines viz. 'Cyber Security in Power Sector Guidelines, 2021' on enhanced cyber security for the generating stations mandates phasing out of legacy system. It may be noted that said guidelines have been issued under Central Electricity Authority (Technical Standards for



Connectivity to the Grid) Regulations, 2019 and, hence, have force of law.

141. Accordingly, the Petitioner had incurred expenditure to enhance the cyber security for existing system with a view to address the issues of upgradation of hardware, disparate versions of operating systems at different locations, limitations in cybersecurity features and non-optimized use due to distributed nature of existing architecture/license structure, etc. and to enhance the utilization of the system by building customized solutions and incorporating latest tools, features and facilities used for various data monitoring, calculations and MIS purposes and also provide data to third party enterprise solutions installed such as ADORE (built on AVEVA Prism - APR system) for early detection of developing abnormalities.

142. The relevant extracts of the aforementioned CEA Guidelines 2021, communicated vide letter dated 07.10.2021 CEA-CH-13-12/4/2021-IT Division, are reproduced as follows:

> ***"Article 7 Phasing out of Legacy System***
>
> *a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.*
>
> *b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors.*
>
> *c) The CISO shall ensure that till equipments/systems nearing end life or left without support from OEM are not replaced, their cyber security is hardened and ensured through additional controls provisioned in consultation with the OEM or alternate Supplier(s)*.*
>
> **e.g. Use of CDAC developed AppSamvid and whitelisting of applications installed may be explored across all legacy systems.*
>
> *d) The Responsible Entity shall document in their Cyber Security Policy*



a Standard Operating Procedure for safe and secure disposal of outlived or legacy devices."

A copy of the Cyber Security in Power Sector Guidelines, 2021 issued by CEA is annexed herewith and marked as **ANNEXURE P/17**.

143. In view of the above directions, the Petitioner has incurred Rs. 61.18 lakh (Rs. 47.97 lakh in FY 2020-21, Rs. 8.47 lakh in FY 2021-22 and Rs. 4.74 lakh during FY 2022-23) in this regard and, accordingly, requests the Hon'ble Commission to approve the same as additional capital expenditure under Regulation 25(1)(b) Tariff Regulations 2019.

vi. Upgradation of AHP PLC

144. It is submitted that the Programmable Logic Control ("**PLC**") system consists of Measurement and Closed/Open Loop Control system (CLCS & OLCS), Data bus system, Operator cum Engineer Workstation, Software including data diagnostics and data bus system with Control and Communication with the process.

145. It may be appreciated that there was a necessity to up-grade the workstations Human Machine Interface (HMI) on account of the obsolescence of technology namely Microsoft Windows XP Operating platform and withdrawal of the support for all XP based systems including automatic security updates. In absence of such support from Microsoft, the Petitioner was not able to update the critical virus definition files and, thus, made the system vulnerable for the system security.

146. Hence, the system needed up-gradation to higher version of Windows platform to ensure improved reliability and availability. HMI systems in service at site were quite old and had outlived their service life. Furthermore, some of these machines were slow in response and used to hang quite frequently. The OEM in its life cycle report strongly recommended to upgrade the obsolete portion of the system. A

MAITHON POWER LIMITED

true copy of the obsolescence certificate dated 12.05.2021 pertaining to HMI is annexed herewith and marked as **ANNEXURE P/18**.

147. Notably, AHP Main plant PLC system being heart of the Ash Handling Plant ("**AHP**"), entire operation, monitoring and control automation is achieved with the help of this PLC system. Non availability of this PLC system or any malfunction in this system would have led to non-availability of generating unit. Hence, the PLC system was upgraded as the availability of this PLC system is very important for the smooth & normal operation of the generating Unit or else there would have been reliability and availability loss.

148. It is also relevant to note that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations including the CEA Cyber Security Guidelines, 2021 [***Refer: Annexure P/17***]. Further, CEA Guidelines, 2021 in its Article 7 clearly mandate the Responsible Entity to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded and to phase out legacy system. The relevant regulation is presented below for reference -

> *"Article 7 Phasing out of Legacy System*
>
> *a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.*
>
> *b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors."*

149. In view of the above, the Petitioner has incurred an additional capital expenditure of Rs. 59.00 lakh in FY 2021-22 and Rs. 2.37 lakh in FY 2022-23 towards the AHP PLC Upgradation and, accordingly, requests the Hon'ble Commission to allow the

MAITHON POWER LIMITED

same under Regulation 25(2)(c) of the Tariff Regulations 2019.

vii. Upgradation of Fire PLC

150. It is humbly submitted that the existing Fire PLC system, installed in 2011, comprises GE Fanuc PLC controllers, I/O network configurations and HMI workstations operating on the now-obsolete Windows XP platform. Over the years, the system has become increasingly unreliable due to the obsolescence of the CPU IC695CPU310 module and Genius bus communication technology, which no longer have spare or repair support from the manufacturer.

151. Additionally, the HMI machines have outlived their service life and Microsoft has withdrawn support for Windows XP, making it imperative to upgrade to ensure the smooth running and availability of the Fire pumps. Accordingly, the Petitioner upgraded the system in FY 2023-24 and the upgrade includes migrating to the latest CPU with an Ethernet platform compatible with Windows 10 Professional OS, installing new HMI workstations and renewing software licenses. This upgrade was essential to avoid system breakdowns, improve reliability and ensure the healthiness of the fire system, which is crucial for the plant's operational safety and sustainability. A copy of the obsolescence certificate dated 12.05.2021 from OEM is annexed herewith and marked as **ANNEXURE P/19.**

152. The benefits derived from this upgrade are substantial and multifaceted. In this regard, it may be noted that:

(a) Firstly, the upgraded system will significantly reduce cyber security threats by utilizing the latest Windows 10 Professional OS and antivirus security software.

(b) Secondly, the transition to an Ethernet-based PLC network system will enhance data transfer speeds, thereby reducing system hanging issues and

MAITHON POWER LIMITED

improving overall efficiency.

(c) Thirdly, the reduced dependency on the OEM for service and support will mitigate risks associated with the obsolescence of the current system.

(d) In addition, the installation of a remote Engineering Workstation (EWS) terminal in the main control room will facilitate continuous monitoring of the Fire pump system, reducing the need for contract manpower and ensuring the security of critical data such as system logic and passwords. This remote monitoring capability is particularly beneficial during critical times, such as adverse weather conditions or local political issues, aligning with the requirements of the Business Continuity and Disaster Management Plan (BCDMP).

(e) Overall, the upgrade will ensure the reliable availability of the fire system, thereby safeguarding the plant's operational activities and equipment from fire emergencies and supporting the sustainable running of the generating unit.

153. It is also relevant to note that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations including the CEA Cyber Security Guidelines, 2021 [***Refer: Annexure P/17***]. Further, CEA Guidelines, 2021 in its Article 7 clearly mandate the Responsible Entity to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded and legacy systems are phased out. The relevant regulation is presented below for reference -

"Article 7 Phasing out of Legacy System

a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.

MAITHON POWER LIMITED

b) *The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors. "*

154. In view of the above, the Petitioner has incurred an additional capital expenditure of Rs. 59.47 lakh in FY 2023-24 towards the upgradation of Fire PLC and accordingly requests the Hon'ble Commission to allow the same under Regulation 25(2)(c) of the Tariff Regulations 2019.

viii. End of life (Decentralised AC System)

155. The Petitioner humbly submits that the Air Conditioning (AC) units in the remote Programmable Logic Controllable (PLC) rooms have been in service for over a decade. These rooms with AC units include the Main Silo PLC Room, Fire PLC Room, MRS PLC Room, DM Plant PLC Control Room, ZLD PLC Panel Room, ZLD PLC Control Room, ZLD UPS Room, Raw Water PLC Room, CHP ER-1 PLC Control Room, ER-2 PLC Room, ER-3 PLC Room, Stacker PLC Room, H2 Plant PLC Room, CWPH Remote I/O Panel Room, HFO Pump House Remote I/O Panel Room, Lift car room, FBT, Switchyard, Kiosk, CHP CONTROL ROOM(ER1)/ER2/ER3 PLC room. The Petitioner is having decentralized and distributed AC systems for all these rooms.

156. The Petitioner also wants to bring to the notice of the Hon'ble Commission that installing an industrial centralized Air Conditioning system was not practicably advisable because of the considerable distances between different areas and even if the same was implemented it would have been much costlier and inefficient. Accordingly, by having de-centralized AC system, instead of industrial centralized AC system, the realized cost saving benefits of much cheaper de-centralized and

MAITHON POWER LIMITED

distributed Air-Conditioning systems have already been passed on to the beneficiaries.

157. These units, which were produced more than 11 years ago, have been operating continuously, notwithstanding the fact that they were not engineered for industrial usage causing substantially deterioration in their efficiency/performance. This led to recurrent operational disruptions majorly due to PLC card failures and the units reached a state where further maintenance was infeasible.

158. Kindly refer to the following list detailing the air conditioning units installed within the facility, inclusive of their respective manufacturing dates.

Location	AC details	DATE OF MFG
ER#1/MAINTENACE ENGINEER ROOM	MPL/ER-1/171000416	MAR2009
	MPL/WB/171000430	MAR2009
	MPL/ER-1/171000415	MAR2009
ER#1/CONFRENCE ROOM	MPL/ER-1/171000414	MAR2009
	MPL/ER-1/171000413	MAR2009
CHP HEAD ROOM	MPL/ER-1/171000410	MAR2009
	MPL/ER-1/171000411	MAR2009
ER#1/SHIFT ENGINEER ROOM	MPL/ER-1/171000412	MAR2009
ER#1/CONTROL ROOM	MPL/EMD/29A	MAR2009
	MPL/EMD/25A	MAR2009
	MPL/ER-1/171000409	MAR2009
	MPL/ASN/AC/701000152/5-12	MAR2009
	MPL/EMD/26A	MAR2009
	MPL/ER-1/171000408	MAR2009
ER#2/PLC ROOM	MPL/EMD/111B	MAR2009
	MPL/EMD/112B	MAR2009
ER#3/PLC ROOM	MPL/EMD/17B	MAR2009
	MPL/EMD/18B	MAR2009
SR/MCC ROOM	MPL/EMD/120	MAR2009
	MPL/EMD/119A	MAR2009
	MPL/EMD/118A	MAR2009

159. While it is typically more cost-effective to extend the lifespan of existing air conditioners by refurbishment of components instead of replacement, the



reliability of the refurnished components/system is much lower than new replaced AC System. Therefore, significant problems can occur when the PLC card fails due to AC System failure.

160. It is further submitted that these Air conditioners have outlived their useful life and needed replacement for enhancing the performance of various components, including compressors, heat exchangers, expansion valves, refrigerant etc. Accordingly, the Petitioner has incurred Rs. 81.16 lakh from FY 2019-20 to FY 2023-24 in this regard and requests the Hon'ble Commission to allow the same as additional capital expenditure under Regulation 25(2)(a) and 25(2)(c) of the Tariff Regulations 2019.

ix. Water Supply Township

161. It is submitted that the Petitioner's Employee Township "Anandam" is in the DVC Colony. The said township has 96 numbers of residential units along with several common facilities such as a canteen, dispensary, power sub-station, mini grocery shop, car parking and a children's playground. The total water requirement of the township was temporarily sustained by underground boring water.

162. According to Central Ground Water Authority (CGWA) Norms [PART II- Sec. 3(ii)] 2.0 dated 24.09.2020, for drinking and domestic use in residential apartments, group housing societies or government water supply agencies in urban areas, it is mandatory to obtain NOC for ground water usage and such NOC shall be granted only if local authority (i.e. DVC) is not able to supply water. A copy of relevant extract of these Central Ground Water Authority (CGWA) Norms is reproduced as follows:

> ***"2.0***
> ***Drinking & Domestic use for Residential apartments/ Group Housing Societies/ Government water supply agencies in urban areas***

MAITHON POWER LIMITED

For grant of No Objection Certificate for ground water extraction, the project proponent has to furnish the details as per the guidelines issued by the CGWA in proper format as available in CGWA website. ***No Objection Certificate for new /existing wells shall be granted only in such cases where the local Government water supply agency is unable to supply requisite amount of water in the area.***
....."

A copy of the Central Ground Water Authority (CGWA) Norms dated 24.09.2020 is annexed herewith and marked as **ANNEXURE P/20-A**.

163. Given the stringent CGWA requirements for groundwater use, it is challenging to utilize untreated groundwater in the required quantities at the township. DVC addresses similar needs in its township through a surface water-based treated water network. Therefore, the Petitioner applied to DVC Projects and Water Supply Department for permanent water supply line from DVC's water treatment system with the applicable charges of water as per the standing commercial rates and allied terms and conditions. Copies of various correspondences exchanged with DVC regarding water supply have been attached herewith and marked as **ANNEXURE P/20-B (COLLY).**

164. Consequently, an agreement was executed on 15.05.2023 wherein DVC agreed to supply the required amount of treated water for a standard commercial charge. A true copy of the Agreement dated 15.05.2023 executed between Petitioner and DVC is attached herewith and marked as **ANNEXURE P/20-C.**

165. The recital of the aforesaid agreement requires the Petitioner to install and maintain water supply lines and system, which is extracted below:

"AND WHEREAS ***the First Party has agreed to such construction, operation and/or maintenance of the water supply scheme by the Second Party*** *and further agreed to such supply of water to the Second Party for an initial period of five years as referred to in Clause- 16 here-in-under on the terms and conditions as hereinafter appearing."*

[***Emphasis Supplied***]

166. The said scheme involved installing pumps at the DVC water treatment plant and the supply lines to pump water from the DVC plant to the Petitioner's Township which have been installed in FY 2023-24.

167. Since the expenditure under the instant scheme has been incurred to meet the CGWA requirement and to maintain environmental and operational standards at the township, the Petitioner requests the Hon'ble Commission to kindly allow the actual expense incurred of Rs. 66.41 Lakh in FY 2023-24 under Regulation 25(1)(b) of the Tariff Regulations 2019.

x. Track Hopper End Wall

168. The Petitioner respectfully submits that since the operationalization of the railway system on 10.03.2022, coal has been received through both rake and road modes, resulting in significant savings in the transportation cost (around 24 paise per unit) in FY 2023-24, which are being passed on to beneficiaries. For unloading coal from trucks/Hyvas before this date, out of 15 originally constructed track hoppers, only 13 were required to avoid excessive dust in larger area of track hopper by truck unloading (i.e., hopper number 3-15) and hopper- 1&2 were not in service. Therefore, only 1 side end wall was constructed with RCC, but other side towards unused hoppers was covered with steel plate to avoid coal spillage and dust during coal pushing in hopper number 3. As a result of this, Track Hopper capacity was reduced from 4200 MT to 3700 MT. This stop-gap arrangement was due to delay in Railway Project caused by Force Majeure reasons, which were also acknowledged by Hon'ble Commission in Order dated 08.01.2022 in Petition No. 408/GT/2020.

169. With unloading from railway wagons, the use of track Hoppers 1 & 2 possible but RCC wall at the other end was necessary to close the spillage of coal from track



hopper end. The Plate along with stiffener were required to be anchored with RCC Beam/wall of track hopper with post installed anchor. The use of Hopper 1&2 will result in increasing the capacity of hopper up to 500 MT (i.e.100% availability and utilisation of track hopper) and, hence, significantly reducing the rake unloading time. The End wall was , therefore, constructed, which will help in significantly improving the plant operation, efficiency and reliability.

170. In light of the above, the Petitioner has incurred an additional capital expenditure of Rs. 98.93 lakh in FY 2023-24 for the construction of the Track Hopper End Wall. The Petitioner respectfully requests this Hon'ble Commission to approve this expenditure under Regulation 25(1)(b) and 25(1)(e) of Tariff Regulations 2019.

xi. Flow Meter Installation (Water Meter)

171. The Petitioner humbly submits that one of the essential resources for daily electricity generation, aside from coal, is water, which is necessary for producing steam to operate turbines. Additionally, water is also used in various ancillary processes, such as the cooling water system, service water system and fire water system. The water supply for the generating station is sourced from the Maithon Dam via an intake channel and it is transported into the generating station through raw water pumps located outside the plant premises using a common pipeline. Thus, it becomes crucial to measure the intake of raw water accurately to calculate and pay the raw water charges to DVC, which was being done right from inception.

172. It is further submitted that the Section 4 of the Water (Prevention and Control of Pollution) Act, 1974 provide as follows:

> *"4. AFFIXING OF METERS*
> *(1) For the purpose of measuring and recording the quantity of water consumed, every person carrying on any 2[industry] and every local authority shall affix meters of such standards and at such places as may be prescribed, and it shall be presumed that the quantity indicated by the meter*



has been consumed by such person or local authority, as the case may be, until the contrary is proved."

173. In compliance with these provisions, a water meter was installed at the plant's intake point to provide cumulative readings of water supplied for various internal uses. The daily raw water consumption at the Petitioner's Plant is approximately 46,000 m^3. It is also important to mention that in the National Water Policy 2012 requires **mapping of water uses for different purposes** to ensure efficient use of water:

> *"5. A system to evolve **benchmarks for water uses for different purposes, i.e., water footprints, and water auditing** be developed to ensure efficient use of water. Project financing has been suggested as a tool to incentivise efficient & economic use of water."*

A copy of National Water Policy 2012 (relevant pages) is annexed herewith and marked as **ANNEXURE P/21** .

174. Further, given the global scarcity of drinking water, which poses significant health and hygiene challenges, it is imperative to optimize and control the use of surface and groundwater for non-drinking purposes to prevent wastage. As mandated by the Environmental Protection Act, 1986, every industry must submit specific water consumption reports to the CPCB and SPCB quarterly. Thus, accurate measurement of water usage for different purposes and the amount recycled is necessary to calculate specific water consumption for each purpose. Metering at multiple points was, therefore, essential for the Petitioner to comply with statutory water consumption requirements.

175. To address these needs, the Petitioner decided to monitor water usage for various purposes and measure waste water quantities to recycle as part of a circular economy approach. The goal was to reduce the intake of raw water and optimize specific water consumption per kWh of electricity produced for water consumed

MAITHON POWER LIMITED

for different purposes. Therefore, the Petitioner has installed multiple water meters throughout the plant to measure water consumption wherever applicable or needed.

176. Before September 2016, Jharkhand State Pollution Control Board(JSPCB) accepted water consumption returns in a prescribed format, where the total raw water consumption for the month was reported based on initial and final meter readings. Consumption in different categories was calculated based on theoretical ratios for allocation. The separate metering for these categories would allow the Petitioner to comply with actual consumption reporting requirement of JSPCB.

177. It is further submitted that although water meters were included in the original Project P&I diagram but the same now need to be augmented after National Water Policy 2012. Thus, on account of stricter environmental norms for conservation of water, the Petitioner has installed water flow meters at various locations and humbly requests the Hon'ble Commission to allow the total additional capital expenditure of Rs. 69.77 lakh out of which Rs. 64.45 lakh in FY 2022-23 and Rs. 5.32 lakh in FY 2023-24 under Regulation 25(1)(b) of the Tariff Regulations 2019.

xii. Track Hopper Ventilation System

178. The Petitioner humbly submits that with the commissioning of Railway system in March 2022, the coal is being received from BOBR Wagons and unloaded in the underground track hopper which was being transported through trucks/Hyvas earlier. Post crushing, the coal is either fed in bunker or conveyed for stacking as per operational requirements. The Underground facilities at Track Hopper are provided with ventilation system that replaces the contaminated indoor air with fresh air, thus, controlling the exposure due to airborne contaminants.

179. The ventilation system is required along the length of the hopper i.e. 200 meters

MAITHON POWER LIMITED

with the requirement of 4 induced and 4 exhaust fans i.e. total 8 fans. When the Run Of Mines (ROM) coal was being fed through trucks/Hyvas till March 2022, the level of fugitive dust while unloading to track hopper was much lower due to coarser ROM coal and lower quantities of coal being unloaded by trucks/Hyvas at a time. Therefore, the track hopper was provided with only 4 ventilation fans i.e. 2 induced draft and 2 exhaust fans. This was done to avoid unnecessary deterioration of fans that would not be used. Further, Track Hopper for entire length was provided only with exhaust duct, which is also partially damaged due to continuous water ingress. As stated earlier, the works were deferred due to delay in Railway System for Force Majeure reasons.

180. However, with unloading of wagons at full length of track hopper now, the dust in track hopper increased significantly due to increased quantity of coal at a time and presence of high dust in crushed coal, which is required to be controlled to meet stipulated requirement of law.

181. Keeping this condition in mind, more effective ventilation system was required in track hopper to extract the dust from underground hopper, thus, preventing the asphyxiating environment. The Petitioner has, therefore, installed 2 more induced draft fans and 2 more exhaust fans and also replaced the damaged duct in FY 2023-24.

182. Hence, the above project was necessitated to prevent condensation, reduce temperature and humidity, to ensure personnel safety from the point of view of airborne diseases and reducing asphyxiating conditions as required under section 7A of the Factories Act, 1948 which is stipulated as follows:

> ***"[7A. General duties of the occupier.—(1) Every occupier shall ensure, so far as is reasonably practicable, the health, safety and welfare of all workers while they are at work in the factory.***



(2) Without prejudice to the generality of the provisions of sub-section (1), the matters to which such duty extends, shall include—

(a) the provision and maintenance of plant and systems of work in the factory that are safe and without risks to health:

(b) the arrangements in the factory for ensuring safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances;

(c) the provisions of such information, instruction, training and supervision as are necessary to ensure the health and safety of all workers at work:

(d) the maintenance of all places of work in the factory in a condition that is safe and without risks to health and the provision and maintenance of such means of access to, and egress from, such places as are safe and without such risks;

(e) the provision, maintenance or monitoring of such working environment in the factory for the workers that is safe, without risks to health and adequate as regards facilities and arrangements for their welfare at work...."

[***Emphasis supplied***]

183. In view of the above, said work has been undertaken by the Petitioner to prevent condensation, reduce temperature and humidity and to ensure personnel safety from the point of view of airborne diseases and reducing asphyxiating conditions.

184. Accordingly, the Petitioner has incurred Rs. 204.39 lakh in FY 2023-24 in this regard and requests the Hon'ble Commission to allow the same as additional capital expenditure under Regulation 25(1)(b) and 25(1)(e) of the Tariff Regulations 2019.

xiii. Yard Sprinkling

185. It is submitted that this work has been carried out in 2014-19 tariff period and there is minor reversal of Rs. 2.96 Lakh in FY 2019-20, which may kindly be considered under Regulation 25(1)(b) in line with the expenditure towards Dust Suppression System of Ash Pond Area.

xiv. Ceramic Lining of Coal Mill

186. **The** coal received at the Petitioner's Plant contains high ash content than envisaged in FSA and, hence, high abrasive mineral species increases the erosion



propensity of coal. Due to presence of high abrasive materials, there was heavy erosion of the coal mill including its internals which has led to higher wear and tear of the coal mill pipes. This may have led to forced breakdown which would have affected the reliability and operation of the plant.

187. The fast erosion is due to poor coal quality which is beyond the control of the Petitioner. Therefore, the Petitioner has carried out ceramic Lining of Coal Mill to enhance reliability and life of Coal Mill. The Petitioner, therefore, prays to the Hon'ble Commission to admit the expenditure of Rs. 319.96 Lakh spread in FY 2022-23 and FY 2023-24 under Regulation 25(2)(a) and Regulation 25(2)(b) of the Tariff Regulations 2019.

xv. Reheater Upgradation

188. The Petitioner respectfully submits that Units 1 and 2 of the Petitioner's generating station have been operational since September 2011 and July 2012, respectively. Over the past few years, the Re-heater section of both units has experienced repeated boiler tube leakages, primarily due to poor coal quality, which is beyond the control of the Petitioner. Instances of temperature excursions in the Re-heater tubes have also been observed, where the metal temperatures exceeded the allowable limit of 600°C. During unit outages, oxide scale mapping of Re-heater coils revealed tubes with significant oxide scale thickness, indicating high metal temperatures.

189. In order to ascertain the root cause of such failures and determine corrective measures, the findings of oxide scale thickness and temperature profiles were shared with BHEL, the OEM. The Petitioner also apprised BHEL regarding the issue of high temperature difference between one thermocouple tag to another tag which is in range of 50-80 degree C for Divisional Panel, Platten Super Heater



("**PSH**") and Low Temperature Super Heater ("**LTSH**") and in the range of 115 degree C for Reheater Coil.

190. Consequent to the above discussions, the furnished details and considering the actual coal firing, BHEL recommended replacement of T22 tubes by T91 for 1st tube for all Panels immediately and main cause was attributed to coal properties as evident in MoM dated 11th and 12th November 2016. In respect of higher temperature difference between the heated and unheated part of hottest tubes of different zones, BHEL assured to revert. Relevant extract of the MoM are extracted below for ready reference.

> *"...m. In view of current observations based on operation and current coal firing (within the range of design limits),* ***BHEL recommended replacement of T22 tube by T91 for tube 1 for all Panels in Reheater rear as indicated in the sketch.***
>
> *o.* ***BHEL stated that if alarms are coming in steady state, it is by virtue of coal properties****. In view of this coal properties shall be forwarded to BHEL for further review and analysis.*
>
> *r. BHEL will revert on delta temp difference between heated and un-heated part for hottest tube of different zones (LTSH, Div Panel, PSH and RH). BHEL will revert back in 3 weeks.*

191. Following additional analysis, BHEL, in its communication dated 08.05.2018 and MoM dated 13th and 14th June 2018, identified delayed combustion due to coal quality variations and frequent load changes as the primary cause of Re-heater tube overheating. To address this, BHEL recommended upgrading the tube material from T22/T91 to SS347H, installing additional thermocouples for better monitoring and implementing other operational measures. The following extracts of the MoM quoted for reference, detail BHEL's recommendations for tube replacement and further analysis:

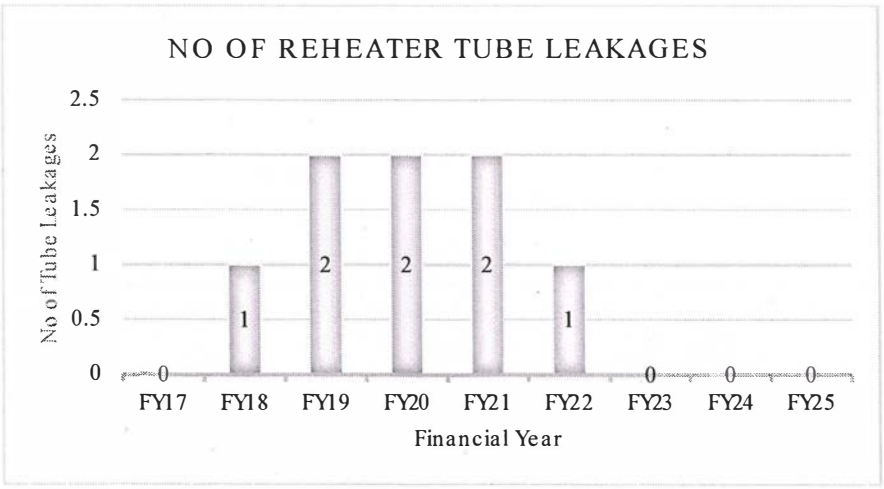
> *"...b.* ***BHEL stated that major root cause resulting in overheating is delayed combustion on account of Coal Characteristics and temperature excursions during start-up and load variation.*** *.....*
> ***Corrective measures****:*



". Acromat Thermocouples to be installed on 2-3 tubes of CRH Preferably tube 2 or 3 on RHS for monitoring of metal temp during start-ups and load variations.....
Up-gradation of HRH from T22/T91 to SS347H as recommended by BHEL earlier. Priority wise 23 Panels on RHS to be considered first....."

A true copy of the MoM dated 11-12.11.2016 of meeting with BHEL have been annexed herewith and marked as **ANNEXURE- P/22 A**. A true copy of MOM dated 13-14.06.2018 of meeting with BHEL is annexed herewith and marked as **ANNEXURE- P/22B.**

192. Noting the above recommendations and in order to have better monitoring and control of tube metal excursions, installation of additional Monochromatic Temperature Measurement ("**MTM**") thermocouples in Re-heater coils were undertaken over and above the existing ones immediately. In addition to the installation of thermocouples, associated items viz. Junction Boxes, Distributed Control System ("**DCS**") hardware etc., are also required to be installed. While considering the priority for upgradation as per recommendation, RHS panels have been replaced in 2019-24 and balance panels are proposed to be replaced in 2024-29. The following graph shows that against 12 boiler tube leakages from FY 2016-17 to 2020-21, the number of leakages has reduced to one during 2021-22 to 2023-24 after replacements during 2019-24:



MAITHON POWER LIMITED

193. Accordingly, due to the above-mentioned force majeure reasons upgradation was carried out in Re-heaters of both the boilers and the Petitioner has incurred an expenditure of Rs. 201.30 lakh in FY 2019-20 and Rs. 986.99 lakh in FY 2020-21, Rs. 486.57 lakh in FY 2021-22, Rs. 500.37 lakh in FY 2022-23, Rs. 505.47 lakh in FY 2023-24 and the same may be allowed by the Hon'ble Commission under Regulation 25(2)(a) and 25(2)(b) of the Tariff Regulations 2019.

xvi. ESP Internals

194. The Electrostatic Precipitator (ESP) is experiencing significant wear and tear due to the high ash content and the resulting erosion of its internal components, such as the Collecting Electrode (CE), Emitting Electrode (EE) and the rapping system. The primary issue with the Collecting Electrode (CE) is damage caused by high ash content, including deformation at the top hook, excessive bending, reduced thickness, and extensive wear in various areas.

195. These issues have decreased the CE's collection efficiency, leading to improper adhesion of ash particles. As a result, ash particles are discharged into the stack, causing emissions to exceed the designed levels. Similarly, the Emitting Electrodes (EE) have sustained damage due to the high ash content. Problems such as reduced spring stiffness, root-end damage and low back value have been identified. These issues have diminished the corona effect and the ionization capacity required for fly ash capture, leading to increased downtime for ESP fields and elevated Suspended Particulate Matter (SPM) levels. Consequently, stack emissions have risen beyond the designed levels.

196. In order to sustain the same level of efficiency so that environmental norms are not violated, periodically the worn-out, eroded, corroded and damaged components of ESP internals had to be replaced with new ones without affecting

the alignment or precision working internals. The Outage data before and after replacement is given below:

SL No	ESP Field outage	No. of field outage before replacement	No. of field outage after replacement
1	Unit-1 ESP Pass-B 1st Field	5	0
2	Unit-2 ESP Pass-C 1st Field	8	0

197. In this regard, the Petitioner has incurred capital expenditure of Rs. 293.42 lakh in FY 2021-22, Rs. 342.33 lakh in FY 2022-23 and Rs. 170.61 lakh in FY 2023-24 for ESP Internals replacement may be approved by the Hon'ble Commission under Regulations 25(1)(b) and 25(2)(a) of Tariff Regulations 2019.

xvii. ESP Wear Resist Pipes

198. Fly ash conveying system pipe are used to convey the fly ash from Electro-static Precipitator (ESP) to Ash silo Bin. Generally, the fly ash is conveyed at low velocity in a non-suspension mode, through all or part of the pipeline, it is referred to as dense phase conveying system. Air Preheater (APH) Duct and ESP ash conveying pipeline utilises the moving bed flow, in which the material is conveyed in dunes on the bottom of the pipelines. Moving bed flow is only possible in a conveying system if the fly ash to be conveyed has good air retention characteristics. This type of flow arrangement is limited to very finely powdered materials having a mean particle size in the range of approximately 40 – 70 µm. The flow also depends on particle size distribution, particle shape and with increase in wear of pipes all these factors cause not only lowering the ash disposal rate but also frequent pipe leakages which need to be plugged.

199. Low ash disposal rate due to high ash content in coal would increase the ash level



in the ESP raising the ash level in the hopper; creating a short in the ESP field leading to high stack emission and ultimately environmental pollution. Since Bulk density of the fly ash is very high and can damage the ESP internals, the rectification of the damaged ESP internals would require a shutdown. This would also be increasing the cost incurred towards procurement and replacement of collecting electrodes along with necessary internal parts of ESP. In order to increase the ash disposal rate due to high wear of existing MS pipes, the Petitioner has installed ESP wear resist pipes in a phased manner.

200. The ESP Wear Resist pipe has been procured and put to use by the Petitioner and the expenditure incurred towards the same is Rs. 108.93 lakh in FY 2021-22, Rs. 38.41 lakh in FY 2022-23 and Rs. 2.52 lakh in FY 2023-24. In view thereof, the Hon'ble Commission is requested to approve this expenditure under Regulation 25(1)(b) and 25(2)(a) of Tariff Regulations, 2019.

xviii. Fabric Expansion Bellows

201. It is submitted that the proportion of coarse ash particles is almost double the designed ash particle size distribution. This ash, carried along with the flue gas through the flue gas ducts as fly ash, has resulted in significant operational challenges. The higher volume and coarser ash particles in the flue gas have caused severe erosion to the duct and bellows while flowing through the ducts. This erosion has led to exposure of most of the duct and bellow sections to the atmosphere, resulting in air ingress and critically impacting the performance and efficiency of the Induced Draft ("**ID**") fans. Such operational issues directly affect the safety, reliability and efficiency of plant operations.

202. In order to address and contain this issue, which arose due to coal quality being beyond the control of the Petitioner, it was imperative to take immediate



corrective measures. To mitigate the problem, the Petitioner decided to cover the entire expansion bellows section with fabric expansion cloth, which is designed to withstand harsh operational conditions and prevent further erosion and air ingress. This measure was essential to ensure the continued reliability and efficiency of plant operations. Consequently, a capital expenditure of Rs. 86.96 lakh was incurred during the period 2019–24, which may be allowed under Regulation 25(2)(a), 25(2)(b) and 76 of Tariff Regulations 2019.

203. The incurrence of this additional capital expenditure was unavoidable and essential to maintain the safe and efficient operation of the plant, mitigate the adverse effects of coal quality and ensure compliance with operational and environmental standards. The fabric expansion cloth provides a sustainable and technically sound solution to prevent further damage to the ducts and bellows. Therefore, this Hon'ble Commission may be pleased to allow the expenses incurred under this head.

xix. Fire Hydrant System

204. The Petitioner humbly submits that the fire lines, which were installed underground and protected with a wrapping coating, particularly in the BTG, BOP and CHP area, are covered with a 100 MM RCC floor. These were complaint with IS 13039: 1991, Indian Standard External Hydrant System Provision And Maintenance Code of Practice Clause 6.1, which allowed both stand post type and underground type fire hydrants and is reproduced below:

> *"6.1*
> *Fire hydrants, namely, stand post type, con-- forming to IS 908 : 1975 and underground type conforming to IS 909 : 1975 should be provided. For use in industrial establishment, only stand post type hydrants should be provided".*

205. These underground fire lines in the BTG areas are more than a decade old and



have corroded over time. This corrosion has led to frequent leakages from the underground Fire Water lines. During periods of breakdown, these fire lines are isolated for extended durations, posing a threat to the generating station.

206. Given the condition of the underground pipes, the associated risks and the frequent occurrence of leakages, the Petitioner has decided to relocate the Fire hydrant line from underground to above ground in the BTG area and other areas in a phased manner. As previously mentioned, leakages have increased in the BTG, BOP and CHP areas. Consequently, the Main Pumps operate continuously instead of the Jockey pump, leading to further deterioration of the Fire lines and increase in risk of fire control.

207. Addressing these leakages necessitates the breaking of concrete, including excavations, which restricts movement in the affected area. Periodic maintenance and thickness monitoring of the underground pipes are also not feasible. During these breakdown periods, the fire lines require isolation for extended durations, which ultimately puts the plant at risk.

208. The inaccessibility of underground system also hinders regular inspections, which are required as per IS 13039 Clause 7.2, which is reproduced below:

> *"7.2*
> ***Each hydrant provided in the area should be inspected as often as possible.*** *The periodicity for such inspections should be determined and laid down depending on the local conditions. However, for cities and towns,* ***such inspections for each hydrant should be carried out at intervals not exceeding one month and for industrial establishment once every week.*** *The record of all such inspections should be maintained and remedial action for any defects observed should be immediately taken on priority basis."*

209. By moving the lines above ground, the Petitioner could isolate smaller areas and avoid putting the entire plant at risk. The Petitioner had attended to approximately 52 instances of leakages since November 2014. This change will

MAITHON POWER LIMITED

also improve the Fire Index of the Petitioner. A copy of data on leakage and outage days is annexed herewith and marked as **ANNEXURE P/23-A**.

210. Further, as per Safety Audit conducted by National Safety Council (NSC) in 2021, following recommendations were made:

> *"6.11 FIRE WATER SYSTEM (INCLUDING FIRE PUMP HOUSE)/ HYDRANT SYSTEM*
> ...
> *OBSERVATIONS*
> *During visit, leakages found in underground hydrant line in the BTG area which is not possible to rectify also.*
> *RECOMMENDATIONS*
> *It is suggested, fire line in BTG area should be installed above the ground for ease of maintenance and better fire protection system for same area."*

A true copy of the Report of Safety Audit dated 16-19.03.2021 conducted by National Safety Council is annexed herewith and marked as **ANNEXURE P/23-B**.

211. Therefore, in view of the above recommendations the requirements of IS and ensuring the safety of plant and plant personnels, the Petitioner decided to shift the Fire line above ground in phased manner so that Preventive Maintenance (PM) of Fire Water lines and valves can also be conducted to minimize fire line leakages. The Intelligence Bureau (IB) in its report (confidential) of 15-16 Feb 2024 also recommended for periodic inspection and maintenance of firefighting system. The relevant extract is as follows:

> *"27. All fire hydrant should be regularly checked and numbered.*
> *28. The fire hoses and other firefighting equipment should be properly maintained."*

It is submitted that a copy of the IB Report shall be provided by the Petitioner as and when directed by this Hon'ble Commission.

212. Therefore, the Petitioner started shifting the Fire line above ground during 2019-24 and is proposing balance work in 2024-29 so that regular inspections and

MAITHON POWER LIMITED

Preventive Maintenance (PM) of Fire Water lines and valves can also be conducted to minimize fire line leakages.

213. In view of the above and considering the safety and security of the workforce and generating station along with the recommendations of Safety Audit Report, the Petitioner humbly requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 302.52 lakh out of which Rs. 87.75 lakh in FY 2021-22, Rs. 115.43 lakh in FY 2022-23 and Rs. 99.34 lakh in FY 2023-24 under Regulation 25(1)(b) and 26(1)(d) of the Tariff Regulations 2019.

xx. Distributed Control System (Upgradation of LVS)

214. It is submitted that the Large Visual Screen (LVS) system in the Central Control Room (CCR) for the Distributed Control System (DCS) of Unit-1 and Unit-2 at Maithon Power Limited is crucial for displaying process parameters and alarm annunciation. However, the current LVS was experiencing frequent malfunctions and system hangs due to alarm overloading, as it handles over 600 alarms compared to the recommended maximum of 350 alarms suggested by BHEL.

215. This overload caused missed process alarms, posing operational risks and potential generation losses. Furthermore, the LVS has been declared obsolete by the OEM, M/s Pyrotech Electronic Pvt. Ltd., making future support and spare parts unavailable. A true copy of the obsolescence certificate dated 06.05.2022 is annexed herewith and marked as **ANNEXURE P/24.**

216. To address these issues, the LVS system has been upgraded with new stations featuring the latest hardware and software compatible with Windows 10. This upgrade distributes the alarm load effectively, resolves chronic hanging issues..

217. It is also relevant to note that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable

MAITHON POWER LIMITED

Regulations including the CEA Cyber Security Guidelines, 2021 [***Refer: Annexure P/17***]. Further, CEA Guidelines, 2021 in its Article 7 clearly mandate the Responsible Entity to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded and obsolete systems should be replaced. The relevant regulation is presented below for reference -

> *"Article 7 Phasing out of Legacy System*
>
> *a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.*
>
> *b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors".*

218. The improvements enhance safety, reliability and operational efficiency at the plant. The project, which costed Rs. 160.03 lakh in FY 2023-24, was essential to maintain system functionality, prevent generation losses and comply with operational standards. Therefore, the expenditure is justified and requested for approval by the Hon'ble Commission under Regulations 25(2)(a) and 25(2)(c) of the Tariff Regulations, 2019.

xxi. Network Equipment

219. It is humbly submitted that Network Equipment such as switches used for e-surveillance, play vital role in facilitating real time monitoring and communication across the Petitioner's power generation facilities providing long-term security benefits and operational reliability.

220. In order to replace 11 obsolete Cisco network switches, which are critical for maintaining the plant's 100% e-surveillance system scheme was taken up. The



current switches have reached their end of life and are no longer supported by the manufacturer, posing a significant risk to the plant's security infrastructure. A copy of the Lists of replaced switches at Petitioner's Plant and Notice of End of Sale and End of Life Announcement (for switches of four different series to be replaced) from the manufacturer is annexed herewith and marked as **ANNEXURE P/25 (COLLY)**.

221. The scheme involved procuring and installing new Cisco Catalyst switches, ensuring uninterrupted surveillance and reducing the risk of coal theft.

222. It is also relevant to note that of Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations including the CEA Cyber Security Guidelines, 2021 [***Refer: Annexure P/17***]. Further, CEA Guidelines, 2021 in its Article 7 clearly mandate the Responsible Entity to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded and legacy system/outdated cyber-security system should be phased out. The relevant regulation is presented below for reference -

"Article 7 Phasing out of Legacy System

a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.

b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors.

c) The CISO shall ensure that till equipments/systems nearing end life or left without support from OEM are not replaced, their cyber security is hardened and ensured through additional controls provisioned in consultation with the OEM or alternate Supplier(s).*



**e.g. Use of CDAC developed AppSamvid and whitelisting of applications installed may be explored across all legacy systems. "*

223. In view of the above, the Petitioner has incurred an additional capital expenditure of Rs. 74.44 lakh during Tariff Period 2019-24 towards the Network Equipment and, accordingly, requests the Hon'ble Commission to allow the same under Regulation 25(2)(c) of the Tariff Regulations 2019.

xxii. Main Turbine & TDBFP TSS

224. It is humbly submitted that it was necessary to replace the Turbine Supervisory Instrumentation System (TSS) sensors in Unit 1 and Unit 2 Main Turbine and Turbine Driven Boiler Feed Pumps (TDBFPs) being a critical component. Initially installed around 2010-2011 during the plant's commissioning, these sensors were meticulously inspected during each unit overhaul.

225. However, recent overhauls revealed significant deterioration in the sensors' linearity and sensitivity, attributed to aging effects. According to the Original Equipment Supplier (OES), M/s Forbes Marshal Magnet, these sensors have exceeded the standard replacement cycle of six years,. Thus, the sensors had surpassed double their recommended service life, necessitating immediate replacement to ensure measurement accuracy and system reliability.

226. Furthermore, the installed VK-series sensors have been discontinued by the OEM, M/s Shinkawa Electric Co., and have been succeeded by the technologically advanced FK series. The FK series offers improved temperature characteristics, stable output, and RoHS compliance, aligning with current industry standards. Consequently, replacing the obsolete VK-series sensors with the FK series was imperative to maintain operational integrity and leverage enhanced performance, thereby justifying the associated expenditure. A copy of the Letter dated



09.12.2019 of recommendation by OEM, M/S Shinkawa is attached herewith and marked as **ANNEXURE P/26.**

227. In view of the above, the Petitioner has incurred an additional capital expenditure of Rs. 239.96 lakh during FY 2022-23 and FY 2023-24 towards the Main Turbine & TDBFP Turbine Supervisory System and, accordingly, requests the Hon'ble Commission to allow the same under Regulation 25(2)(c) of the Tariff Regulations 2019.

xxiii. DG Set

228. It is humbly submitted that a 250 kVA Generator was installed in the generating station in 2009. Further, the Central Pollution Control Board (CPCB) in its "*Guidelines for in-use Generator sets (Noise and Emission)*" (Guidelines) directed Phasing out of old Generator sets on 25.02.2015 and all users have also been directed to comply with these Guidelines in the Order dated 11.03.2015 issued by the Hon'ble National Green Tribunal.

229. As per the above Guidelines, Generator sets should be scrapped out after its useful life, i.e., 15 years from the date of manufacturing. Thus, in line with Clause 2(iii) of the said Guidelines, the current 250 kVA Generator has been scrapped and new Generator has been commissioned in the plant. Relevant extract of clause 2(iii) is as follows:

> ***"2. Phasing out old Generator sets***
>
> .....
>
> *iii. Generator sets manufactured on or after 17th May 2002 be scrapped and dismantled after its useful life, i.e., 15 years from the date of manufacturing or 50,000 hours of operation, which even earlier."*

A copy of the Guidelines for in-use Generator sets (Noise and Emission) issued by CPCB and a copy of Hon'ble National Green Tribunal's Order dated 11.03.2015 are

MAITHON POWER LIMITED

annexed herewith and marked as **ANNEXURE-P/27 (COLLY.).**

230. Accordingly, the Petitioner requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 38.71 lakh incurred toward towards 250 kVA Generator in FY 2023-24 under Regulation 25(1)(b) read with 25(2)(c) of the Tariff Regulation 2019.

xxiv. Fire Tender

231. It is submitted that that the Notifications dated 06.03.2020 and 20.04.2020 issued by the Ministry of Transport and Highways bar the registration of fire tender after 15 years' service life. Notably, the existing two fire tenders in the Petitioner's Generating Station have reached the end of their 15-year service life and need to be de-registered. According to government directives, vehicles with emissions ratings below BS 4 are not eligible for re-registration. As a result, new vehicles must be procured. Given the crucial role fire tenders play in thermal power stations, this expenditure is necessary. Relevant extracts of the aforementioned Notification dated 06.03.2020 are reproduced below:

> *"I am directed to refer to the this Ministry's notification G.S.R. 889(E) dated 15.09.2016 vide which the Government has mandated mass emission standard for BS-VI throughout the country with effect from 1 April, 2020 to bring down pollution across the country. Further, this Ministry has also issued GSR 178 (E) dated 20th February, 2018 on the subject matter. However, the* ***Hon'ble Supreme Court vide its order dated 24th October, 2018 has directed that no new motor vehicle conforming to the emission standard Bharat Stage-IV shall be sold or registered in the entire country with effect from 01.04.2020****. The Hon'ble Supreme Court's in its order dated 24.10.2018 (copy enclosed) in the matter of W.P (C) No. 13029 of 1985, M.C. Mehta V/s Union of India has passed following directions:-*
>
> > *"Therefore, in exercise of the power vested in this Court under Article 142 of the Constitution, we read down sub-rule 21 of Rule 115 and direct that sub-rule 21 of Rule 115 shall be interpreted and understood to read that no motor vehicle conforming to the emission standard Bharat Stage-IV shall be sold or registered in the entire*



country with effect from 01.04.2020."

The compliance to Hon'ble Supreme Court order be strictly ensured."

[***Emphasis supplied***]

A true copy of the relevant pages of the Notifications dated 06.03.2020 and 20.04.2020 issued by the Ministry of Transport and Highways along with Order dated 27.03.2020 passed by the Hon'ble Supreme Court is annexed herewith and marked as **ANNEXURE P/28 (COLLY.)**.

232. In view thereof, two new fire tenders (Multipurpose and Water Tenders) were acquired in FY 2023-24 to meet the requirements. This will reduce the response time to reach the location and handle emergencies promptly.

233. Therefore, this Hon'ble Commission is requested to kindly allow this expenditure of Rs 101.36 Lakh under Regulation 25 (1)(b) of the Tariff Regulations, 2019.

xxv. Refurbishment of Economiser coil

234. It is submitted that due to poor coal quality and high ash content, heavy erosion of the economiser coils was recorded in last few years resulting into boiler tube leakages. The issue was taken-up with the OEM, BHEL for finding out the root cause of rapid erosion and further recommendations.

235. However, in order to address the exigencies before implementing the detailed recommendations of BHEL in MoM dated 13th – 14th June, 2018, Petitioner had to undertake refurbishment of some of the damaged Economiser coils, bends and protection shields which were beyond the repairable condition. Replacement of the economiser coils based on BHEL recommendation has been started in 2019-24 and is also being proposed during the period 2024-29. For ease of reference, the relevant extracts of BHEL's recommendations in the MoM dated 13.06.2018-14.06.2018 (***Refer Annexure P/22B***) is reproduced below:

MAITHON POWER LIMITED

"MPL presented the failure history, inspection findings for the Economizer banks, and LTSH Tubes. BHEL stated the major root cause resulting in erosion in LTSH and Economizer banks also on account of Coal Characteristics and properties. Since MPL is required to continually required to operate with .coal properties having higher ash content i.e. towards worst side of the designed coal, as per availability in the local region, ***additional care may be exercised to ensure replacement of above Economizer and LTSH sections, at least once in next 4 years,*** *followed by scheduled periodic maintenance to maintain the safety and reliability of boiler operation for plant generation."*

[*Emphasis Supplied*]

236. Since it was critical for boiler operation, pending replacement of Economizer coils, procurement process has already been initiated and refurbishment has been undertaken during FY 2019-20. The total Project Cost is at Rs. 98.93 lakh for FY 2019-20 and Rs. 0.94 lakh for FY 2021-22. The said expenditure falls within the scope of Regulation 25(2)(a) and 25(2)(b) of Tariff Regulations 2019, since quality of the coal received at the Petitioner's generating station is not within its control.

B.II.B. Additional Capital Expenditure beyond Original Scope

B.II.B. a. ***Expenditure approved in Order dated 08.01.2022 passed in Petition No. 408/GT/2020***

i. Boundary Wall Under Pass

237. The Petitioner humbly submits that the Hon'ble Commission *vide* order dated 08.01.2022 in Petition No. 408/GT/2020 (Para 226) had allowed additional capital expenditure of Rs. 100 Lakh during FY 2020-21 towards the Boundary Wall Under Pass under Regulation 26(1)(d) of the Tariff Regulations 2019.

238. It is submitted that the cost estimated in Petition No. 408/GT/2020 was on projected basis while the total additional capital expenditure incurred on the actual basis towards the said work is Rs. 118.17 Lakh in FY 2021-22 and FY 2022-23 which is minor deviation associated with such works.

MAITHON POWER LIMITED

239. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 118.17 Lakh in FY 2021-22 and FY 2022-23 under Regulation 26(1)(d) of the Tariff Regulations 2019.

ii. Peripheral Road (Road Along Boundary Wall)

240. The Petitioner humbly submits that this Hon'ble Commission *vide* order dated 08.01.2022 had allowed additional capital expenditure of Rs. 150.00 lakh during FY 2020-21, Rs. 150.00 lakh during FY 2021-22, Rs. 100.00 lakh during FY 2022-23 and Rs. 50.00 lakh during FY 2023-24 towards the Road along the Boundary wall under Regulation 26(1)(d) of the Tariff Regulations 2019.

241. However, the actual cost incurred is slightly more than estimated cost in Petition No. 408/GT/2020, primarily on account of execution of major part in FY 2022-23 and 2023-24 after approval in Order dated 08.01.2022. The requirement of Road along Boundary Wall was proposed by the Petitioner on the directions of IB. The increase in the additional capital expenditure is due to the fact that the cost estimated in Petition No. 408/GT/2020 was on projection basis.

242. Accordingly, the Petitioner humbly requests that the Hon'ble Commission to approve the additional capital expenditure of Rs. 51.30 lakh incurred during 2019-20, Rs. 27.66 lakh during 2020-21, Rs. 98.62 lakh during FY 2022-23 and Rs. 344.49 lakh in FY 2023-24 totalling to Rs. 522.08 lakh towards the said work under Regulation 26(1)(d) of the Tariff Regulations 2019, along with minor cost overrun which was beyond control of Petitioner.

iii. Automatic Generation Control

243. The Petitioner humbly submits that the Hon'ble Commission *vide* order dated 08.01.2022 in Petition No. 408/GT/2020 had allowed additional capital expenditure of Rs. 80 lakh during FY 2019-20 towards the Automatic Generation

control under Regulation 26(1)(a) of the Tariff Regulations 2019. It is submitted that the scheme has been completed at Rs. 79.91 Lakh (with a minor deviation).

244. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 49.96 lakh in FY 2020-21 and Rs. 30.00 lakh in FY 2023-24 under Regulation 26(1)(a) of the Tariff Regulations 2019.

iv. Coal Pit Run-off Mechanized Drainage systems

245. The Petitioner humbly submits that the Hon'ble Commission vide Order dated 08.01.2022 in Petition No. 408/GT/2020 had allowed additional capital expenditure of Rs. 399.53 lakh during FY 2019-20 towards the Coal Pit Run-off Mechanised Drainage systems under Regulation 26(1)(c) of the Tariff Regulations 2019. However, the scheme could not be executed due to local agitation.

246. The Petitioner submits that the present scheme was approved in the Tariff Order dated 08.01.2022. The scheme was approved mainly for construction of following drainage as mentioned in para 91 (iv):

(a) Construction of the drainage system for natural flow of storm water entering through northern area near the plant and preventing it from mixing with the contaminated water;

(b) To divert coal run off disposal into Ash pond (during monsoon season) through a pumping and piping management.

(c) To contain the coal dust mixed run off water within coal storage area.

247. However, the scheme could not be executed due to local agitation despite the Petitioner (after spending Rs. 10.92 Lakh in FY 2019-20) undertaking mitigating measures. The resistance was mainly with respect to usage of land outside plant boundary in the drainage route. After lot of persuasion and discussions with local residents the Petitioner is now hopeful of reaching an amicable agreement over

MAITHON POWER LIMITED

revised route very soon. This expenditure is, therefore, proposed to be incurred partly in FY 2024-25 and FY 2025-26 with capitalization in FY 2025-26. Considering the necessity of project, Petitioner proposes to undertake this project during 2024-29 at the earliest. Hon'ble Commission is requested to approve Rs. 10.92 Lakh in FY 2019-20 under Regulation 26(1)(c) of Tariff Regulations 2019. The balance amount of Rs. 388.61 Lakh is being proposed in Tariff Period 2024-29.

v. Mini-fire tender

248. The Petitioner respectfully submits that the Hon'ble Commission, through its order dated 08.01.2022, had approved an additional capital expenditure of Rs. 25.00 lakh for FY 2022-23 towards the procurement of a mini-fire tender under Regulation 26(1)(d) of the Tariff Regulations 2019. However, the actual cost incurred was slightly lower than the estimated cost provided in Petition No. 408/GT/2020.

249. It is further submitted that this expenditure was essential to ensure compliance with IS Code 3034, paragraph 10.2.5. The relevant extract for reference has been provided below. The extract for the same is mentioned below for ready reference:

"10.2.5 Super Thermal Power Stations Having Installed Capacity Exceeding 1000 MW (Class I)
The following equipment shall be provided:

Type of Appliances	*No.*	*Manning Pattern*
Foam and CO2 C/T	*1*	*Round the Clock*
Water Tender type B	*1*	*Round the Clock*
Dry Chemical Tender 2000 kg	*1*	*Round the Clock*
Emergency Tender conforming to IS 949 : 1985	*1*	*As reserve*
Hydraulic Platform 22m height (indigenously fabricated)	*1*	*Reserve*
Portable Water/Foam Monitors	*4*	
13.5 m light alloy extension ladders	*2*	
Trailer/Portable Flood Light Unit	*1*	

MAITHON POWER LIMITED

Type of Appliances	*No.*	*Manning Pattern*
Jeep 4 × 4	*1*	
B A sets (positive pressure type)	*24*	
High pressure Charging Set	*1 set*	
Blower and Exhauster	*4 No.*	
Water Jel Blankets (1.80m × 1.50m)	*16 No.*	
Water Jel Blankets (0.90 × 0.75m)	*32 No.*	
Water Jel Containers	*8 No.*	
Foam Compound	*50000 litres*	
Dry Chemical Powder Trailer of 150 kg capacity	*1 No.*	
High Expansion Foam Generator	*2 No.*	

NOTE - Considering the large area of the Super Thermal Power Stations and also for facilitating quick turnouts it may be necessary to deploy the operational equipment at two fire stations, a main Fire Station and Sub-Fire Station, both having update communication arrangement to help easy mobilization in case of emergency."

A true copy of the IS Code 3034 has been annexed herewith and marked as **ANNEXURE-P/29**.

250. This Hon'ble Commission is respectfully requested to approve the aforementioned scheme with the actual expenditure of Rs. 24.97 lakh against the approved cost of Rs. 25 lakh, as the deviation is minor in nature. This request is made under Regulation 26(1)(b) and (d) of the Tariff Regulations 2019.

vi. Economiser Platform

251. The Petitioner submits that the Economizer Coil Handling Platform scheme was approved with cost estimation of Rs 350 lakh under Regulation 26(1)(d) by the Hon'ble Commission in the Tariff Order dated 08.01.2022 to address the problem of forced outage due to Boiler Tube Leakage ("**BTL**") which constituted more than 90% of forced outages which led to loss of revenue and decreased plant availability. However, revision in design due to direction from Chief Inspector of Factories ("**CIF**") has lead to change in the scope of work and has increased the



cost to Rs. 1461.26 lakh as explained below.

252. The said project of Economiser Platform was planned only for taking out Economiser coils from inside the furnace and repairing them locally at the height of 43 meters by placing one side of the coil on the platform itself and re-inserting them after repairs. And, accordingly it was envisaged to extend the Floor Platform only at 43 meters with estimated quantity to be handled as approximately 100 MT for each Unit considering in-situ repair of coils partly resting on the platform.

253. It was later realized that part of coil on the boiler side could not be easily inspected/repaired from the platform. As working at a height of 43 meters with proposed Economiser Platform posed safety risk for working personnel and thus, a suitable arrangement was required in compliance of section 32(c) of the Factories Act, 1948. Relevant extract of this provision is as follows:

> ***"32. Floors, stairs and means of access.—In every factory—***
> *(c) when any person has to work at a height from where he is likely to fall, provision shall be made, so far as is reasonably practicable, by fencing or otherwise, to ensure the safety of the person so working."*

254. It was, thus, envisaged to place full coils to be repaired on the platform. With this change, the tentative estimation of structure loading increased from 100 to 450 MT in each Unit considering Economiser Platform with Economiser Coil and Handling structures. However, the originally envisaged Platform could not safely handle this increased loading.

255. In this regard, on 30.03.2021, Chief Inspector of Factories (CIF) had informed the Petitioner that stability test certificates issued for Petitioner's plant are subject to compliance of the condition that no structure shall be loaded, under any circumstance, beyond its Designed Safe Load Capacity and Load as per Dynamic Model Analysis. Relevant extract of the letter date 30.03.2021 is given below:



प्रसंग: Your letter Ref: MPL/FY 21/21-03/019 दिनांक 22.03.2021

महाशय,

उक्त विषय एवं प्रसंग का निदेश किया जाय ।

झारखंड कारखाना नियमावली 1950 के नियम 3A के अन्तर्गत विहित प्रपत्र 34 (Prescribed Form 34) में उक्त प्रमाण पत्रों को निर्गत किया गया है उपर्युक्त निर्गत स्थायित्व प्रमाण पत्रों (Stability Certificates) को नियमानुसार प्रेषित किया गया जिसकी स्वीकार्यता निम्नांकित शर्तों के साथ दिया जाता है ।

(क) कारखाना भवन के प्रत्येक संरचना का अनुरक्षण / पेन्टिंग आवश्यकता के अनुसार किया जायेगा ।

(ख) किसी संरचना पर अभिकल्पित सुरक्षित लोड क्षमता (Designed Safe Load capacity) & Load as per Dynamic model analysis report से अधिक लोड किसी परिस्थिति में नहीं दिया जायेगा ।

(ग) निर्धारित काल अवधि के बाद समुचित जाँच सुनिश्चित करना अनिवार्य होगा ।

(घ) सक्षम व्यक्ति द्वारा निर्धारित शर्तों का अनुपालन प्रभावी ढंग से करना अनिवार्य होगा।

भवदीय

मुख्य कारखाना निरीक्षक, झारखंड
श्रम भवन, राँची

A copy of the Letter dated 30.03.2021 from CIF is annexed herewith and marked as **ANNEXURE P/30.**

256. Based on above direction and for safe working at ground level, after Platform strengthening, the philosophy of complete economizer coil replacement and repairing the replaced economizer coil at ground level was found suitable option. Hence, a suitable arrangement was required to take out the Economizer Coils outside the Boiler, resting the same on the Platform and lowering the Coils to ground level for repairing the Economizer Section. Accordingly, the Petitioner explored Economizer Coil Handling structure for coil repairing and replacement which is safe in all respects.

257. This Philosophy was also line with recommendation of BHEL in MoM dated 13-14 June 2018 for replacement of Economiser coils in next 4 years. Relevant extract of the Report is as follows:

> *"MPL presented the failure history, inspection findings for the Economiser banks, and LTSH Tubes. BHEL stated that major root cause resulting in erosion in LTSH and Economiser banks also on account of Coal*

MAITHON

Characteristics and properties. Since MPL is required to continually required to operate with the coal properties having higher ash content i.e. towards worst side of the designed coal, as per availability in the local region, ***additional care may be exercised to ensure replacement of above economiser and LTSH sections, at least once in next 4 years,*** *followed by scheduled periodic maintenance to maintain the safety and reliability of boiler operation for plant generation".*

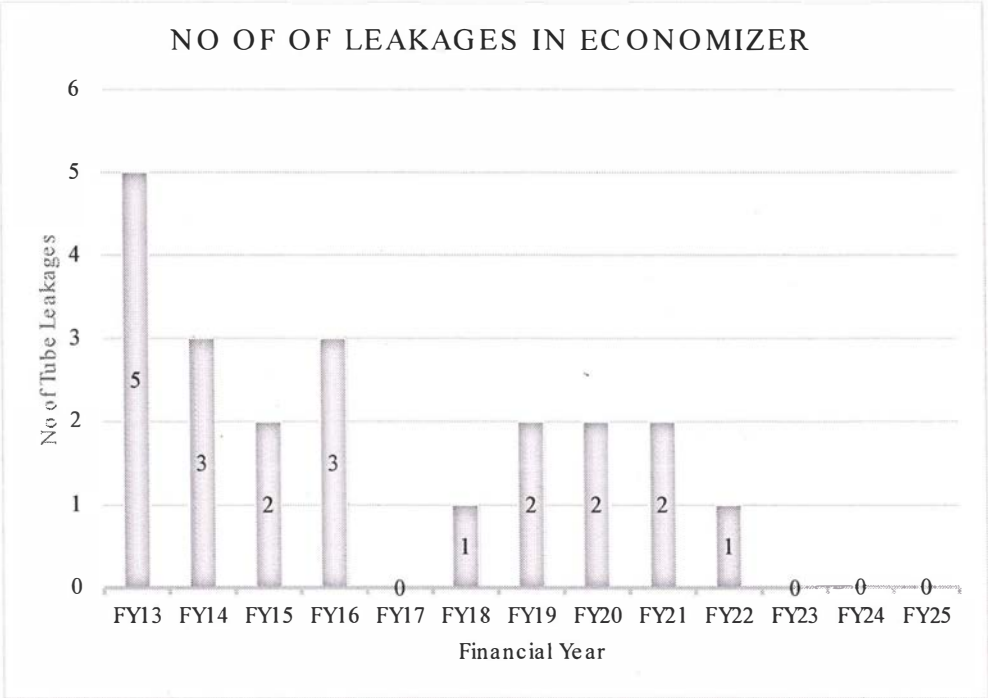
A copy of MoM dated 13-14 June 2018 has already been annexed as Annexure-P/22B.

258. Hence, in the compliance of the requirements by CIF and BHEL recommendation, the Petitioner revised the said scheme with addition of Economiser Coil Handling structure with lowering arrangement at both sides for easy and Safe lowering and lifting of Economiser coils and timely replacement/inspection completion. Arrangement of Economiser Coil repair bed was further established at ground level for repair of the Economiser coils . Thus, thorough repair of coils could be carried out safely at ground level and 100 % coils could be repaired and re-inserted inside the Boiler within the Annual Overhaul (AOH) duration.

259. Also, additionally Electric Overhead Travelling (EOT) crane for easy handling and lowering/lifting of Economiser coils was included for avoiding any operational/handling risks. Similarly, for the handling structure, civil foundation jobs were included for additional column at Boiler left and right side from 0 to 55 mts.

260. Therefore, in view of above constraints and safety of the workmen and the plant, the Petitioner executed the said revised scope to fabricate permanent structure for the coil removal, inspection, repair and re-placement of coil in the boiler. The reduction in number of leakages after the execution of schemes is shown in the following graph:





261. Thus, revision in scope was to comply with CIF directive, to enhance safety of the plant and the workplace and avoid any unwanted eventuality and, hence, the cost overrun is beyond the control of the Petitioner. In addition, the said scheme shall enhance the Plant availability and enable the Petitioner to cater to peak demand.

262. Therefore, in the above context, the factors for the cost increase was beyond the control of the Petitioner and, thereby, it is humbly prayed that the Hon'ble Commission may be pleased to approve the aforesaid Actual Additional Expenditure of Rs 1461.26 lakh under Regulation 26(1)(b) and 26 (1)(d) of Tariff Regulations 2019

vii. Soak Pit

263. The Petitioner submits that the Soak Pit scheme was duly approved by the Hon'ble Commission in the Tariff Order dated 08.01.2022 for Rs. 40 lakh for FY 2019-20 under Regulation 26(1)(a) and 26(1)(b) of Tariff Regulations 2019. Further, it is submitted that the Order in Petition No. 408/GT/2020 was published on 08.01.2022 and, therefore, the order placement was delayed leading to the

MAITHON POWER LIMITED

subsequent deviation from the year of capitalization approved by the Hon'ble Commission. The work has been capitalized in FY 2023-24.

264. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 15 lakh incurred during FY 2023-24 under Regulation 26(1)(a) read with Regulation 26(1)(b) of the Tariff Regulations 2019.

viii. eSecurity

265. It is submitted that works such as gate house, installation of camera, satellite phone and UPS Capacitor was necessitated on account of increasing security incidents due to local agitations, strikes, dharna and increasing instances of theft etc. and the same was approved by the Hon'ble Commission *vide* its Order dated 13.12.2022 in Petition No. 4/RP/2022 in Petition No. 408/GT/2020 wherein the Hon'ble Commission approved Rs. 939 Lakh (Rs. 369 Lakh+ Rs. 550 Lakh+ Rs. 20 Lakh) in terms of the e-security system scheme on account of safety as per the IB Report dated 10.01.2019. The relevant extract of the Order dated 13.12.2022 is reproduced as below for your quick reference:

> *"12 **Analysis and decision***
> *We have examined the matter and perused the IB report. The Review Petitioner had claimed total additional capital expenditure towards Gate house near JNT/ Security infra/ E-security for Rs. 4.01 crore during the period 2016-19, under Regulation 14(3)(iii) of the 2014 Tariff Regulations and **total additional capital expenditure for Rs. 3.69 crore during the period 2019-21, under Regulation 26(1)(d) of the 2019 Tariff Regulations.** Similarly, the Review Petitioner had also claimed the projected additional capital **expenditure of Rs. 5.50 crore towards Installation of CCTV cameras during the period 2020-22, under Regulation 26(1)(d) of the 2019 Tariff Regulations and Rs.20.00 lakh towards Automatic Boom Barrier in 2020-21 under Regulation 26(1)(d) of the 2019 Tariff Regulations**. The Review Petitioner is mainly aggrieved with the disallowance of the aforesaid additional capital expenditure which were incurred during the period 2016-19 and proposed to be incurred during the period 2019-24, towards enhancement of security measures based on the IB report dated 10.1. 2019.*
> *13. .....In our view, the additional capital expenditure claimed in respect of the aforesaid assets is only a culmination of preliminary instructions given to*



officers of the Review Petitioner (security audit), during November 2018, by the IB and its report dated 10.1.2019. Moreover, the installation of these assets is essential for surveillance and safety of the generating station particularly considering its location and the threat assessment to the premises/plant. These aspects were inadvertently not considered at the time of passing the impugned order 8.1.2022. The non-consideration of the same, according to us, is an error apparent on the face of the record and review on this count is maintainable. ***Accordingly, the additional capitalization claimed by the Review Petitioner, in respect of the items/assets (as mentioned in para 12 above) for the period 2016-19 and for the period 2019-24, are admissible and accordingly allowed.*** *Issues (A), (B) and (C) are disposed of as above".*

266. Accordingly, the Petitioner has incurred total of Rs. 628.54 Lakh in 5 years period of 2019-24. Notably, in terms of the IB report on Industrial Security dated 15-16th February 2024, further strengthening of CCTV network is required, which has been proposed during 2024-29. As stated earlier, the said report shall be submitted as and when directed by this Hon'ble Commission.

267. In view of the above and considering the safety and security of the workforce and generating station along with the IB recommendations, the Petitioner humbly requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 628.54 lakh during 2019-24 under Regulation 26(1)(d) of the Tariff Regulations 2019.

Re. Upgradation of ABT for RRAS and SCED

268. It is humbly submitted that in Order dated 08.01.2022, Hon'ble Commission had allowed Rs. 75 Lakh towards Upgradation of ABT for RRAS and SCED in FY 2020-21 under Regulation 26(1)(a). This scheme is currently dropped since there is no directive available from ERLDC/ERPC with respect to 5 minutes data requirements. Therefore, the Petitioner is not claiming any ACE against this scheme and seeks liberty to claim the same in true-up when the said directive is issued and complied with by the Petitioner.

MAITHON POWER LIMITED

B.II.B. b. ***New Additional Capital Expenditure***

i. Safety (Platform in coal mill area)

269. It is submitted that coal mill is an integral part of the boiler system, supplying fuel along with primary air to enable combustion. Due to its very nature, the coal mill is prone to erosion, so proper maintenance is essential to ensure consistent throughput. Additionally, the coal mill area is prone to leakages, particularly around the mill outlet, coal pipe couplings and coal funnel, which often require repairs at heights of 10 to 15 m. Fixing these leaks typically requires scaffolding, which can not only be time-consuming and sometimes extends over several days but is also a safety risk to the workmen doing the maintenance at height of 10-15 m on a temporary structure.

270. Therefore, to improve efficiency, reduce maintenance time and ensure safety, a permanent platform was needed in place of scaffolding particularly if heavy coal mill internals were to be taken out for maintenance. With a total of 16 coal mills, the Petitioner identified key locations to construct permanent structures to create a safer work environment and incurred expenditures during the period FY 2019-20 to FY 2023-24. Pertinently, the Competent Person, notified by the Chief Inspector of Factories requiring Safety Audit of MPL in its letter dated 24.01.2024, has also recommended this need for a permanent structure in Coal Mill Area in the Safety Audit Report dated 14th-15th June 2024.

271. In this regard, the Safety Auditor during Safety Audit stated that the Safety Platform in coal mill area is not adequate and made the following recommendations:

> ***"(R) Documents of system of Management of change / process / plant modification/change of procedure:***
> *Observation- Coal Mill Maintenance Platform is not available.*



Recommendation- Recommended to erect permanent platform in those areas of Coal Mill which are located at height and need periodic maintenance and risk assessment to be carried out for newly constructed platform and activities."

A copy of the Letter dated 24.01.2024 issued by the Chief Inspector of Factories is annexed herewith and marked as **ANNEXURE P/31-A.** A copy of Report of Safety Audit dated 14th – 15th June, 2024 is annexed herewith and marked as **ANNEXURE P/31-B**.

272. Consequently, the Petitioner, in line with the recommendations of the Safety Auditor in the Safety Audit report made sure that additional platforms were provided along with the platform extensions in Boiler and Coal Mill Area to carry out regular maintenance work.

273. Accordingly, the Petitioner has incurred Rs. 261.24 Lakh for the safeguarding higher safety and security standards of the plant during 2019-24 and hereby requests that said scheme may be approved by the Hon'ble Commission as additional capital expenditure under Regulation 26(1)(d) of Tariff Regulations 2019.

ii. Interconnection of Chutes from BCN 4A/B

274. The Petitioner humbly submits that as per the existing configuration, the belt conveyors just after the crushers i.e., the Chute Interconnection in 4A/B- 6, have no cross interconnectivity between them leading to no interchange of coal flow from A stream to B Stream or vice versa. Therefore, presently the system reliability depends upon 3 streams, i.e., (BCN 4A/B, 6A/B & 8A/B) which are in series. If Petitioner's Coal Handling Plant is equipped with two parallel conveyors with interconnectivity, it would ensure redundancy and reliability.

275. It is also pertinent to mention that with commencement of coal supply through



rake under Gati Shakti Policy which has led to significant saving in capital and transportation cost which have been passed on to the beneficiaries. It will be critical to have enhanced redundancy in the system for smooth unloading of the rakes for reliable operation of the coal handling plant. In view of the above, Petitioner has installed an interconnection chute with flap gates b/w BCN-4A to 6B and BCN-4B to 6A at JNT8 to improve the overall BCN-4A/6A & 4B/6B route availability at an additional capital expenditure of Rs. 49.98 lakh in FY 2022-23 and, accordingly, requests the Hon'ble Commission to allow the same under the Regulation 26(1)(c) and Regulation 76 of the Tariff Regulations 2019.

iii. Ash wharf

276. The Petitioner respectfully states that, in accordance with MoEF&CC guidelines dated 31.12.2021 for ash disposal, the ash generated by the generating station must be collected and transported to nearby abandoned mines. To comply with these guidelines, the Petitioner has engaged a third-party contractor to handle the collection of an allocated portion of ash.

277. The contractor is tasked with collecting ash from the Main Fly Ash Silos, Bottom Ash Silos and Ash Pond areas and transporting it to nearby abandoned mines, referred to as "Designated Mines." The ash disposal process, including dumping and stowing in these mines, must comply with the relevant MoEF&CC guidelines and notifications, which are subject to periodic updates.

278. The scope of work includes excavating wet ash from ash ponds, loading ash from Fly/Bottom Ash Silos and Ash Ponds, evacuating ash from the plant and transporting it to the designated mines for stowing. In addition to backfilling mine voids, the contractor may also transport ash for other eco-friendly applications to achieve 100% ash utilization. This includes the sale and transport of conditioned

fly ash (CFA) for use in cement industries in the Eastern region, North-East States, and for export to Bangladesh, utilizing rail wagons as per the demand-supply scenario. CFA, preferred for its cost-effectiveness, is loaded in bulk from the silo area into Box-N or other types of wagons, covered with tarpaulin, using Hyvas and payloaders.

279. Despite certain seasonal limitations, this method is economically viable due to reduced logistics costs. To further optimize ash disposal logistics, the Petitioner has undertaken the construction of an Ash Wharf located opposite the Coal Wharf on the same rail line. The benefits of this initiative include faster loading, reduced railway detention charges, minimized logistics costs compared to Hyvas/loaders, lower environmental impact and reduced socio-political challenges. Additionally, eliminating manual labor interventions at the main silo area, which is in an open space and hence, mitigates local community issues. This initiative positions the Petitioner more competitively in the demand-supply market and is projected to generate significant savings.

280. A cost-benefit analysis reveals that disposing of ash via rail mode could save approximately Rs. 500-600 lakh annually with use of Ash Wharf. Further, with commissioning of Ash Silos for loading of wagons, the savings would approximately increase to Rs. 1600 -1700 lakh annually. Detailed computation in respect of the cost benefit analysis has been provided in section dealing with Ash Disposal Expenses for FY 2024-25 to FY 2028-29.

281. In view of the above, the Petitioner requests the Hon'ble Commission to allow the actual additional capital expenditure incurred by the Petitioner of Rs. 201.82 lakh spread in FY 2022-23 and FY 2023-24 under Regulation 26 (1)(b) and 26(1)(e) of the Tariff Regulations 2019.



iv. MVWS System (Medium Velocity Water Spray)

282. The Petitioner respectfully submits that a Fire Hydrant system is strategically installed within the plant area, supported by a Fire Tender on standby to address on-site emergencies. However, in the Report for safety audit conducted by National Safety Council dated 16-19 March 2021 (***Refer ANNEXURE P/23-B***), with regard to Main Oil Tank ("**MOT**") it was observed that sprinkler system needs to be provided:

> *"6.11....*
> *Observations:*
> *Medium Velocity Water sprinkler provided for the following*
> *1. Cable Gallery*
> *2. LDO/HFO tank area*
> *3. CHP-Conveyor belt area.*
> *.....*
> ***Sprinkler system not provided for MOT tank***
> *Recommendations:*
> *It should be provided and maintained"*
>
> [***Emphasis Supplied***]

283. According to IS 3034 standards, it is essential to address fire emergencies promptly and it mandates the installation of Water Spray (WS) System for controlling fire involving large quantities of lubricating oil (which includes MOT) in Thermal Power Stations with a capacity of 1000 MW or more. Same has been reproduced below for ready reference:

> *"**8.5.1***
> ***The fixed water spray type protection system shall be used for controlling a fire involving large quantities of lubricating oil on turbine generators.** This shall consists of two systems of water protection, one for areas below the operating floor of the turbo generator and designed to extinguish pool fires and also providing protection against heat generated by three-dimensional or spray fires. The other is a water spray system for oil fires at or around the bearing house.*
> *...."*
>
> ***[Emphasis Supplied]***

284. Accordingly, Medium velocity water spray system ("**MVWS**") which has been

MAITHON POWER LIMITED

installed in the MOT and Cable Cellar area, is designed to extinguish fires automatically with the MVWS system installed as per above mandate, fire emergencies can now be more effectively managed within the required timeframe, avoiding the possibilities of significant asset loss and interruptions in plant generation.

285. Considering the mandate and the benefits from the scheme of reduced response time as the automatic operation of the MVWS system ensures rapid response to fire incidents, the Petitioner would be able to ensure enhanced availability and reliability of Fire Protection System and Protection of Critical Equipment, which will safeguard essential equipment and minimize the risk of severe damage during a fire incident. It is, therefore, requested before the Hon'ble Commission to allow the expenditure of Rs. 97.28 lakh for FY 2023-24, as same falls under the scope of Regulation 26(1)(b) and (d) of the Tariff Regulations 2019.

v. Reliability (Structural Strengthening - BTG, CHP)

286. It is submitted that the Petitioner conducted a '*statutory structural strengthening audit & corrosion audit*' in January 2021, in compliance of directions dated 16.01.2021 of the Office of the Chief Inspector under the Factories Act, 1948, and recommendations given *vide* letter dated 13.09.2022 by the Government approved third party agency. In their report, the auditors have suggested for re-strengthening of structures to avoid any safety incidence and to ensure system reliability. A copy of the said directions dated 16.01.2021 issued by the Office of Chief Inspector is annexed herewith and marked as **ANNEXURE P/31C**. A copy of recommendation letter dated 13.09.2022 issued by the Government approved third party agency is annexed herewith and marked as **ANNEXURE P/31D.**

287. The following is the list of structures that needed rectification as per letter dated

MAITHON POWER LIMITED

13.09.2022:

"....

During inspection it was found that rectification/modification in RCC buildings/structures were upto the mark, but buildings/structures as mentioned below needs to restored. Following is the cost of structures that needs rectification:

1. *BCN#3A & 3B: Main gallery structure and supporting members including tie bracings & columns.*
2. *Junction Tower (JNT) 1, 2, 3, 4, 4A, 5, 6, 7 and 8 Crusher House-Column, bracings, plan bracings, supporting members, runners, intermediate truss, Monorail Door Support, Slab Supporting Beam, Length breakers & Debris Chute Revamping.*
3. *Crusher House Dust Extraction System Chimney & Duct Revamping."*

288. The total expenditure incurred is Rs. 443.92 Lakh in FY 2023-24 on following counts:

(a) Main gallery structure and supportive members for BTG and CHP area upgradation (as per points 1 & 2 above):

i. For structures of BTG and Coal Handling Plant, it has been found that at multiple locations the structure is damaged/corroded and structural members need to be replaced.

ii. Additionally, support was required for the structural members to sustain the Operation of BTG Area Equipment and Coal Handling system in the long run and to avoid any damage to the system due to non-compliance of the recommended actions by the auditor. Accordingly, the Petitioner requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 238.20 lakh in FY 2023-24 under Regulation 26(1)(d) of the Tariff Regulations 2019.

(b) Revamping of Debris Chutes (as per point 2 above):

i. It may be noted that Debris chutes are installed in every junction tower (JNT) to collect spillage coal and coal dust during the feeding



cycle. These chutes facilitate the transfer of coal from the top floor to the ground floor, from where it is transported to the track hopper and then fed into the bunkers.

ii. The chutes are crucial for collecting spillage coal and dust from every floor, connecting the top floor to the ground floor. However, moisture and rainwater ingress have led to corrosion and damage of these chutes.

iii. The absence of functioning debris chutes means that spillage coal and coal dust cannot be efficiently collected from the take-up floor to the ground floor. With damaged debris chute, dumping coal directly from the top floor, approximately 60 meters high, is impractical as it creates significant fugitive dust in the surrounding area. These chutes play an essential role in recovering spillage coal, maintaining housekeeping standards and adhering to 5S principles throughout the Coal Handling Plant.

iv. Without the debris chutes, accumulated coal dust and spillage coal on each floor pose fire hazards and slip, trip and fall risks. Additionally, extra manpower would be needed to clean and reload spillage coal onto conveyor belts at the height of JNTs, a process that is both unsafe and cumbersome. Therefore, revamping the debris chutes was necessary as per above direction of auditor, to enhance worker safety, improve housekeeping environmental compliance and ensure the recovery of coal.

V. In view of thereof, the Petitioner has incurred Rs. 98.91 lakh in FY 2023-24 towards removal of old damaged debris chute, supply of

MAITHON POWER LIMITED

debris chute material, erection and installation at every JNT, cutting of concrete floor, concrete grouting work at connecting floor and support with the junction tower structure etc. Accordingly, the Petitioner requests the Hon'ble Commission to allow the same as additional capital expenditure under Regulation 26(1)(d) of the Tariff Regulations 2019.

(c) Crusher House Dust Extraction System Chimney & Duct Revamping (at point 3 above)

i. Dust extraction (DE) system is an air quality improvement system installed in the crusher house to improve the breathable air quality and safety by removing dust particles from the extracted air from crusher house. It works based on collection, separation and filtration. DE system and chimney is required to collect the dust particles from the crusher house through duct and discharge the course particles on the conveyor and fine particles through Chimney at a height of 34 m to maintain the environmental norms (PM 2.5 & PM 10).

ii. Due to heavy windstorm, 20 m top portion of the chimney of DE system got collapsed resulting in discharge of fine particles at very low height than required for meeting environmental norms. Therefore, the above direction was complied with for revamping the chimney and duct of dust extraction system to reduce the pollution in the vicinity of the plant, so that environment norms can be maintained at plant and nearby area.

iii. In the view of the above, the Petitioner has incurred Rs. 106.81 Lakh

MAITHON POWER LIMITED

towards Crusher House Dust Extraction system, which kindly be allowed under Regulation 26(1)(d) of Tariff Regulations 2019.

vi. Field Hostel

289. It is submitted that this Hon'ble Commission in its order dated 19.11.2014 in Petition No. 274/2010 had acknowledged that there is a need of field hostel within the boundaries of the plant for smooth, intervention free operation of the plant, considering the difficult remote location of the plant, accessibility at odd hours and frequent blockages and agitation by local villagers backed by factional politicians. Further, this Hon'ble Commission in its Order dated 08.01.2022 acknowledged the existence of local agitations and unrest leading to delay in execution of Field Hostel and, accordingly, allowed the expenditure towards the Field Hostel.

290. In this respect, it is necessary to take note of the fact that there have been multiple instances of major issues/disruption done by Locals which necessitates construction of Field Hostel. Pertinently, there have been disruptions/issues on 12 occasions in FY 2018-19, 11 occasions in FY 2019-20 and 15 occasions in FY 2020-21.

291. Further, in case of gate blockage or agitation outside the plant, the operation and maintenance officers/ other staffs in one shift can neither go out nor can continue or directed to continue to work beyond their shifts/ recommended number of hours without proper rest as per the Factories Act, 1948.

292. In absence of provision of Field Hostel, the Staff/Officers will be forced to continue to work/stay in the plant beyond the standard hours which in turn leads to violation of the Factories Act as well as fatigue the operation/ maintenance engineers which may lead to fatal events.



293. Therefore, in order to accommodate more personnel and to provide proper rest to officers/ staffs to deal with such events which are unavoidable in future as well, the Petitioner had to incur and capitalise an amount of Rs. 1.02 lakh in FY 2019-20 and Rs. 89.71 lakh in FY 2020-21 towards increasing the capacity of the Field hostel.

294. In view of the above, the Petitioner requests the Hon'ble Commission to allow the actual additional capital expenditure incurred by the Petitioner of Rs. 90.73 lakh under Regulation 26(1)(b) and 26(1)(c) of the Tariff Regulations 2019.

vii. Fire door for MCC Room

295. It is submitted that the existing doors of Batteries Rooms, Motor Control Centre (MCC) Rooms and Electrical Rooms, are of normal type. In this regard, the provisions as contained in the Indian Standard Code of Practice for Fire Safety in Cable Runs (IS 12459-4) specifies the use of fire doors and is reproduced below for ready reference:

> ***"COMPARTMENTATION AND FIRE STOPS/ CABLE PENETRATION SEAL AND FIRE DOOR***
>
> ***5.1*** *In Order to prevent vertical/ lateral spread of fire through cables, all cable tunnels/galleries through which cable/ cable trays pass should be subdivided into smaller compartments irrespective of type of cable used.* ***This should be done by provision of walls at interval not more than 30 m and by sealing the apertures openings with the use of fire stops****. The fire rating of fire stops when tested according to the method given in IS 12458 and of barrier wall, when tested according to IS/ISO 834-4, shall not be less than the rating of building component.* ***For the requirements of fire rated doors, requirements as in IS 3614 shall be used****."*
>
> [***Emphasis supplied***]

296. It may be appreciated that when a fire breaks out, the heat causes the intumescent strips to expand to fill the gap between the fire door and the frame. This seals the room and stops the spread of fire for a given time. Normal doors will not be able to serve the purpose in the event of fire break out. Since a breakout of fire is never

MAITHON POWER LIMITED

predictable, the fire door, unlike any other door, will then perform its prime purpose – to protect lives and offer protection to the remainder of the building and to other buildings.

297. Therefore, to comply with IS 12459 (Code of Practice For Fire Safety in Cable Runs) of having Fire Check Doors, the Petitioner has carried out the replacement of normal doors with fire Doors for which the Petitioner has incurred Rs. 19.84 Lakh in FY 2023-24 and the same may be approved by the Hon'ble Commission as additional capital expenditure under Regulation 26(1)(b) of the Tariff Regulations 2019.

viii. SCADA Upgradation

298. It is humbly submitted that at para 89 of Tariff Order dated 08.01.2022, the Hon'ble Commission acknowledged the matter for Upgradation/replacement of old Remote Terminal Unit (RTU) in Eastern Region. Subsequently, *vide* letter dated 14.02.2018, ref no: ERLDC/SL/2017-18/6212, Power System Operation Corporation Limited ("**POSOCO**") has requested to take appropriate action for replacement/Upgradation/of the RTU/SAS as there were instances of frequent failure of old RTUs. Also, it is stated that last mile fibre connectivity may also be made available as real time data reporting (through SCADA) over IEC-104 protocol is not available. A copy of the Letter dated 14.02.2018 issued by POSOCO is annexed herewith and marked as **ANNEXURE P/32**.

299. It is also relevant to note that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations including the CEA Cyber Security Guidelines, 2021 [***Refer: Annexure P/17***]. Further, CEA Guidelines, 2021 in its Article 7 clearly mandate the Responsible Entity to ensure that its IT technologies in the Power System

MAITHON POWER LIMITED

Equipment/System have the ability to be upgraded. The relevant regulation is presented below for reference -

> *"Article 7 Phasing out of Legacy System*
> *a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded."*

300. In view of the above Petitioner incurred additional expenditure of Rs. 20.50 Lakh for SCADA upgradation. The said work was executed and capitalized in FY 2019-20. Accordingly, the Petitioner requests the Hon'ble Commission to allow the same under Regulation 26(1)(b) of the Tariff Regulations 2019.

ix. Extension of Stores

301. It is humbly submitted that the "Store Renovation" was required to be undertaken to address the problem of Open Storage of critical Spares since more than 60% of the Equipment & Spares and Lubricating Oil were stored in the open due to unavailability of covered area. This problem arose due to supply of free spares by the OEM, BHEL worth Rs. 84 Crore as compensation for generation loss during stabilization period of these Units. Storage space in original scope did not envisage this additional storage requirement.

302. It may be appreciated that storing these items in open area leads to deterioration of the said material and items. With due course of time and aging of the plant, storage of additional spares requires more space. In this respect, the National Safety Council in its Report of 16-19 March 2021 [***Refer Annexure P/23-B***] has directed to store lubricating oil in safe cabinets. Relevant extract of the said report is reproduced as follows:

> ***"6.5.5 Handling of Flammables and Gas Cylinders***
> *Observation: Handling of lubricating oil, diesel, paint and thinner in small quantities has been found in Contractor office areas, MOT area, Hydrogen*

MAITHON POWER LIMITED

station.
Recommendation: Lubricating oil should be stored away and only should be transported by trolley as and when required. ***It is suggested that storage of this kind of bottles should be avoided or stored in safe cabinets".***

303. In order to increase the life of the critical spares in stores and to comply with above direction, the Petitioner has undertaken this scheme of "Store Renovation". Therefore, the Petitioner has procured Metal Pellets, Heavy duty Racking System, Heavy duty equipment (includes stacker and hydraulic trolley), oil drum racking with shed and heavy-duty racks.

304. Accordingly, it is humbly prayed before the Hon'ble Commission to allow additional capital expenditure of Rs. 341.06 lakh under Regulation 26(1)(b) and 26(1)(d) of the Tariff Regulations 2019.

x. Ash Weigh Bridge (100 MT)

305. The Petitioner humbly submits that as an endeavour to increase Ash Disposal in terms of the Notifications issued by the MoEFCC, the Petitioner, apart from Disposal through Rake and Hywas, is in a continual follow up with Major Cement Industries and Fly Ash Traders for Utilization of Fly Ash in Dry Form which involves incorporation of closed vessel Bulkers as a means of transport.

306. Notably, with the existing ash weighment infrastructure at the generating station, Small Capacity Bulkers up to 60 MT can only be weighed at the Ash WB 1 near Main Silo. However, with this kind of technical limitation, it was becoming a restriction for transporters to deploy Large Capacity Bulkers (whose Gross Weight can reach up to more than 100 MT) which was resulting in a loss of opportunity to dispose of Ash for Cement Utilization .

307. In view thereof, in order to increase the weighing capacity, the Petitioner has incurred an additional capital expenditure of Rs. 64.03 lakh in FY 2023-24 and,

MAITHON POWER LIMITED

accordingly, requests the Hon'ble Commission to allow the same under Regulation 26(1)(e) of the Tariff Regulations 2019.

xi. Solar Panel

308. It is submitted that in order to reduce existing consumption of Administrative Building from conventional sources, the Petitioner has installed 50 kWp solar Panels at a cost of Rs. 38.40 Lakh in FY 2023-24.

309. Therefore, it is humbly prayed before this Hon'ble Commission to approve the above expenditure under Regulation 26(1)(b) of Tariff Regulations 2019.

xii. Upgradation of protection system

310. It is submitted that a small amount of Rs. 0.05 Lakh has been spent in upgradation of protection system during FY 2020-21, which is requested to be approved by this Hon'ble Commission under Regulation 26(1)(b) of Tariff Regulations 2019.

311. Further, it is also relevant to note that of Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations including the CEA Cyber Security Guidelines, 2021 [***Refer: Annexure P/17***]. Further, CEA Guidelines, 2021 in its Article 7 clearly mandate the Responsible Entity to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded. The relevant regulation is presented below for reference -

> *"Article 7 Phasing out of Legacy System*
> *a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded."*

Accordingly, it is requested that this Hon'ble Commission may allow the same.

xiii. Testing Instruments

312. The Petitioner humbly submits that expenditure on testing instruments was

MAITHON POWER LIMITED

approved in True-up of 2014-19 period under Regulation 14(3)(ii) of Tariff Regulations 2019 in para 58 of Tariff order dated 08.01.2022. While major part of procurement was done in the said period, some instruments were procured in FY 2019-20 at total cost of Rs. 20.15 Lakh. Accordingly, this Hon'ble Commission is requested to allow the same under Regulation 26(1)(b) of Tariff Regulations 2019.

xiv. Augmentation of Fire Detection System

313. It is humbly submitted that with expected commencement of crushed coal supply by Railway transportation in FY 2021-22, increased quantum of crushed coal movement to coal yard was envisaged. This movement increased the risk of conveyors catching fire due to more coal dust and friction of crushed coal with conveyor.

314. In this regard, the National Safety Council (NSC) by its Report dated 16-19th March 2021 (***Refer ANNEXURE P/23-B***), had recommended the review of existing Smoke Detection System after any change in process. Following are the relevant extracts of the said Report:

> *"6.9*
> ***FIRE DETECTION AND ALARM SYSTEM***
> *Observation*
> *:.....*
> *It is found that, Panel provided for the detection system is with on off system. Incase of closure, system will not gives any alarm in emergency.*
> *.....*
> *Recommendation:*
> *.....*
> *Review of smoke detector and manual call points should be carried out after any change in process/building.*
> *....."*

315. Further, considering the fact that there were few incidents of fire at coal yard in the past, an analysis of the existing system was undertaken with the changed process with higher crushed coal and a new fire-detection system at coal yard was

installed. Fire Detection system along the conveyors of CHP is a crucial requirement for prevention of fire hazards in the Coal Handling Plant. The automatic fire detection system installed will detect fire on occurrence along the conveyors and will initiate activation of fire-fighting system. Therefore, for this important safety requirement installation of Fire Detection System was undertaken by the Petitioner for compliance of existing law as well as directions of NSC.

316. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 23.72 lakh under Regulation 26(1)(b) and 26(1)(d) of Tariff Regulations, 2019.

Re. DECAPITALIZATION

317. The Regulation 26(2) of the Tariff Regulations 2019 states as follows:

> *"(2) In case of de-capitalisation of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of decapitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place with corresponding adjustments in cumulative depreciation and cumulative repayment of loan, duly taking into consideration the year in which it was capitalised."*

318. It is submitted that in terms of Regulation 26(2) of Tariff Regulations 2019, the Petitioner has furnished the details of items decapitalized in books for the period 2019-24 in Form I of the Tariff Forms. A copy of the Auditor's Certificate certifying the details of decapitalization of Property, Plant & Equipment (PPE) during financial years 2019-20 to 2023-24 for the Petitioner Generating Station is annexed herewith and marked as **ANNEXURE-P/33**. The summary of the decapitalization as per Books and in terms of Auditors Certificate is tabulated as follows:



Table 10: Summary of Decapitalization as per Books for 2019-24

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Decapitalization	68.48	27.62	76.61	1,005.90	1,888.46

319. However, the decapitalization of the assets which were not part of admitted capital cost and assets which are being claimed under Capital Spare on net basis (i.e., after removing residual value) have been excluded for the purpose of Tariff.

320. As regards the assets not forming part of the admitted capital cost, the Petitioner submits exclusion of Rs. 21.09 lakh in FY 2019-20, Rs. 10.61 lakh in FY 2020-21, Rs. 9.54 lakh in FY 2021-22, Rs. 54.54 lakh in FY 2022-23 and Rs. 45.56 lakh in FY 2023-24 towards decapitalizations of IT equipment's and Minor Admin Assets which were not considered by the Hon'ble Commission under Actual Capital Expenditure beyond the Cut-off date i.e., 31.03.2015 for the Petitioner's project.

321. As regards the assets being claimed under Capital Spares on net basis, the Petitioner submits that Capital Spares have been claimed excluding the residual value i.e., 10% of the total value of the Capital Spares in terms of the findings by the Hon'ble Commission in the tariff order dated 08.01.2022. The relevant excerpts of the Order are reproduced below for kind reference.

> *"143.....*
> *Further, we are of the view that spares do have a salvage value. Accordingly, in line with the practice of considering the salvage value, presumed to be recovered by the Petitioner on sale of other capital assets, on becoming unserviceable, the salvage value of 10% has been deducted from the cost of capital spares considered above, for the 2014-19 tariff period. Therefore, on prudence check of the information furnished by the Petitioner in Form-17 and on applying the said ceiling limit along with deduction of the salvage value @10%, the net capital spares allowed in terms of Regulation 29(2) of 2014 Tariff Regulations is as follows:..."*

322. Pursuant to aforesaid findings, salvage value amounting to Rs. 646.15 lakh for the period 2019-24 has already been deducted from the gross value of the Capital

MAITHON POWER LIMITED

Spares and, therefore, decapitalization of Rs. 294.06 lakh in FY 2022-23 and Rs. 333.27 lakh in FY 2023-24 have been excluded towards decapitalizations of assets which are being claimed under capital spares on net basis for the purpose of tariff.

323. Moreover, the Petitioner humbly submits that out of the proposed decapitalization in the Table below, items amounting to about Rs. 123 lakh are those items which after repair shall be retained and used as spare on rotation basis. Such items have future economic value and need not be decapitalized for the purpose of tariff.

324. Accordingly, the following decapitalization has been considered for the purpose of tariff for the period 2019-24:

Table 11: Summary of Net Decapitalization for 2019-24

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Decapitalization as per Books	68.48	27.62	76.61	1,005.90	1,888.46
Less Decapitalization- Not Part of admitted cost	21.09	10.61	9.54	54.54	45.56
Less Decapitalization - Assets claimed under capital spares				294.06	333.27
Net Decapitalization	47.39	17.01	67.07	657.31	1509.63

325. The Petitioner humbly requests that in the event if certain additional capital expenditures are not being considered by the Hon'ble Commission after prudence check, the decapitalization corresponding to said ACE may kindly be excluded for the purpose of tariff. This shall avoid double deduction from admitted capital cost and the same would be fair and just.

Re. UN-DISCHARGED LIABILITY and DISCHARGES FOR 2019-24

326. The Petitioner humbly submits that for arriving at the Cash Capitalization for each year of the Tariff Period, the Petitioner has worked out Net Discharge by adjusting



the difference between the undischarged liabilities (UDL) as on opening of the financial year (FY) i.e., 1st April of the FY and as on closing of the FY i.e., 31st March of the FY. A copy of the Auditor's Certificate certifying the scheme wise closing UDL for the years 2019-20 to 2023-24 for the Petitioner's Generating Station is enclosed hereto and marked as **ANNEXURE-P/34 (COLLY.).** Further, the closing UDL against capital cost as on 31.03.2019/ or in other words Opening UDL as on 01.04.2019 is nil for the Petitioner's Generating Station.

Re. ***EXCLUSION***

327. The Petitioner humbly submits that following exclusions have been claimed under different heads vide Form-9D of the Tariff Formats against the actual capitalizations/ decapitalizations/ liabilities as per Books of accounts:

Table 12: Exclusions for the Period 2019-24

Sr. No	Head of Work / Equipment	Additional Capital Expenditure claimed under exclusion				
		2019-20	2020-21	2021-22	2022-23	2023-24
i	Capitalisation towards Railway Package*	2524.68	60883.18			
ii	Undischarged Liability towards Railway Package	10.14	6566.87			
iii	Employee Vehicle Purchase not part of Admitted capital cost				73.34	77.98

*Claimed for capitalization in FY 2021-22.

Re. Capitalization towards Railway Package

328. The Petitioner submits exclusion of Rs. 2524.68 lakh in FY 2019-20 and Rs. 60883.18 lakh in FY 2020-21 towards items Capitalized in Books of Accounts under 'Railway Package' as these assets could only be put to use in FY 2021-22 for

MAITHON POWER LIMITED

reasons beyond the control of the Petitioner as elaborated under the Section for Capitalization of Railway Project. Accordingly, the Petitioner though recognized the capitalization in the book of accounts but the same are being claimed only from the year it is actually put to use i.e. FY 2021-22. The Petitioner has, therefore, excluded the said amount in FY 2019-20 and FY 2020-21 while claiming the same in FY 2021-22 for the purpose of tariff computation.

Re. Undischarged liability towards Railway Package

329. The Petitioner submits exclusion under Un-discharged liabilities towards Railway Package of Rs. 10.14 lakh in 2019-20 and Rs. 6566.87 lakh in 2020-21 since the same were recognized in the book of account in the respective year against actual capitalization as per books of account. However, as described above, the actual Asset of Railway Package was put to use and claimed only in FY 2021-22 due to reasons beyond the control of the Petitioner. Thus, since the undischarged liability closing March'20 & March'21 pertains to the period prior to the date of put to use or capital cost being claimed, the same has been excluded by the Petitioner for the purpose of tariff computation for the period 2019-20 and 2020-21. Closing liability as on March'22 onwards has duly been considered for tariff computation.

Re. Employee Vehicle Purchase

330. The Petitioner has procured vehicles for its employees amounting to Rs. 73.34 lakh in 2022-23 and Rs. 77.98 lakh in 2023-24. As the capitalization of such assets procured after the cut-off date of the generating station is not allowed for the purpose of tariff, the Petitioner has excluded the said amount.

Re. NORMATIVE IDC ON EXCESS EQUITY FOR 2019-24

331. With regard to the claim of Normative IDC, it may kindly be noted that the Hon'ble Commission in Petitioner's case had allowed Normative IDC for the Period 2014-



19 vide order dated 08.01.2022 in Petition No. 408/GT/2020 with certain observations regarding furnishing of Auditor Certified normative IDC or date of infusion of funds, applicable interest rates etc. The relevant extracts of the order are provided below for the reference of the Hon'ble Commission:

> *"111. We have considered the submissions of the Petitioner. It is noticed that the Petitioner has neither submitted the normative IDC, duly certified by Auditors, nor the date of infusion of funds, the corresponding dates of capitalisation, the applicable interest rates etc. and their supporting documents, if any. Hence, in the absence of the aforesaid information, we have worked out the normative IDC based on assumptions as follows:*
>
> *a. Infusion of funds has been assumed to be at the beginning of the year of additional capital expenditure incurred;*
>
> *b. Date of capitalisation has been assumed to be at the mid of the year; and*
>
> *c. Weighted Average Rate of Interest (WAROI) on actual loan of respective years have been applied for calculation of normative IDC of respective years"*

332. Accordingly, in compliance with the observations of the Hon'ble Commission, the Petitioner in the instant Petition is providing the below details duly certified by the Statutory Auditors which are in accordance with Form-R of the Tariff Filing Forms and required for computing the actual cash expenditure or in other words infusion of funds on quarterly basis.

(a) Expenditure towards Capital Work In Progress (CWIP): Opening and closing CWIP at the beginning and closing of each quarter covering addition to CWIP and reduction of Capitalisation from CWIP (i.e., Amounts which are capitalized and moved to Gross block).

(b) Capital Advances: Opening and Quarter end closing position of Advances paid to vendors towards Capital Assets, if any.

(c) Un-discharged Liabilities: Opening and Quarter end closing liabilities towards CWIP.



333. With the above data and following the approach provided in Form-R the Petitioner has computed the closing quarterly expenditure by deducting capitalization performed during the quarter (i.e., +Addition to CWIP (Opening + quarterly additions) - Capitalization in each quarter). Thereafter, the Petitioner arrived at the actual cash expenditure at the end of each quarter by adding Capital Advances, if any, and subtracting the liabilities towards CWIP from closing CWIP.

334. Further, for computing the Normative IDC, the Petitioner has considered 70% of the Actual Cash Expenditure as Normative loan since the Capex have been funded only through internal resources/equity and without obtaining any actual loan and capitalizing any IDC in books of account in respect of these Additional Capital Expenditure. Actual Cash Expenditure during the quarter has been obtained by averaging Opening and Closing Cash Expenditure incurred towards CWIP in line with the approach being followed by this Hon'ble Commission for arriving at the Average Equity or Loan while computing Return on Equity or Interest on Loan.

335. Finally, such normative loan for each quarter is multiplied with the claimed Weighted Average Rate of Interest on Long Term actual loan for that year and intervening period as ¼ of the year to arrive at the quarterly IDC. Sum total of such Normative IDC for the year is claimed as Normative IDC and is added to Gross Block in accordance with Tariff Regulations 2019.

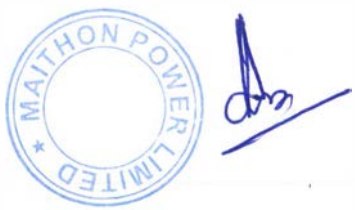
336. It is prayed that the Hon'ble Commission may kindly approve the above Normative IDC computed by the Petitioner which is mainly following the steps indicated in Form R of the Tariff Filing Formats and based on data duly certified by the Statutory Auditors for computation of Normative IDC and to include the same as the Additional Capitalisations towards the various assets capitalized during 2019-24. Accordingly, in view of above, the Petitioner has claimed normative IDC of Rs



206.20 lakh for the period 2019-24 towards Capex Schemes other than Railway Package, out of which Rs. 84.43 lakh is for FY 2019-20, Rs. 55.62 lakh in FY 2020-21, Rs. 12.44 lakh in FY 2021-22, Rs. 16.2 lakh in FY 2022-23 and Rs. 37.51 lakh in FY 2023-24. A copy of the Auditor certificates certifying the quarterly Capital Work in Progress and Capital Advances for the period FY 2019-20 to FY 2023-24 for Capex Schemes with segregated closing balances for Railway System, FGD, Schemes other Railway Package etc are enclosed herewith and marked as **ANNEXURE-P/35A (COLLY.)**. A copy of the Certificate dated 12.12.2024 for undischarged liability which also captures liabilities towards certain capex items along with subsequent Certificate dated 27.01.2025 summarizing scheme-wise UDL and above requisite clarifications are already enclosed as Annexure-P/34. A copy of the Computation of Normative IDC for Capex Schemes (excluding Railway) is annexed herewith and marked as **ANNEXURE-P/35 B**.

Re. Normative IDC on Railway System

337. It is humbly submitted that for calculation of Normative IDC on Railway assets the Petitioner has followed the same approach as elaborated in the above paragraphs. Since Railway Capex has been funded through both internal resources/equity in excess of 30% and actual loan, the Petitioner for arriving at the Normative IDC has first computed total IDC from inception till date of put to use considering 70% of the Actual Cash Expenditure in each quarter as loan without segregating the same into actual loan or normative loan and then multiplied the same with the approved/claimed Weighted Average Rate of Interest on Long Term actual loan for that year and intervening period as ¼ of the year. Thus, from the total IDC as described above, the Petitioner removed the actual IDC capitalized in books of account to arrive at the Normative IDC. Accordingly, the Petitioner has claimed



total IDC of Rs 18391.61 lakh in FY 2021-22 towards 'Railway Package', out of which IDC of Rs. 9384.70 lakh has been capitalized in books and IDC of Rs. 9006.91 lakh is towards Normative IDC. Further, it is relevant to mention that vide Order dated 08.01.2022, the Hon'ble Commission in total has allowed IDC of about 15429.38 lakh and increase in the claim of IDC is mainly on account of delay from March'21 to March'22 for reasons beyond the control of the Petitioner as explained in detail in section of "Railway System". Further, The Auditor certificates certifying quarterly Capital Works in Progress and Undischarged liabilities for the period since inception to March'22 for Railway Package are enclosed herewith and marked as **ANNEXURE-P/36A (COLLY).** The Computation of Normative IDC for Railway System is enclosed hereto and marked as **ANNEXURE P/36 B** for kind consideration of the Hon'ble Commission.

Re. CAPITAL COST CLAIMED FOR 2019-24

338. As already stated, the Petitioner has considered closing capital cost of Rs. 479376.83 lakh as on 31.3.2019 as approved by this Hon'ble Commission vide order dated 13.12.2022 in Review Petition No. 4/RP/2022 in Petition No. 408/GT/2020 as opening capital cost as on 01.04.2019.

339. The following table summarizes capital cost considered as on 01.04.2019, Additional Capital Expenditure, Normative IDC on Excess Equity, Normative IDC on Actual Loan, decapitalisation considered and discharges made during the respective years from 2019-20 to 2023-24.

Table 13: Gross Block over Period FY 2019-20 to FY 2023-24 (Rs. Lakh)

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	Opening Capital Cost	479376.83	481467.64	483906.52	559419.75	562538.93



2	Add: Addition during the year/period	2151.03	2441.37	68424.86	3154.32	9440.28
3	Less: De-capitalisation during the year/period	47.39	17.01	67.07	657.31	1509.63
4	Add: Undischarge Liability as on 1st April of each year	0.00	97.26	138.37	2002.28	1396.28
5	Less: Undischarge Liability as on end of each year	97.26	138.37	2002.28	1396.28	6624.68
6	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
7	Add: Normative IDC on Excess Equity excluding Railways	84.43	55.62	12.44	16.18	37.51
8	Add: Normative IDC on Excess Equity Railways	0.00	0.00	9006.91	0.00	0.00
9	Closing Capital Cost	481467.64	483906.52	559419.75	562538.93	565278.70
10	**Average Capital Cost**	480422.24	482687.08	521663.13	560979.34	563908.81



340. Based on the above, the closing capital cost claimed as on 31.3.2024 is Rs. 565278.70 lakh.

Re. ANNUAL FIXED CHARGES FOR 2019-24

341. The Annual Fixed Charges comprise of the following components:

(a) Return on Equity;

(b) Interest on Loan;

(c) Depreciation;

(d) O&M Expenses; and

(e) Interest on Working Capital.

Re. RETURN ON EQUITY

342. Regulation 30 of the Tariff Regulations 2019 stipulates the following norms for Return on Equity.

> *"**30. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.*
> *(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:*
> *Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;*
> *Provided further that:*
> *i. In case of a new Project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch center or protection system based on the report submitted by the respective RLDC;*
> *ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking*



based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

31. Tax on Return on Equity. *(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.*

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with clause (□) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

Rate of return on equity = 15.50/(1-0.2155) = 19.758%

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 Crore;

(b) Estimated Advance Tax for the year on above is Rs 240 Crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;

(d) Rate of return on equity = 15.50/ (1-0.24) = 20.395%.

(3) The generating company or the transmission licensee, as the case may

MAITHON POWER LIMITED

be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the Tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."

343. The Return on Equity (Pre-Tax) as approved by the Hon'ble Commission *vide* its Order dated 08.01.2022 in Petition No. 408/GT/2020 is shown in the following Tables:

Table 14: Approved Return on Equity at base rate for works within the original scope of Project (Rs. Lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
27083.53	29077.29	30933.29	30878.74	30857.54

Table 15: Approved Return on Equity at WAROI for additional capitalization beyond the original scope of Project (excluding additional capital expenditure due to change in law) (Rs. Lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
25.47	75.73	111.35	126.83	136.69

Table 16: Total Approved Return on Equity for the generating station (Rs. Lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
27109.00	29153.01	31044.64	31005.56	30994.24

344. Based on the above quoted Regulations, the opening Equity base for the 2019-24 tariff period pertaining to the Petitioner's Generating Station has been arrived at corresponding to the closing Equity as on 31.03.2019 along with equity additions during 2019-24 period and RoE has been computed accordingly. Since all additional capitalisation, & other than Railways, have been done with internal



accruals and Railways has been funded with debt less than 70%, the debt: equity ratio has been considered as 70:30.

345. With regard to grossing up of ROE, it is submitted that the Hon'ble Commission has determined the ROE for admitted additional capital expenditure items within the original scope, by grossing the base rate of return on equity with the effective tax rate. However, while calculating the ROE for admitted additional capital expenditure items beyond the original scope, the Hon'ble Commission has not grossed up WAROI, with the effective tax rate. The Hon'ble Commission in the Order dated 08.01.2022 has inadvertently erred in not grossing up the Return on Equity (ROE) at the weighted average rate of interest (WAROI) for the purpose of tariff. The Commission in the said Order in Petition No. 408/GT/2020 observed as under:

> "252. Regulation 31 of the 2019 Tariff Regulations provides for grossing up of the base rate and does not provide for grossing up of weighted average rate of interest to be used for ROE for additions beyond the original scope of the project. Accordingly, in line with Regulation 31 of the 2019 Tariff Regulations, ROE has been allowed as under:
> ..."

346. The Petitioner humbly submits that Regulation 30 (as amended vide First Amendment to Tariff Regulations 2019) read with Regulation 31 provides for grossing up of base ROE with effective tax rate and the same has apparently escaped the attention of the Hon'ble Commission, while passing the Order dated 08.01.2022 in Petition No. 408/GT/2020. The Commission in its subsequent Orders in 11/RP/2022 in Petition No. 401/GT/2020 and 34/RP/2022 in Petition No. 426/GT/2020 has acknowledged the inadvertent error and allowed the grossing up for Return on Equity at WAROI Rate. Accordingly, the Petitioner has grossed-up the rate of return on equity for computation of tariff for the additional



capitalization both under Original Scope of Work and beyond the Original Scope of Work.

347. It is humbly submitted that the Petitioner has paid tax at MAT Rate during 2019-24 and the same has been considered as effective Tax Rate for the purpose of Grossing-up of the Rate of Return. Further, based on the Additional Capitalization during 2019-24, as discussed in the above sub-sections, the computation of actual RoE (Pre-Tax) for Assets under the Original Scope of Work and Assets beyond the Original Scope of Work for the Tariff Period 2019-24 pertaining to the Petitioner Generating Station has been tabulated as follows:

Table 17: RoE during 2019-24 – Assets capitalized under Original Scope of Work (Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Net Opening Equity (Normal)	143813.05	144311.74	144809.78	167191.67	167923.17
Add: Increase in equity due to addition during the year / period	512.91	503.14	22402.01	928.70	822.18
Less: Decrease due to De-capitalisation during the year / period	14.22	5.10	20.12	197.19	452.89
Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharges during the	0.00	0.00	0.00	0.00	0.00



year / period					
Net closing Equity (Normal)	144311.74	144809.78	167191.67	167923.17	168292.46
Average Equity (Normal)	144062.40	144560.76	156000.73	167557.42	168107.82
Base Rate of Return on Equity (%)	15.50%	15.50%	15.50%	15.50%	15.50%
Effective Tax Rate (%)	17.47%	17.47%	17.47%	17.47%	17.47%
Rate of ROE (%)	18.78%	18.78%	18.78%	18.78%	18.78%
Total ROE	**27057.80**	**27151.40**	**29300.06**	**31470.64**	**31574.01**

Table 18: RoE during 2019-24 – Assets capitalised beyond the Original Scope of Work (excluding additional capital expenditure due to change in law) (Rs. lakh)

Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Net Opening Equity (Normal)	-	128.55	362.18	634.25	838.51
Add: Increase in equity due to addition during the year / period	128.55	233.63	272.08	204.25	452.64
Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Net closing Equity (Normal)	128.55	362.18	634.25	838.51	1,291.15
Average Equity (Normal)	64.27	245.36	498.21	736.38	1,064.83
WAROI	8.32%	8.05%	7.72%	8.12%	8.93%
MAT Rate	17.47%	17.47%	17.47%	17.47%	17.47%
Rate of ROE (%)	10.08%	9.75%	9.36%	9.84%	10.82%
Total ROE	**6.48**	**23.93**	**46.62**	**72.48**	**115.16**

348. The Petitioner, therefore, humbly requests the Hon'ble Commission to allow the actual Return on Equity (Pre-Tax) on Original and Beyond the Original Scope of work as claimed in the above tables for the 2019-24 tariff period.

Re. INTEREST ON LOAN

349. Regulation 32 of the Tariff Regulations 2019 stipulates the following norms for Interest on Loan:

> 32. *Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*
> *(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*
> *(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*
> *(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*
> *(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:*



Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."

350. The Interest on Long Term Loan as approved by the Hon'ble Commission *vide* its Order dated 08.01.2022 in Petition No. 408/GT/2020 in terms of Regulation 32 of the Tariff Regulations 2019 is shown in the following Table:

Table 19: Interest on Loan during 2019-24 Approved in Order dated 08.01.2022 in Petition No. 408/GT/2020 (Rs. lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
14094.35	14216.55	14014.45	11573.71	9133.87

351. Further, the Petitioner has claimed the Weighted Average Rate of Interest for the computation of Interest on Loan on the basis of Loan Portfolio during the year and the applicable interest rate. The detailed computation of the Weighted Average Rate of Interest on Loan has been furnished in Tariff Application Form 13. A copy of the Auditor's Certificate certifying the loan movement with interest for the years 2019-20 to 2023-24 for the Petitioner's Generating Station is enclosed hereto and marked as **ANNEXURE-P/37A.** Accordingly, the following table shows the computation of actual Interest on Loan for the period 2019-24. Interest on Loan has been computed by applying Rate of Interest on the Average Loan for the year which has been arrived at after considering the Opening Balance for the year,



Debt component of Additional Capitalization, Deemed Repayment of the Loan (Annual Depreciation) and Closing Balance derived therefrom:

Table 20: Interest on Loan During 2019-24 (Rs. lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross loan – Opening	3,35,563.78	3,37,027.35	3,38,734.56	3,91,593.82	3,93,777.25
Cumulative repayments of Loans upto previous year	1,64,754.01	1,88,300.14	2,11,971.00	2,37,197.40	2,64,159.04
Net loan – Opening	1,70,809.77	1,48,727.21	1,26,763.56	1,54,396.42	1,29,618.21
Add: Drawl(s) during the Year	1,496.74	1,719.12	52,906.21	2,643.55	2,974.58
Deletion during the year (70% of de-cap)	47.39	17.01	67.07	657.31	1,509.63
Less: Decrease due to de-capitalisation during the year/period	33.18	11.91	46.95	460.12	1,056.74
Less: Repayment (s) of Loans during the year	23,564.71	23,678.33	25,256.89	27,271.52	27,773.39
Net loan – Closing	1,48,727.21	1,26,763.56	1,54,396.42	1,29,618.21	1,04,544.19
Average Net Loan	1,59,768.49	1,37,745.38	1,40,579.99	1,42,007.32	1,17,081.20
Weighted Average Rate of Interest	8.32%	8.05%	7.72%	8.12%	8.93%
Total Interest	**13292.43**	**11086.83**	**10855.94**	**11535.36**	**10450.13**

352. The Petitioner, therefore, humbly requests the Hon'ble Commission to allow the actual Interest on Loan as claimed in the above table for the 2019-24 tariff period.

Re. Refinancing of Term Loan:

353. With regard to refinancing of Term Loan, it is re-iterated that the Petitioner signed



the Common Loan Agreement ('CLA') on 04.02.2008 with the consortium of 17 lenders with State Bank of India (SBI) as the lead lender for funding the Project. As per Schedule IV of the revised CLA the Rate of Interest of the Loan is defined as 2.75% spread over the prevalent SBI Base Rate to be reset on the annual reset date of 3rd March. The rate of interest worked out as per the CLA would accordingly be as under:

Interest Rate as per Original Term Loan	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Rate of Interest	11.75%	11.11%	10.07%	10.45%	12.22%

354. The Petitioner, being a prudent utility, in an effort to bring down the cost of debt, made refinancing efforts 4 times through various funding sources upto March'2019 and every time it was successful in bringing down the cost of debt, effectively bringing the interest rate down for each financial year. The details of each of the refinancing has been provided in the previous tariff petition filed by the Petitioner and gains arising out of the said refinancing have been shared accordingly with the beneficiaries in terms of the refinance rate or the WAROI approved by the Hon'ble Commission in the Tariff Order dated 08.01.2022 for the period 2019-24 subject to true-up at actuals during true-up. In view of the increased creditworthiness of the Project and in an effort to bring down the cost of debt, the Petitioner further explored the opportunities to re-finance the Long-term Loan and, accordingly, was able to once again refinance the term loan in FY 2020-21. The Petitioner under the 5th Refinancing has refinanced part of the outstanding term loan by Rs. 22500.00 lakh Loan from AXIS Bank (5th Refinancing) and Rs. 19900 Lakh through NCD III issued in December 2020. The

weighted average rate of interest at refinanced rates (i.e., WAROI on actual loan) accordingly has been computed and claimed which works out as under:

WAROI claimed in True-up at Refinanced Rates	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Rate of Interest	8.32%	8.05%	7.72%	8.12%	8.93%

355. It is relevant to mention here that pending true-up for 2019-24, the savings arising due to variations in the provisionally approved refinanced rates/ WAROI vis-a-vis the actual rates including the cost of 5th refinancing are yet to be shared with the beneficiaries. As per the provisions of the Tariff Regulations 2019, the Petitioner proposes to share the remaining net benefit of the refinancing in the prescribed ratio with the beneficiary post truing up of the interest rate considered in aforesaid section of this Petition where the interest expense claim has been discussed. Copies of the supporting documents of the cost of refinancing of Rs. 429.18 Lakh have been provided under **ANNEXURE- P/37B (COLLY.)** of the instant Petition for the kind perusal of the Hon'ble Commission.

Re. DEPRECIATION

356. Regulation 33 of the Tariff Regulations 2019 stipulates the following norms for Depreciation,

> *"33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the Tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single Tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*
> *Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity*



of all the units of the generating station or Capital Cost of all elements of the transmission system, for which single Tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the Capital Cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the Capital Cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and

100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the Capital Cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated Tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later Stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the Capital Cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing Projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the



completion of useful life of the Project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in Tariff by the decapitalized asset during its useful services."

357. The Depreciation as approved by the Hon'ble Commission *vide* its Order dated 08.01.2022 in Petition No. 408/GT/2020:

Table 21: Summary of Depreciation Approved by the Hon'ble Commission vide Order dated 08.01.2022 in Petition No. 408/GT/2020 (Rs. lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
24588.73	26492.50	28243.13	28223.66	28223.56

358. The Weighted Average Rate of Depreciation (WAROD) has been computed in accordance with 'Form 11' and the same has been considered for the purpose of computation of Depreciation for the period 2019-24 as shown in the Table below. A copy of the Certificate from Statutory Auditors dated 12.12.2024 regarding Gross Block of the Assets as per depreciation schedule in Tariff Regulations 2019 for financial years of the Tariff Period 2019-24 is annexed hereto and marked as **ANNEXURE P/38**.

However, since the Petitioner is proposing capitalization of Railway Project from March 2022, when it was put to use instead of March 2021 when it was capitalized in books, the Petitioner has worked out WAROD by excluding all capitalizations of Railway Project prior to March 2022 from GFA reflected in books and shifting all such capitalisations to March 2022. On the class-wise assets, the Petitioner has applied the rates specified in Tariff Regulations 2019 to compute WAROD.

359. Thereafter, Weighted Average Rate of Depreciation (WAROD) is multiplied by



Average Gross Block for the year adjusted with Average Gross Block of freehold land to arrive at the allowable depreciation for the year. The computation of depreciation is provided in the Table below:

Table 22: Depreciation for Tariff Period 2019-24(Rs. lakh)

Sl. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	Opening Capital Cost	479376.83	481467.64	483906.52	559419.75	562538.93
2	Closing Capital Cost	481467.64	483906.52	559419.75	562538.93	565278.70
3	**Average Capital Cost**	**480422.24**	**482687.08**	**521663.13**	**560979.34**	**563908.81**
4	Freehold land	17513.13	17576.52	17639.91	17639.91	17639.91
5	Depreciable value @ 90%	416618.19	418599.50	453620.90	489005.49	491642.02
6	Rate of depreciation*	5.09%	5.09%	5.01%	5.02%	5.08%
7	Balance useful life at the beginning of the period	17.42	16.42	15.42	14.42	13.42
8	Balance depreciable value	251864.18	230299.36	241649.90	251808.09	227482.98
9	**Depreciation for the period**	**23564.71**	**23678.33**	**25256.89**	**27271.52**	**27773.39**
10	**Depreciation annualised**	**23564.71**	**23678.33**	**25256.89**	**27271.52**	**27773.39**
11	Cumulative depreciation at the end of the period	188318.72	211978.47	237227.90	264468.92	291932.43
12	De-capitalisation during the year	47.39	17.01	67.07	657.31	1,509.63
13	Less: Cumulative depreciation adjustments on account of de-capitalisation	18.58	7.47	30.50	309.88	781.53
14	Net Cumulative depreciation at the end of the period after adjustments	1,88,300.14	2,11,971.00	2,37,197.40	2,64,159.04	2,91,150.90

360. The Petitioner humbly requests the Hon'ble Commission to allow the actual Depreciation as claimed in the above table for the 2019-24 tariff period.

Re. OPERATIONAL NORMS

361. The Tariff Regulations 2019 stipulate various Operational Norms for generating units of different capacities and the recovery of Capacity Charges & Energy

Charges are subject to successful achievement of these Norms. The Petitioner has claimed Operational Parameters as defined in the Tariff Regulations 2019 with suitable relaxation in GSHR.

362. The following Sub-Section details the Operational Performance of the Generating Station during the Tariff Period 2019-24.

Re. Plant Availability

363. Regulation 49 (A) of the Tariff Regulations 2019 specifies the Normative Plant Availability as:

> *"Norms of operation for thermal generating station*
> *49. The norms of operation as given hereunder shall apply to thermal generating stations:*
> *(A) Normative Annual Plant Availability Factor (NAPAF)*
> *(a) All thermal generating stations, except those covered under clauses (b), (c), (d), & (e) – 85%"*

364. The Petitioner for the purpose of the tariff has computed Gross Generation for the 2019-24 tariff period at Normative Availability of 85% in line with the norms.

Re. Auxiliary Power Consumption

365. Norms for Auxiliary Power Consumption for thermal generating station as stipulated in the Tariff Regulations 2019:

> *"49. The norms of operation as given hereunder shall apply to thermal generating stations:*
> ...
> *(E) Auxiliary Energy Consumption:*
> *(a) For Coal-based generating stations except at (b) below:*

S. No.	*Generating Station*	*With natural Draft cooling tower or without cooling tower*
(i)	*200 MW series*	*8.50%*
(ii)	*300 MW and above*	
	Steam driven boiler feed pumps	*5.75%*
	Electrically driven boiler feed pumps	*8.00%*

Provided that for thermal generating stations with induced



draft cooling towers and where tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8% respectively:"

366. Unit 1 & Unit 2 of the Generating Station fall under the category of 300 MW & above having Steam-driven Boiler Feed Pumps & Induced Draft Cooling Tower. Therefore, both Units qualify for a Normative Auxiliary Power Consumption of 6.25% (5.75% for Units having Steam driven BFP & additional 0.50% for having Induced Draft Cooling Tower).

Re. Gross Station Heat Rate

367. Regulation 49 (C)(b) of the Tariff Regulations 2019 provides Station Heat Rate for the thermal generating station having COD on or after 01.04.2009 as under:

"49 ...
(b) Thermal Generating Stations achieving COD on or after 1.4.2009:
(i) For Coal-based and lignite-fired Thermal Generating Stations:
1.05 X Design Heat Rate (kCal/kWh)
Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure."

368. The Hon'ble Commission, in its Order dated 19.11.2014 for the period 2011-2014, allowed a Station Heat Rate (SHR) of 2425 kCal/kWh due to inferior coal quality, although the Tariff Regulations 2009 set the normative SHR at 2360.47 kCal/kWh. In a subsequent Tariff Order dated 26.12.2017 for the period FY 2014-19, the Hon'ble Commission approved an SHR of 2375 kCal/kWh, considering the plant's actual Gross Station Heat Rate of 2377 kCal/kWh, boiler efficiency of 85.5%, and Turbine Heat Rate of 1945 kCal/kWh as per the Tariff Regulations 2014. The Hon'ble Commission approved a boiler efficiency of 85.5% achieved during PG tests with actual coal, noting the poor quality of coal received, compared to the 87.80% guaranteed by the OEM (BHEL) using design coal

369. The Hon'ble Commission, in its Tariff Order dated 08.01.2022 in Petition No.



408/GT/2020 (MYT 2019-24), approved a Station Heat Rate (SHR) of 2326.03 kCal/kWh, instead of the 2388 kCal/kWh claimed by the Petitioner. The relevant extract is reproduced below for the kind consideration of this Hon'ble Commission:

> *"305. The Petitioner has considered PG Test performance based on the quality of coal permissible to the Boiler and Plant characteristics. Also, the PPA was executed by the Petitioner based on demonstrable plant characteristics. The Boiler efficiency had undergone changes due to receipt of poor quality of coal in comparison to the quality envisaged at the time of PG test.* ***The deterioration of coal quality is temporary and cannot alter the plant characteristics on a perpetual basis. Coal is being procured by the Petitioner after execution of the Fuel Supply Agreement with the coal supplier. It was the obligation of the Petitioner, while entering into FSA, to ensure the desired quality of coal, by enforcing the provisions of FSA or by exploring any other alternate sources of coal.*** *The Petitioner, having not been prevented from exploring alternate source of coal, cannot, on a perpetual basis, be permitted to pass on the burden on the beneficiaries on this count, more so when the Petitioner has not fulfilled the said obligations. It is further noticed that the* ***Petitioner has not furnished any documentary evidence substantiating the efforts taken by it to ensure the good quality of coal. In our view, the relaxation of SHR of the generating station, in perpetuity, based on coal quality, will render the operational parameters specified under the 2019-24 Tariff Regulations for all generators redundant, as more often than not, the coal quality may no match with design coal.*** *In view of this, there is no merit in the prayer of the Petitioner for relaxation of SHR on grounds of deterioration in quality of coal.* ***The Petitioner is directed to ensure the required quality of coal as envisaged during the PG test. Accordingly, considering the operating margin of 5% as specified in Regulation 49I(b)(i) of the 2019 Tariff Regulations, the GSHR of the generating station works out as 2326.03 kcal/kWh [1945*1.05)/0.878] and the same is considered and allowed."***
>
> ***[Emphasis supplied]***

370. The Petitioner, aggrieved by the Order dated 08.01.2022 in Petition No. 408/GT/2020, raised the issue in a Review Petition. However, the Hon'ble Commission, in its Order dated 26.05.2022, did not admit the issue, stating that there was no infirmity in the Impugned Order. The Hon'ble Commission returned

the following findings on this issue:

> *"7. .... We observe from records that though the Petitioner, in Petition No.274/2010 (tariff for the period 2011-14) had sought relaxation in SHR norms to 2443 kcal/kWh (based on design heat rate), on the ground of inferior quality of coal being received,* ***the Commission by its order dated 19.11.2014 had relaxed the Heat Rate norm for this generating station as 2425 kcal/kWh (instead of SHR of 2443 kcal/kWh claimed), on the ground that the generating stations of NTPC have been allowed the same Heat Rate norm****. Similarly, in Petition No. 152/GT/2015 for the period 2014-19, the SHR of 2375 kcal/kwh as claimed by the Petitioner was approved by order dated 26.12.2017,* ***on the ground that the same was lesser than the GSHR allowed during the 2009-14 period****.*
>
> ...
>
> *9. Further, the submissions of the Review Petitioner, in support of relaxation of SHR, on the grounds that (i) .... etc., cannot also be considered, as these submissions of the Review Petitioner, touches upon the merits of the case. It is an established law that the scope of review proceedings is very limited. A review does not mean an appeal in disguise, whereby the matter is reheard on merit and the decision is taken afresh. A review lies only on account of patent error and not for rehearing. In our view, the acceptance of the submissions of the Review Petitioner would amount to reopening the impugned order on merit, which is beyond the scope of the review proceedings. Accordingly, the review of the impugned order on this count is not maintainable."*
>
> **[Emphasis Supplied]**

371. In this regard, it is submitted that the Petitioner being in a financial predicament due to the said order has filed an Appeal No.12 of 2022 before the Hon'ble APTEL, the decision of which is still pending.

372. Regarding the reasons based on which the Hon'ble Commission considered an SHR of 2326.03 kCal/kWh instead of 2388 kCal/kWh in the Order dated 08.01.2022 for Petition No. 408/GT/2020, the Petitioner would like to make the following submissions for consideration of this Hon'ble Commission:

Re: The deterioration of coal quality is temporary and cannot alter the plant characteristics on a perpetual basis. Such relaxation cannot be allowed in perpetuity.



373. It is humbly submitted that the Hon'ble Commission *vide* RoP of hearing dated 02.06.2020 in Petition No. 408/GT/2020 directed the Petitioner to furnish the actual coal quality (GCV, proximate and ultimate analysis) received in generating station during the year FY 2019-20. This information was submitted *vide* an additional affidavit dated 20.06.2020 and was considered by the Hon'ble Commission in Para 302 of the Tariff Order dated 08.01.2022 for 2019-24.

374. The Petitioner informed the Hon'ble Commission about the sub-optimal quality of coal in both the Petition and the additional affidavit dated 20.06.2020. The Hon'ble Commission, in Para 304, also noted that the coal quality for FY 2019-20 only improved efficiency by 0.05%, indicating no substantial change in coal quality.

375. The Petitioner humbly submits that it has no control over the quality of coal, which has neither improved nor is expected to improve in the future. Therefore, the Petitioner requests that the Hon'ble Commission to continue the same dispensation provided in earlier Orders and relax the SHR accordingly. With respect to Petitioner's generating station, it is most respectfully submitted that:

(a) There is no market for domestic coal supply in India, as coal supply companies are government-owned and hold a monopoly over supply. Consequently, the Petitioner has no control over the coal supply.

(b) The Petitioner states that the station is landlocked and depends on domestic coal supplies. Imported coal is not a viable or cost-effective alternative.

(c) The Petitioner has entered into revised Fuel Supply Agreements (FSA) with BCCL and CCL on 16.01.2013 and 16.12.2013, respectively. These FSAs are one-sided standard documents favouring the coal supply companies, with no penalty provisions for variations in coal quality.



(d) Although there is a provision for adjusting the coal price according to the grade of supply in the FSA, which must be and is being passed on to the beneficiaries in the cost-plus tariff for the generating station, there is no penalty for poor coal quality that is affecting Petitioner's performance. This is similar to adjustments made for grade slippage and quantity variation.

(e) The Petitioner, therefore, submits that any deterioration in the station heat rate due to poor coal quality is being borne by it despite the coal quality being beyond its control.

Re. It was the obligation of the Petitioner, while entering into Fuel Supply Agreement, to ensure the desired quality of coal, by enforcing the provisions of FSA or by exploring any other alternate sources of coal.

Re. The Petitioner has not furnished any documentary evidence substantiating the efforts taken by it to ensure the good quality of coal.

376. The Petitioner further submits that the Gross Calorific Value (GCV) of coal, a key quality parameter affecting efficiency, is beyond the control of the generator. This has been acknowledged by the Hon'ble Commission in the Explanatory Memorandum issued in December 2018 with the Draft Tariff Regulations 2019. Relevant extracts are provided below:

> *"22.5 In the entire value chain from mine end to generating station end, the loss of GCV can take place on account of grade slippage at mine end, during transportation (transit with railway) and during storage (at generating stations).* ***The generating companies generally have no control over the grade/GCV of coal received at their generating stations.*** *There are several cases of grade slippages between the mine mouth and at the site of generating stations. Further, there is loss in GCV during transport of coal through Railway.* ***Therefore, the generator may receive lower energy than what was billed by the coal companies. These are beyond the control of the generating companies.***
>
> *22.6 Since the cost of slippage in grade of coal between the loading point*



and the site of generating station is ultimately passed on to the beneficiaries, this issue needs to be looked at in terms of risk allocation between the coal company, railways and the generating stations."

[*Emphasis supplied*]

377. The Petitioner respectfully submits that due to the low GCV of coal, several letters were issued to CCL, the coal supplier, on 01.06.2017, 25.05.2017, and 10.04.2017. These letters were annexed as sample communications in Petition No. 408/GT/2020.

378. It is pertinent to highlight the letter dated 06.09.2019 issued by GM (QC), BCCL, which clearly shows the dominant position of coal supplier companies that they are not willing to listen to quality complaints of the Petitioner and have summarily dismissed its request. The relevant extract of the letter dated 06.09.2019 has been reproduced below:

> *"...If you carry out any sampling and analysis of coal samples in any lab and submit the same to BCCL, it is immaterial/useless for BCCL and such results will not be entertained by BCCL. Your all letters along with analysis reports are being returned to you.*
> ***Hope, you will not send such irrelevant letter to this office or any office of BCCL in future."***
>
> **[Emphasis supplied]**

379. The Petitioner asserts that it has taken adequate steps to procure good quality coal. However, due to factors beyond its reasonable control, as previously mentioned, the quality of coal cannot be substantially improved. A true copy of the Letters dated 01.06.2017, 25.05.2017, 10.04.2017 and 26.09.2019 are annexed hereto and marked as **ANNEXURE P/39-A (COLLY.)**.

380. In addition to the above, theoretically, it can be argued that the Petitioner could achieve the normative SHR of 2326.03 kCal/kWh approved in Order dated 08.01.2022 in line with Regulation 49(C)(b)(i) specified in the Tariff Regulations 2019 with a Design THR of 1945 kCal/kWh, Design boiler efficiency of 87.8% and



a 5% operating margin if Design Coal is used. However, practically achieving Design values is only possible if other Design Conditions (e.g., ambient temperature, no degradation due to ageing, etc.) are also maintained. Even with Design Coal, actual boiler efficiency may be lower than the design efficiency under practical conditions on performance test of boiler. Actual boiler efficiency will further deteriorate if actual coal quality is poorer than design quality. The same can be substantiated from the report on performance test of boiler, (Report No. CPRI/ERED/EA/225/24) conducted by Central Power Research Institute (CPRI) for the Petitioner. The findings of CPRI are reproduced below for the Hon'ble Commission's reference:

> *"From the performance testing results it can be observed that the* ***boiler of Unit-1 and Unit-2 are operating at an efficiency of 84.98% and 84.89% against the design value of 87.80% at a maximum plant operating load of 528 and 574.74 MW.***
>
> *The dry flue gas loss is predominant in both boilers followed by the wet flue gas which is uncontrollable. The excess air ratio in both the boilers are maintained well within the limit. The measured CO varies from 8 to 9 ppm in Unit-1 and the same for Unit-2 varies from 7 to 8.75 ppm. These trace amount of CO indicates that the combustion is complete and hence there is no loss on account of CO.*
>
> *From the coal analysis it can be observed that the boilers are designed to handle coal with GCV of 4671 and ash content of 36.19%. During the performance testing the GCV of coal used in boiler-1 was 3978.6 and for boiler -2 was 3724.3 kcal/kg. Ash content of the coal used in boiler-1 was 41.97% and for boiler -2 was 46.02%. Hence, to operate the plant with highest possible load, more coal has to be burnt in boiler as the used coal GCV is far below the design GCV. The ash content in coal is very high compared to the design.* ***Thus with high firing rate of coal, more ash is being generated in the boiler. This will result in more boiler related auxiliary power consumption in terms of handling more fuel, flue gas and ash handling. The internal heat exchanging infrastructure of the boilers are exposed to such a high ash flow than it is designed for leads to high erosion rate and reduction in its life time.***
>
> *From the past three years trend (refer Figure – 1 and 2) it can be seen that the plant has never received coal of design GCV and operated most of the time*



with coal of CV less than 4000 kcal/kg.
The performance test results of boilers indicate that ***both the boilers are performing with a maximum achievable efficiency point even with firing of coal with low GCV and higher ash content."***

[*Emphasis supplied*]

A true copy of the Report dated 09.10.2024 on performance test of boiler (Report No. CPRI/ERED/EA/225/24) conducted by Central Power Research Institute (CPRI) is annexed herewith and marked as **ANNEXURE P/39-B**.

381. The CPRI Report validates Petitioner's assertions that deterioration in SHR of Petitioner's Plant is due to poor coal quality on which it has no control. Also, the FSA coal quality and, hence, boiler efficiency has not improved since commissioning. In fact, boiler efficiency has gone down from 85.5% at PG Test to 84.98% and 84.89% for Unit-1 and Unit-2 respectively. Therefore, in order to achieve actual SHR close to approved SHR, it would ideally be appropriate for the Petitioner to source higher GCV coal and blend it with FSA coal to operate close to the Design GCV of 4671 kCal/kWh. In fact, the Hon'ble Commission has also directed the Petitioner to make efforts to maintain GCV of coal received close to Design GCV. This will reduce the annual under-recovery of the Petitioner due to lower GCV of FSA coal to almost zero.

382. In this regard, it is relevant to note that the Petitioner sought the consent of the beneficiaries for procurement of imported coal in compliance to the aforesaid directions by the Hon'ble Commission *vide* letters dated 17.03.2023. A copy of the Letters dated 17.03.2023 issued by the Petitioner to beneficiaries respectively for seeking consent of the beneficiaries is annexed herewith and marked as **ANNEXURE P/39-C (COLLY.)**

383. However, the Petitioner was unable to secure the consent of the beneficiaries for such procurement, as the blending of coal would result in a substantial increase in



the variable cost which was estimated to be in the range of 90-100% of the prevailing variable cost while the savings in the from a lower GSHR would only amount to about Rs. 35-40 Crore annually. A copy of the Replies received from beneficiaries denying the consent for procurement of the imported coal are annexed hereto and marked as **ANNEXURE P/39-D (COLLY.)**

Re: Relaxation in SHR based on coal quality will render the norms in Regulations redundant as more often than not coal quality may not match the design quality.

384. It may kindly be noted that the Hon'ble Commission consistently uses the average SHR achieved in past years for NTPC's coal-based thermal generating stations, categorized by capacity (200/210/250 MW, 500 MW, and 660 MW units) and age (commissioned before 01.04.2009, between 01.04.2009 to 31.03.2014 and after 01.04.2014). These norms are applied to all coal-based generating stations, including Independent Power Producers (IPPs) like the Petitioner.

385. Further, the norms as per the Tariff Regulations 2019, if applied without relaxation, cause financial losses in the case of the Petitioner for none of its fault, warranting exercise of power to relax.

386. The Hon'ble Commission has been fixing SHR norms for new stations commissioned after 01.04.2009 on the basis of Design Heat Rate with some Operating Margin as per following formula:

SHR = Design Heat Rate x (1 + Operating Margin)

where, Design Heat Rate =Design Turbine Hear Rate/Design Boiler Ƞ

387. The Operational Margin was set at 6.5%, 4.5% and 5% in the Tariff Regulations of 2009, 2014 and 2019, respectively, based on the actual SHR and Operating Margin over the Design SHR of NTPC stations for the preceding 5 years, subject to ceiling



norms for Turbine Heat Rate (THR), Boiler Efficiency and SHR. For older stations commissioned before 01.04.2009, the SHR norm is based on the actual SHR achieved by NTPC stations over the preceding 5 years and is a single value for all stations within a category (e.g., 200/210 MW, 500 MW, 660 MW). For these older stations, design parameters are not considered and only the actual SHR from past years with the actual coal quality is validated against the fixed SHR norm. Additionally, relaxed SHR norms have been specified in the Regulations for certain older stations.

388. The CPRI Report further found out the current boiler efficiencies of 84.98% for Unit 1 and 84.89% for Unit 2 against the PG Test Boiler efficiency of 85.5% with actual coal due to poor coal quality against design value of 87.80% with design coal. Relevant extract of the Report is as follows -

> *"The performance assessment of boilers was conducted in August 2024. The work at the site consisted of measurement of input and output variables of different equipment and auxiliary loads in the plant.*
> ***The boiler efficiency of unit 1 and 2 were found to be 84.98% and 84.89%, respectively at test conditions, against the design value of 87.80%.***
> *The performance test results of boilers indicate that both the boilers are performing with a maximum achievable efficiency point even with firing of coal with low GCV and higher ash content."*
>
> [***Emphasis supplied***]

389. The Hon'ble Commission specified minimum values for Turbine Heat Rate, Boiler Efficiency and Design Heat Rate for different steam parameters. While Turbine Heat Rate and Design Heat Rate varied for different steam parameters, the minimum boiler efficiency was set at 85% in the Tariff Regulations 2009. This minimum was raised to 86% in the Tariff Regulation 2014 **for new generation stations achieving COD on or after 01.04.2014**, based on recommendations from the CEA. Since Petitioner's Plant was commissioned in tariff period 2009-14 of Tariff Regulations 2009, the minimum efficiency norm of 85% shall be



applicable to it and, hence, PG Test boiler efficiency of 85.5% may be considered as design boilers efficiency for the purposes of approving SHR of Petitioner's Plant for the period 2019-24.

390. The foundation for setting the minimum boiler efficiency norm at 86% is discussed in detail in Paragraphs 37.56 and 37.57 of the Statement of Reasons for the 2014 Tariff Regulations mentioned as under:

> *"37.56 The Commission, in the draft Regulations, had proposed to limit the boiler efficiency to 87%. The Commission is of the view that the CEA's computation of 3% margin on design heat rate is based on the lower boiler efficiency, which for recently installed units is in the range of 84%-85%. However, the Commission had proposed a margin of 4.50% at higher boiler efficiency of 87%.* ***The Commission considering the recommendations of CEA and other suggestions received from the stakeholders, has revised the boiler efficiency to 86% from 87% proposed in the draft Regulations for new generating stations achieving COD on or after 01.04.2014 while retaining the margin of 4.50% for heat rate.***
>
> *37.57 Further, for generating stations that have achieved COD between 1.4.2009 to 31.03.2014, the margin has been revised to 4.50%. The Commission would like to point out the observation made by CEA on the alarming trend of decreasing boiler efficiency, which has dropped down to level below 85% for recently commissioned Units of the same station operating on similar coal. The Commission is of the view that practices, which lead to unnecessary burdening of consumers should be discouraged. The Commission has, therefore, reduced their margin over and above design heat rate to 4.50%. Further, in order to limit the heat rate so derived, the Commission is of the view that the same should not exceed the heat rate norms approved during FY 2009-10 to FY 2013-14."*
>
> ***[Emphasis supplied]***

391. In the Tariff Regulations 2019, the lower limit of 86% boiler efficiency was retained. However, the operational margin was increased from 4.5% to 5%, based on the actual deviation from the Design Heat Rate adjusted for the lower limit of boiler efficiency for 500 MW units of NTPC. Relevant extracts of Explanatory Memorandum for Tariff Regulations 2019 are reproduced below:

> *"17.6.16 The following table summarises the computation of actual Operating Margin for 500 MW Series thermal generating stations commissioned after 01.04.2009.*



Table 55: Operating Margin for 500 MW Series Generating Stations

Generating Stations	Boiler Efficiency considered	Turbine HR	Design Heat Rate	Average of Corrected SHR	Actual Operating Margin
	(%)	(kcal/ kwh)	(kcal/ kwh)	(2016-17 and 2017-18)	(%)
500 MW Series					
Kahalgaon-II	**86.00**	1,944	2,260	2,393	5.54%
Korba-III	**86.00**	1,945	2,262	2,368	4.49%
Mauda-I	**86.00**	1,932	2,297	2,401	6.43%
Rihand-III	**86.00**	1,932	2,299	2,365	5.01%
Simhadri-II	**86.00**	1,933	2,287	2,381	5.61%
Sipat-II	**86.00**	1,948	2,269	2,342	3.27%
Vindhyachal-IV	**86.00**	1.932	2,300	2,405	6.58%
Average					**5.28%**

17.6.17 The Commission observe that in case of Kahalgaon II Power Station which comprises of three units of 500 MW, the design turbine cycle heat rate is 1944 kCal/kWh for Stage II. ***Further, the boiler efficiency for stage II is taken as 86.00%.*** *The Design heat rate, works out to around 2260kCal/kWh for stage II. By considering the current norm of 4.5% margin above the design heat rate, this results in a heat rate of 2361 kCal/kWh for Stage II. However, the actual five-year average heat rate for the station works out to be 2393 kCal/kWh. Similar is the case with other units.* ***The Commission, therefore, proposes to slightly normalise the norms to reflect the current operational efficiencies of the stations by increasing the margin to 5.00% from the current level of 4.50%.***"

[Emphasis supplied]

392. The Hon'ble Commission, by setting the boiler efficiency limit at 86%, has realistically corrected the over-estimated efficiency reduction at Design stage. This is evident from above quoted Table 55 of the Explanatory Memorandum for the Tariff Regulation 2019 which shows that after applying the efficiency correction for 500 MW Units commissioned after 01.09.2009, the average deviation for all plants is about 5%.

393. The Petitioner submits that for most of the other plants, where Design Boiler efficiency is less than 86%, the SHR norm is set using actual coal quality data and



a design efficiency of 86%, which is lower than the Petitioner's design efficiency of 87.8%. It is submitted that Petitioner had set higher design efficiency based on Design coal as per coal quality in the FSAs, which was not and will never be actually delivered. Hence, the Petitioner would never be able to achieve the strict SHR norm derived from its Design efficiency for none of its fault. Without relaxation in SHR to at least the 86% boiler efficiency level allowed for other plants, the Petitioner faces undue hardship and is expected to meet an unachievable SHR with the existing coal for the tariff period 2019-24.

394. When comparing the current approved SHR for thermal generating stations with similar 500 MW sets, the Petitioner appears to be an outlier. All similar capacity machines with the same turbine cycle heat rate (1945 kCal/kWh) have a design boiler efficiency of ≤ 86%. A copy of the table showing such difference/comparison of approved SHR between various thermal generating stations is annexed herewith and marked as **ANNEXURE P/39-E.**

395. The Petitioner demonstrated a boiler efficiency of 85.5% against design value of 87.8% in the PG test. However, due to consideration of lower boiler efficiency limit of 86% for other plants and design boiler efficiency of 87.8% for the Petitioner in the 2019-24 tariff period, the Petitioner incurs an additional 1.8% loss. Other stations with similar machines do not face this impact which amounts to discrimination.

396. The Petitioner respectfully submits that the Hon'ble Commission has allowed relaxations in operational parameters for many stations on valid and genuine grounds, such as DVC stations and gas-based stations of NEEPCO. Notably, the Hon'ble Commission previously relaxed norms for the Petitioner due to sub-optimal coal quality for the periods 2009-14 and 2014-19. However, the same



dispensation was not considered for the period 2019-24.

397. In view of the foregoing submissions, it is humbly prayed before the Hon'ble Commission to kindly relax the SHR norm for the Petitioner for the period 2019-24 to **2375** kCal/kWh for 2019-24 by considering boiler efficiency as 86% similar to other generators and providing level playing field, as the actual SHR is higher for the above reasons beyond the control of the Petitioner under Power To Relax as per Regulation 76 of Tariff Regulations 2019.

Re. Secondary Fuel Oil Consumption

398. Regulation 49(D) of the Tariff Regulations 2019 stipulates the Normative Specific Secondary Fuel Oil Consumption for Coal-fired Thermal Generating Stations as,

> *"Norms of operation for thermal generating station*
> *49. The norms of operation as given hereunder shall apply to thermal generating stations:*
> ...
> *(D) Secondary fuel oil consumption:*
> *(a) For Coal-based generating stations other than at (c) below: 0.50 ml/kWh"*

399. Accordingly, the Petitioner has considered Normative Specific Secondary Fuel Oil Consumption of 0.50 ml/kWh for the purpose of Tariff computation for the 2019-24 tariff period.

Re. Summary of Operational Parameters

400. The summary of the Operational Performance of the generating station for the 2019-24 tariff period considered for the tariff purpose is as follows:

Table 23: Summary of Operational Parameters for Tariff Period 2019-24

Particulars	UoM	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days of the Year		366.00	365.00	365.00	365.00	366.00
Unit Capacity	MW	1,050.00	1,050.00	1,050.00	1,050.00	1,050.00
NAPAF	%	85.00	85.00	85.00	85.00	85.00

MAITHON POWER LIMITED

Particulars	UoM	2019-20	2020-21	2021-22	2022-23	2023-24
SHR	kCal/kWh	2,375	2,375	2,375	2,375	2,375
Auxiliary Power Consumption	%	6.25	6.25	6.25	6.25	6.25
Secondary Fuel Oil Consumption	ml/kWh	0.50	0.50	0.50	0.50	0.50
Gross Generation at NAPAF	MU	7,834.82	7,813.41	7,813.41	7,813.41	7,834.82
Ex-Bus Generation (NAPAF)	MU	7,349.74	7,329.66	7,329.66	7,329.66	7,349.74

Re. Fuel Parameters for 2019-24 tariff period

401. This Section explains the components of Fuel Parameters considered for arriving at the Base Values of GCV of Coal, Base Price of Coal and Secondary Fuel as per the Tariff Regulations 2019. Regulation 34 of the Tariff Regulations 2019 reproduced below specifies the guidelines for arriving at the initial Landed Prices (of Coal & Secondary Fuel) and initial Projection of Gross Calorific Value ("**GCV**") of Coal:

> *"(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which Tariff is to be determined:*
>
> *Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which Tariff is to be determined."*

402. Accordingly, the Base Landed Price of Coal has been computed based on the



Weighted Average Landed Price of Coal for the third quarter i.e. October to December of each preceding year during 2019-24. Similarly, the Base Landed Price of HFO has been computed based on the Weighted Average Landed Price of HFO for the third quarter i.e. October to December of each preceding year during 2019-24.

403. In view of the above, the Base Landed Price of Coal, Base Landed Price of HFO and Base GCV of Coal are presented in the following Table.

Table 24: Summary of Fuel Parameters for Tariff Period 2019-24

Particulars	UoM	2019-20	2020-21	2021-22	2022-23	2023-24
Weighted Average Price of Coal	Rs./MT	4458.82	4045.19	3663.52	4306.90	4450.50
Weighted Average "As Received" GCV of Coal less 85 kCal/kg	kCal/kg	3986.82	3869.52	3731.84	4019.12	4102.57
Weighted Average Price of Secondary Fuel OIL	Rs./kL	47270.59	45666.78	37495.03	46038.57	65365.98
Weighted Average GCV of Secondary Fuel OIL	kCal/L	9100.00	9100.00	9100.00	9100.00	9100.00

404. The Petitioner humbly requests the Hon'ble Commission to allow the above-mentioned Fuel Parameters for the purpose of computation of tariff for the 2019-24 tariff period.

Re. O&M EXPENSES

405. Regulation 35 of the Tariff Regulations 2019 stipulates the Normative O&M Expenses as follows:

> *"**35. Operation and Maintenance Expenses:***
> *"(1) **Thermal Generating Station:** Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:*
> *(1) Coal based and lignite fired (including those based on Circulating*



Fluidized Bed Combustion (CFBC) technology) generating stations, other than the generating stations or units referred to in clauses (2), (4) and (5) of this Regulation:

Year	*200/210/250 MW Series*	*300/330/350 MW Series*	*500 MW Series*	*600 MW Series*	*800 MW Series and above*
FY 2019-20	*32.96*	*27.74*	*22.51*	*20.26*	*18.23*
FY 2020-21	*34.12*	*28.71*	*23.30*	*20.97*	*18.87*
FY 2021-22	*35.31*	*29.72*	*24.12*	*21.71*	*19.54*
FY 2022-23	*36.56*	*30.76*	*24.97*	*22.47*	*20.22*
FY 2023-24	*37.84*	*31.84*	*25.84*	*23.26*	*20.93*

Provided that where the date of commercial operation of any additional unit(s) of a generating station after first four units occurs on or after 1.4.2019, the O&M expenses of such additional unit(s) shall be admissible at 90% of the operation and maintenance expenses as specified above;"

" 35

...

(6) The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:

Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system, subject to prudence check. The details regarding the same shall be furnished along with the Petition;

Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses;

Provided also that the generating station shall submit the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance as per Regulation 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 or Special Allowance or claimed as a part of additional capitalization or consumption of stores and spares and renovation and modernization.

Re. Raw Water Charges, Security Expenses

406. The Regulation 35(6) of the Tariff Regulations 2019 stipulates that the Water Charges shall be allowed separately after prudence check based on water

consumption depending upon type of plant and type of cooling water system.

407. It is reiterated that the Generating Station is a Coal-based Thermal Power Plant with Induced Draft Cooling Towers utilizing Circulating Water system for the cooling of the condenser and the ancillary equipment. Further, Raw Water is also utilized for various purposes the majority of which are listed below:

(a) Preparation of the De-mineralized Water utilized for the generation of Steam in the Boiler.

(b) De-ashing of Bottom Ash

(c) Plant usage and cleaning as Service Water

(d) Fire Hydrant System

408. With regard to Water charges, the Petitioner re-iterates that DVC *vide* its Office Memorandum dated 23.07.2019 revised the water Tariff for Industrial consumers (drawing water from reservoir/river) including Petitioner from Rs 5.7/KL to Rs. 10.64/KL with an annual escalation of 10% effective from 01.04.2019.

409. Further, the Petitioner requested DVC to reconsider this steep rise in water Tariff by letter dated 20.08.2019. However, DVC *vide* its Letter dated 03.09.2019 replied that it has revised the water Tariff for Industrial & Domestic water supply of raw water with effect from 01.04.2019 in exercise of its power under section 15 of DVC act, 1948 and the Petitioner is obligated to pay the same as per DVC's Schedule of Rates in accordance with agreement. A copy of correspondences exchanged with DVC regarding raw water charges are annexed herewith and marked as **ANNEXURE-P/40 A**.

410. Considering revised Tariff including annual escalation, the Average Annual Water Charges approved during the Tariff Period 2019-24 and claimed now are presented in the following Tables:



Table 25: Raw Water Charges Approved for Tariff Period 2019-24(Rs. lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1930.35	2117.58	2329.34	2562.28	2826.22

Table 26: Raw Water Charges claimed for the Tariff Period 2019-24(Rs. lakh)

Particulars	UoM	2019-20	2020-21	2021-22	2022-23	2023-24
Total raw water Expenses	Rs lakh	1600.66	1773.85	2149.43	2236.33	2537.69

A copy of the Auditor Certificate for O&M Expenses covering water charges, security expenses and Ash Disposal Expenses is annexed herewith and marked as **ANNEXURE P/40 B**.

411. In view thereof, the Petitioner humbly requests the Hon'ble Commission to allow the actual Raw Water Charges for the 2019-24 tariff period.

Re. Security Expenses

412. Regulation 35(6) of the Tariff Regulations 2019 stipulates that the Security expenses shall be allowed separately, and the generating station shall submit the assessment of the security requirement.

413. The following table shows actual Security Expenses for the generating station incurred for the period FY 2019-20 to FY 2023-24.

Table 27: Actual Security Expenses for the period 2019-24

Particulars	Unit	2019-20	2020-21	2021-22	2022-23	2023-24
Security Expenses	**Rs. lakh**	**723.82**	**834.98**	**918.57**	**1,056.85**	**1,039.65**

A copy of the auditor certificate for actual security expenses is already annexed herewith and marked as Annexure P/40 B.

414. The Petitioner humbly requests the Hon'ble Commission to allow the actual



security expenses for the 2019-24 Tariff Period.

Re. Ash Disposal Expenses

415. The Hon'ble Commission, after considering the submissions of the Petitioner, acknowledged the cost towards 100% Ash utilization as a statutory requirement as per MoEF&CC Notification dated 03.11.2009 in its Order dated 08.01.2022 and allowed an expense of Rs. 17099.51 lakh on account of Ash disposal for period 2019-24 as claimed by the Petitioner subject to true-up at the end of the tariff period with prudence check. Relevant extracts from the Order dated 08.01.2022 in Petition No. 408/GT/2020 are reproduced below:

> *"The Petitioner has submitted that on account of dropping of Ash conveying pipeline, due to uncertainty in the allocation of the abandoned mines for ash disposal by ECL management, the ash disposal expenses may be allowed. It is observed that the coal received at Maithon site is of sub-optimal quality as compared to the design coal and ash content is to the tune of 43% to 46% (approx.). However, due to limited capacity of the Ash ponds, the Petitioner has considered the option of disposing unutilized ash through bulkers to sites for back filling of mines and to other approved locations for land filling, thereby incurring the cost towards excavation and transportation of pond ash. The projected ash disposal expenses claimed by the Petitioner are as follows*
>
> ....
>
> *294. The matter has been considered. We observe that the Ash disposal expenses claimed by the Petitioner and allowed to this generating station since COD, is in view of limited capacity of the Ash ponds and the mandatory ash disposal in terms of the notification of MOEF&CC mandating 100% ash utilization. Considering the limited capacity of ash ponds and the fact that the Petitioner is under an obligation of meeting 100% ash utilization as per MOEF & CC notification, we, in line with our dated 25.4.2019 in Review Petition No.16/RP/2018 (in Petition No.152/GT/2015) (as quoted in paragraph 289 above), allow the expenses claimed towards Ash disposal, on projection basis, for the 2019-24 tariff period as under:*

(Rs. In lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
3425.52	3416.16	3416.16	3416.16	3425.52

> *295. This is however subject to prudence check at the time of truing-up of*



tariff of the generating station. The Petitioner is directed to award Ash disposal contracts based on the transparent bidding process and shall submit the details of bidding while claiming the actual ash disposal expenses during truing up of tariff for the 2019-24 tariff period. Considering the fact that the reimbursement of ash disposal expenses is allowed based on the special circumstances (limited ash pond storage) for this generating station, these expenses are not made part of the O&M expenses allowed and the consequent annual fixed charges determined in this order"

416. Therefore, for the purpose of truing–up, the Petitioner has considered the following actual ash disposal expenses incurred in the respective financial years during the period 2019-24. It may be seen that with its continuous efforts, the Petitioner has been able to keep Ash Disposal Expenses within the total allowed expenditure in the first four years, the year-on-year variation being primarily due to variations in actual ash quantity disposed.

Table 28: Approved and Actual Ash Disposal Expenses for the period 2019-24

Particulars	Unit	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Allowed by Commission	Rs. lakh	3425.52	3416.16	3416.16	3416.16	3425.52	17099.51
Actual Expense Incurred	Rs. lakh	2,883.40	3,719.98	3,023.57	3,337.21	5,832.29	18,796.45

417. The cost variation in 2023-24 between the approved amount by the Hon'ble Commission and the actual expenditure is attributable to the reasons which were not envisaged by the Petitioner at the time of determination of tariff and are described as under alongwith details of transparent bidding process:

(a) Higher Quantum of Ash for disposal

The Petitioner would humbly like to submit that during the final year the Quantum of Ash Disposal increased by nearly 24% from the previous year as can be observed from the details provided below:

Year	Opening Balance (Pond) (MT)	Ash Generated (MT)	Total (MT)	Ash Disposal (MT)	Closing Balance (Pond) (MT)	Cost of Ash Disposal (Rs. Crore)	% Change in Annual Ash Disposal	% Change in Annual Cost of Disposal
2019-20	647,528	1,578,197	2,225,725	1,596,653	629,072	28.83		
2020-21	629,072	1,648,398	2,277,470	2,187,916	89,554	37.20	37%	29%
2021-22	89,554	1,851,600	1,941,154	1,657,702	283,452	30.24	-24%	-19%
2022-23	283,452	1,808,698	2,092,150	1,748,295	343,855	33.37	5%	10%
2023-24	343,855	2,067,783	2,411,638	2,173,513	238,125	58.32	24%	75%

As evident from the above data the quantum of Ash disposal in FY 2023-24 is much higher than the previous years as the Petitioner had to not only dispose of the amount of Ash Generated during the year but also some part of the Ash already available in the Pond for achieving 100% Ash utilization which is a statutory requirement as per MoEF&CC Notification dated 3.11.2009 and as duly recognized by Hon'ble Commission in its Order dated 8.1.2022. It is noteworthy to mention that the Petitioner, in addition to 100% disposal in each year, has also managed to bring the quantum of Pond Ash down from 647528 MT in the beginning of FY 2019-20 to 238125 MT by the end of FY 2023-24 i.e. by 409403 MT through additional ash disposal.

(b) Higher distance for disposal of Ash beyond the control of the Petitioner

The Petitioner would like to bring to the kind attention of the Hon'ble Commission that as the Mines allotted to the Petitioner for Mine Void filling by Eastern Coalfields Limited ('ECL') were no longer available for backfilling, the Petitioner vide letter Ref. No. MPL/ECL/FY 22-23/131022 dated 13.10.2022 requested ECL for allocation of abandoned mine voids for back filling near the Maithon Thermal Power Station. Subsequent to the request, the Eastern Coalfields Limited vide letter ref. no. ECL/GM/MA/2022/13/140 dated 15.10.2022 notified the Petitioner

MAITHON POWER LIMITED

that the Gopinathpur Colliery, which was only about 20 km away, earlier allotted for backfilling of mine void is not to be used for future fly ash dumping. The Petitioner being a prudent utility requested ECL for allotment of abandoned mines near MPL Plant vide letter ref no. MPL/FY23/22-11/010 dated 22.11.2022, 01.02.2023 and with CEA on 09.08.2024 but no new mines were allotted upto 9.07.2024. More so, the newly allotted mine is at a significantly longer distance of about 65-70 km from MPL Plant resulting into higher disposal expenses. It is pertinent to mention that the allotment of abandoned mines is beyond the control of the Petitioner and the Petitioner can only request for mines at a closer distance. This resulted in ash disposal at longer distances at significantly higher cost for ash disposal compared to the amount projected by the Petitioner at the time of determination of Tariff. Copies of all the communications regarding the issue of disposal of ash are annexed hereto and marked as **ANNEXURE-P/41A (COLLY.)**.

(c) Higher per MT Rate for Ash Disposal

It is pertinent to mention that the Petitioner followed a transparent bidding process for the discovery of rates for sale of fly ash and evacuation, transportation and stowing of pond/hydrobin ash from Maithon Power Limited for the period FY 2019-20 to FY 2023-24 and shall do so for ensuing years as well. Sample copy of Advertisements published in newspapers seeking for the interested bidders regarding are attached at **ANNEXURE-P/41B (COLLY.)**. The price discovered through the transparent bidding process was adopted for the purpose of billing for Ash Disposal. However, as a consequence of increase in rate as well as disposal distance as elaborated above, the overall expenses increased in FY 2023-24.

(d) Freight Subsidy to cement companies for offtake of Dry Fly Ash.

It is submitted that offtake of dry fly ash by cement companies through bulker was



at zero cost for the period from July-21 to November-22. However, with increase in availability of dry fly ash from nearby Plants, lifting commitments were not fulfilled by the cement factories. Further, MPL published advertisement on 09.07.2022 for sale of fly ash through rail and road mode, however, it did not receive any buyer of fly ash. Therefore, in order to reduce the higher cost of disposal to far of mines, the Petitioner approached various cement plants in west Bengal, Jharkhand and north eastern States of India for use of their generated ash using rail and road mode. The cement companies agreed to lift dry fly ash from MPL with freight subsidy only. Considering the prevailing circumstances, the cost advantage of disposal at mines vis-a-vis freight subsidy asked by parties, the Petitioner offered freight subsidy to some extant which continued the increase in the cost in FY 2023-24. It is worth mentioning that without such freight subsidy, the ash disposal expense would have been much higher.

Re. Capital Spares

418. It is submitted that as stipulated in Regulation 35(6) of the Tariff Regulations 2019, the actual Capital Spares consumed during a year can be claimed separately provided the same is not funded through compensatory allowance or Special Allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization. The Petitioner humbly submits that the Petitioner required several Capital Spares for the critical equipment during the above Tariff Period in Order to ensure the reliability and the availability of the main equipment.

419. Further, these Capital Spares have been claimed excluding the residual value i.e., 10% of the total value of the Capital Spares in terms of the findings by the Hon'ble Commission in the Tariff Order dated 08.01.2022. The relevant excerpts of the



Order are reproduced below for kind reference.

> *"143.....*
> *Further, we are of the view that spares do have a salvage value. Accordingly, in line with the practice of considering the salvage value, presumed to be recovered by the Petitioner on sale of other capital assets, on becoming unserviceable, the salvage value of 10% has been deducted from the cost of capital spares considered above, for the 2014-19 tariff period. Therefore, on prudence check of the information furnished by the Petitioner in Form-17 and on applying the said ceiling limit along with deduction of the salvage value @10%, the net capital spares allowed in terms of Regulation 29(2) of 2014 Tariff Regulations is as follows:..."*

420. Further, these Capital Spares have not been included in the Additional Capitalization nor funded through compensatory allowance or Special Allowance.

Table 29: Details of Capital Spares for the 2019-24 period (Rs. lakh)

S. No.	Capital Spares	2019-20	2020-21	2021-22	2022-23	2023-24	Total
i.	DM Plant equipment	45.56	45.91	22.08	2.40		115.95
ii.	Cooling Tower Internals			88.25	209.67	202.05	499.97
iii.	Coal Mill Journal Assembly			26.49	340.09		366.58
iv.	Economiser Coil		495.26	699.87			1195.13
v.	TDBFP Recirculation Valve	55.37	54.80	57.75	1.24	0.45	169.61
vi.	Coal Mill Gearbox				399.48		399.48
vii.	400KV Circuit Breaker			61.65			61.65
viii.	Crusher Rotor Assembly				83.09	66.59	149.68
ix.	Turbine Bearing Set					51.58	51.58
x.	Pulveriser internals	98.96	0.34	0.34			99.64
xi.	Suspended Magnet & Track Hopper	69.70					69.70
xii.	Breaker & Relays	26.72		73.14	99.34	40.29	239.49
xiii.	Vacuum Pump	127.68	85.58	262.80	53.43		529.49
xiv.	Control Valves					3.30	3.30

MAITHON POWER LIMITED

xv.	Capital Spares Replenishment			110.29	1753.36	646.53	2510.18
xvi.	Total	423.99	681.89	1402.66	2942.1	1010.79	6461.44
	Less 10% Residual value	42.40	68.19	140.27	294.21	101.08	646.15
	Net Capital spares	**381.60**	**613.70**	**1262.40**	**2647.89**	**909.73**	**5815.31**

Re. Additional Capitalization as directed by Hon'ble Commission in Previous Order to claim under Capital Spare:

421. It is humbly submitted that the Hon'ble Commission, in the Order dated 08.01.2022, had granted liberty to the Petitioner to claim expenses on certain item under Capital Spares. Following are the relevant extracts of the Order dated 08.01.2022:

> *"192. However, for other items such as coal mill internals, cooling tower internals, economizer coil DM plant equipment, C.T fan gearbox etc. required to be replaced before the life of plant due to wear/ tear, we hold that the failure/replacement of items does not fall under force majeure. However, replacement of such consumables may be met from the capital spares and may be claimed under capital spare consumption during truing up. In view of this, the additional capital expenditure claimed by the Petitioner is not allowed. Further, the prayer of the Petitioner for granting liberty to seek capitalization against 'Refurbishment of HP bypass hydraulic servo system' at the time of truing-up shall be considered as per the merit and provisions of regulations at the time of truing-up of tariff."*

422. In view thereof, this Hon'ble Commission may be pleased to consider the following claims:

i. DM plant Equipment

423. The Petitioner submits that the De-mineralization (DM) water Plant uses strong acids and alkalis for demineralizing of water to be used in the Boiler for steam generation purpose. Acids and Alkalis have a lasting detrimental effect on metallic parts even if adequately protected and selected for the purpose of use. To prevent accelerated deterioration of these equipment periodic heavy refurbishment/ replacement is required at strategic areas of DM Plant.



424. Due to the use of strong acids and alkalis the Deterioration in rubber quality led to leakage from piping & vessels and ultimately resulted in reduction in DM plant capacity. Reduced DM water makeup in boiler in running conditions restricts boiler load, consequently, restricting Unit loading. Therefore, the refurbishment of DM Plant was undertaken with replacement of pipelines and acid tanks in a phased manner from FY 2019-20 to FY 2022-23. The refurbishment of DM Plant (i.e., replacement of Mild Steel Rubber Lined ("**MSRL**") Piping, Vessels etc.) has ensured reliable operation of DM Plant.

425. Therefore, the Petitioner prays to the Hon'ble Commission to admit the Capital Spare of Rs. 115.95 lakh incurred under Regulation 35(1)(6) of the Tariff Regulations 2019.

ii. Cooling Tower Internals

426. It is submitted that the Availability of Cooling Towers ("**CT**") are vital for any thermal power station. Each Unit of Petitioner's Plant is having 22 nos. of Cooling Tower Cells and in total 44 nos. CT Cells are there for two Units. Effectiveness of Cooling Towers are essential to reduce the temperature of Circulating Water for condensation of exhaust steam inside Condenser and maintenance of TG Vacuum. Notably, over a period of continuous use under a highly moist environment combined with the effect of ageing has resulted in deterioration of Cooling Towers Internals and more chances of premature failures of Cooling Tower Internals.

427. Therefore, for reliable operation of Cooling Tower, the healthiness of all components viz, PVC fills, drive shaft, drift eliminators, flow control butterfly valves and blades of axial flow fans of cooling towers is very much essential.

428. Hence, it was planned to replace the Cooling Tower Parts to avoid any breakdown. In view of the above facts and to increase the availability and reliability of Units

for smooth, uninterrupted power supply, expenditure has been incurred for the procurement and replacement of IDCT Internal Spares of Rs. 499.97 Lakh spread over FY 2021-22 to FY 2023-24 to replace the existing ones for the smooth running of the plant.

429. With regard to major portion of this expenditure on PVC fills, M/S MM Aqua technology limited, the OEM has communicated the useful life to be 8 years vide its email dated 06.05.2022, which has already been over. A copy of the Email dated 06.05.2022 issued by OEM is annexed herewith and marked as **ANNEXURE-P/42**.

430. Hence, the Hon'ble Commission is requested to allow the aforesaid claim under Regulation 35(1)(6) of the Tariff Regulations 2019.

iii. Coal Mill Journal Assembly

431. It is submitted that the Coal Mill Journal Assemblies are vital parts of Coal Milling system. Coal particles get crushed in between grinding rollers mounted on Journal Assemblies and Bull- Ring segments. Since Journal Assemblies are situated inside the Coal Mill, they have suffered heavy erosion and deterioration on account of abrasive property of coal aggravated due to high ash content. But to avoid breakdown of the coal mills, replacement of the coal mill Journal Assembly was required for assemblies which are beyond repairs and overhauling of the repairable ones.

432. As recommended by M/s BHEL in its Minutes of Meeting dated 13th and 14th June 2018, phase-wise replacement of the unrepairable ones/overhauling of the repairable one was planned in ensuing years. Following are the relevant extracts of the MoM dated 13th and 14th June 2018 [***Refer: Annexure P/22B***] held between the Petitioner and BHEL:

"*over a period of within 10 years, and plant approaching half-life period of*



design operation, plant will also be required to take up extensive replacement if internals of crushers, coal mill internals and gear box including replacement of burner assemblies in a phased manner of next 4 years time"

433. Pertinently, in the Petitioner's plant, 8 pulveriser/coal mills are installed in individual Units having 3 numbers of Journal Assemblies. Thus, total 48 Journal Assemblies are operational. Considering the level of deterioration of the Journal Assembly, the Petitioner for now has procured and replaced of 30 Journal Assemblies, i.e., for 10 Coal mills in phased manner from FY 2021-22 (Rs. 26.49 Lakh) and FY 2022-23 (Rs. 340.09 Lakh). The Petitioner, therefore, prays to the Hon'ble Commission to admit the Capital expenditure within the scope and purview of Regulation 35(1)(6) of the Tariff Regulations 2019.

iv. Economiser Coil

434. It is humbly submitted that as explained in previous paragraphs on Economiser Coil Refurbishment, since COD of the Units, large number of forced outages have been recorded due to boiler tube leakages in economizer and LTSH Coils. On further inspection, the Petitioner had noticed heavy erosion of the pressure parts resulting into significant degradation of the economiser coils.

435. In Order to find out the root cause of such failures and for seeking corrective measures, failure history of economiser banks and LTSH coils along with inspection findings were given to M/s BHEL. Considering above details and after due analysis, BHEL, in the meeting held on 13th and 14th June 2018 [***Refer: Annexure P/22B***], attributed coal characteristics to be the root cause of such erosion and further recommended for replacement of economiser and LTSH Coils. Following are the relevant extracts of the MoM held between the Petitioner and BHEL:

" MPL presented the failure history, inspection findings for the economiser



banks and LTSH Tubes. ***BHEL stated that major root cause resulting in erosion in LTSH and economiser banks are on account of coal characteristics and properties****. Since MPL is required to continually operate with coal properties having higher Ash content i.e., towards worst side of the designed coal, as per availability in the local region, additional care may be exercised to* ***ensure replacement of above economiser and LTSH sections, at least once in next 4 years****, followed by scheduled periodic maintenance to maintain the safety and reliability of boiler operation ...."*

[***Emphasis Supplied***]

436. Based on above observations and considering cost involved in undertaking replacement of all coils, the Petitioner proposes to inspect the coils thoroughly after bringing it to ground level as thorough inspection is not possible to be done in situ and after completion of all physical inspection, thickness measurement and corrective action, coils will be positioned back to boiler. Removal of Economizer coils from boiler to ground level, inspection and repairing is the effective and widely accepted methodology, accordingly, the Petitioner has built/proposed Economiser Platform in the previous paragraphs.

437. Since these activities are time consuming and keeping in view the 198 nos. of Economizer coils in one boiler, 100% coils inspection, repairing and re-insertion is not possible to be completed within the Outage Period. In view of 100% economiser coil servicing, Petitioner has proposed procurement of 1 Set of economizer coils . During overhaul, installed economiser coils will be removed and replaced with new economiser coils within the stipulated outage time.

438. Thereafter, the removed economiser coils will be repaired after careful inspection in next few months and will be kept ready for use in successive overhauls. This will be a one-time procurement for both the Units.

439. Accordingly, Hon'ble Commission is requested to approve Rs. 1195.13 Lakh incurred for Economiser Coils as capital spare during 2019-24 under Regulation 35(1)(6) of Tariff Regulations 2019.



Re. Capital Spares allowed to be claimed in previous Order

v. TDBFP Recirculation Valve

440. It is submitted that the Recirculation Valve ("**RCV**") is an integral part of the Boiler Feed Pump (BPP). This is an ON/OFF type Valve and it operates depending on the suction flow of the Boiler Feed Pump. Opening of RCV is very much critical during initial start-up for maintaining minimum flow requirement of BFP and during emergencies to avoid churning and damage of pump internals.

441. After few years, it was observed that the RCVs are passing feed water during shut-off condition (i.e. during normal operation). The rate of passing gradually increased and reached up to 300 TPH in a Unit. Initially, the passing could be controlled by repairing the Valve internals which could only sustain for 4-6 months. Repeated damage of Valve Seat, Plug & Stack caused frequent outage of BFP. Therefore, the Petitioner has replaced TDBFP RCVs gradually from FY 2019-20 to 2023-24.

442. Thus, the capital expenditure of Rs. 55.37, 54.80, 57.75, 1.24, 0.45 Lakh respectively in each year during 2019-24 for TDBFP Recirculation Valve may be approved by the Hon'ble Commission as capital spare under Regulation 35(1)(6) as per Tariff Regulations 2019.

vi. Coal Mill Gearbox

443. It is submitted that the Coal Mill Gearbox is an integral part of Milling System and has to absorb major part of vibration and high impact of unbalanced forces generated during coal grinding process owing to presence of non-grindable objects like stone and foreign particles. So, these gearboxes need periodic overhauling and replacement of its critical components as required during overhauling process.



444. Ideally, these gearboxes need overhauling after every 5-6 years of continuous operation at OEM workshop. Since 16 Coal Mills are in service at the Petitioner's Plant for last 7-8 Years, they need overhauling to continue further operation. At present, 3 Gearboxes are in critical condition and need immediate attention to avoid forced outage of Coal Mills. As recommended by BHEL in its MOM dated 13-14th June 2018, [***Refer: Annexure-P/22B***] phase wise replacement was planned in years. Following are the relevant extracts of the said MoM:

> *"over a period of within 10 years, and plant approaching half life period of design operation, plant will also be required to take up extensive replacement if internals of crushers, coal mill internals and gear box including replacement of burner assemblies in a phased manner of next 4 years time"*

445. In order to take up this activity one by one, gearboxes need to be replaced with Capital Spare and removed ones are required to be sent to OEM/Vendor workshop for overhauling. The entire cycle of removal-transport-repair takes almost 9-12 months. Pertinently, the Petitioner received one set of gear box under initial Spares for maintenance purpose. But in given situation, it was very difficult to plan and overhaul running 16 number of gearboxes with just one set of spare gear box assembly considering the cycle time of the process.

446. In view of the above constraint and to avoid complete failure of Gear boxes, procurement of one set of Gear Box Assembly including other Spares with actual cost of Rs. 399.48 lakh has been incurred during FY 2022-23 as capital spares for kind approval of the Hon'ble Commission under Regulations 35 (1)(6) of the Tariff Regulations 2019.

vii. 400 kV Circuit Breaker

447. It is submitted that the Petitioner has one and half breaker scheme in 400 kV switchyard. One and a Half Breaker scheme means for every 2 Equipment, there

are 3 Circuit Breakers. Any breaker can be removed for maintenance without affecting the service. Only one Pole of Spare Breaker was supplied by BHEL under initial spares for Projects which was consumed in FY 2016-17, hence, making the stock as nil.

448. In case of failure of one breaker, system load will be in service without any interruption. However, this situation poses reliability risk for the period breaker is out of service or has been sent for repair. After consumption of spare Pole in 2017, the Petitioner did not have any spare breaker in 400 kV switchyard. Failure of any one breaker would reduce the reliability of critical power evacuation system which will have impact on grid reliability.

449. In above scenario, the Petitioner was not able to take advantage of one and half scheme. For carrying out maintenance of that particular bay or for attending hot spot, complete shutdown of the bay is required. In order to enhance reliability of 400 kV switchyard, requirement was felt for procurement of one complete Spare Circuit Breaker and same was to be kept as critical spare for plant.

450. In light of the above, it is requested before the Hon'ble Commission to approve actual cost of Rs 61.65 lakh in FY 2021-22 for the procurement of one set of spare 400 kV Circuit breaker under Regulations 35(1)(6) of the Tariff Regulations 2019.

viii. Crusher Rotor Assembly

451. It is submitted that there is no Primary Crusher available in CHP. The Secondary Crusher, Ring Granulator, therefore, handles the ROM (Run of Mines) Coal with greater than 300 mm size Coal & Stones. Due to continuous operations under the presence of foreign materials and stones in coal has impacted adversely the life of the equipment. As also stated above, the quality of coal is beyond the control of Petitioner.



452. So far, the Petitioner is managing the breakdown with continuous repairs and replacement of damaged internals of the Assembly. However, with repeated repairs the life of the crusher rotor assembly had deteriorated drastically and may have essentially needed replacement anytime in near future. There was no spare crusher rotor assembly supplied during the Project Commissioning under initial Spares. Further, BHEL in its MOM dated 13-14th June 2018 [***Refer: Annexure-P/22B***], advised for procuring crusher spares in next 4 years. Following are the relevant extracts of the said MoM:

> *"over a period of within 10 years, and plant approaching half life period of design operation, plant will also be required to take up extensive replacement if internals of crushers, coal mill internals and gear box including replacement of burner assemblies in a phased manner of next 4 years time"*

453. Considering the above and to meet exigency, procurement of one set of spare crusher rotor assembly with cost of Rs. 149.68 lakh was done incurred in FY 2022-23 and FY 2023-24. The Hon'ble Commission under Regulations 35(1)(6) of the Tariff Regulations 2019 may kindly approve the same as capital spares.

ix. Turbine Bearing set

454. The turbine bearing set was classified as a capital spares in Order dated 08.01.2022, wherein the Hon'ble Commission directed it to be included during the true-up process. Consequently, procurement commenced and a budget was allocated in June 2023, with an order placed with the OEM, M/s BHEL, in October 2023.

455. It may be noted that during the Annual Overhaul of Unit-1 carried out by the Petitioner in October-November 2017, TG Bearing sets were found in non-usable condition and a new set of bearings was installed as per the recommendation of M/s BHEL, as M/s BHEL was engaged as the principal service provider for TG

Overhauling. Since only one set of bearings was procured as Initial Spares the current stock for Turbine Bearing is Nil.

456. Considering the application criticality of the installed spare and following the recommendation by M/s BHEL another set of bearings needs to be procured. The absence of ready-to-use spare bearings can lead to extended shutdown periods, resulting in significant generation losses and potential secondary damage to other critical components due to high vibration. The benefits of this expenditure are multifaceted as follows:

(a) Firstly, having a ready-to-use spare set of bearings will mitigate the risk of prolonged shutdowns and generation losses, which can amount to 12.6 MUs/day.

(b) Secondly, it ensures that any sudden breakdown due to bearing failure can be addressed promptly, thereby maintaining the reliability and availability of the power units.

(c) Thirdly, the procurement from the OEM guarantees the reliability and fitment cum interchangeability of the bearings, which is crucial given the critical application area.

457. Given the large size of the bearings for the 525 MW TG set, BHEL agreed to an eight-month delivery period due to the casting and machining processes involved. With ongoing follow-up, BHEL supplied one bearing in March 2024, with the remaining bearings scheduled for delivery in FY 2024-25. All the bearings shall be replaced in upcoming overhauls for which projections have been made in Tariff period 2024-29. A copy of the correspondences exchanged between BHEL and the Petitioner regarding Turbine Bearing set are annexed herewith and marked as **ANNEXURE P/43**.



458. Thus, the Petitioner has incurred Rs. 51.58 Lakh in FY 2023-24 and balance estimated project cost of Rs. 261.02 lakh shall be incurred in FY 2024-25.

459. In view thereof, it is humbly requested before the Hon'ble Commission to approve the above expenditure of Rs. 51.58 Lakh in 2023-24 under Regulations 35(1)(6) of the Tariff Regulations 2019.

Re. New Proposed Capital Spares

x. Pulveriser internals

460. It is submitted that the pulveriser internal components (liners, bull ring segments, grinding rolls, journal heads, ceramic cone and deflector) are also subjected to high erosion due to higher ash content of coal. Over the period of time, the components got heavily eroded leading to reduction in quality of pulverized coal and pulverizing capacity. Issue of high rate of erosion in coal mills was also taken up with M/s BHEL. After analysing the facts, M/s BHEL, in MoM dated 13th and 14th June 2018 [***Refer: Annexure P/22B***], under "Corrective Measures", stated coal characteristics to be the main cause and recommended for replacement of internals for pulveriser. Relevant portion of the MoM are extracted below:

> *".... Over a period within 10 years, and plant approaching half-life period of design operation, plant will also be required to take up extensive replacement of internals for* ***crushers, coal mill internals and gear box*** *including replacement of Burner assemblies in phased manner of next 4 years' time"*

461. In view of above, expenditure towards Pulveriser internals has been carried out with actual cost of Rs 99.64 lakh during 2019-24. The said expenditure falls within the scope of Regulation 35(1)(6) of the Tariff Regulations 2019 and may kindly be approved by the Hon'ble Commission.

xi. Suspended Magnet & Track Hopper

462. It is submitted that as part of the CHP, there are Inline Magnetic Separators (ILMS)



(1 number on each belt) installed at the discharge point of conveyor (BCN-3A/3B) which discharges coal to the crusher (Ring Granulators). In Order to control the frequent tripping of conveyor due to MDT sensing both types of metals and to eliminate the possibility of metal pieces entering the crusher, it was required to install a trolley mounted suspended electromagnet prior to the MDT.

463. Therefore, capital expenditure incurred is Rs. 69.70 lakh in FY 2019-20, for the procurement and installation of suspended magnet and it is prayed that the same may be allowed by the Hon'ble Commission under Regulation 35(1)(6) as per the Tariff Regulations 2019.

xii. Breaker & Relays (MV&LV Switchgear)

464. As explained in case of 400 kV circuit Breaker, one and half breaker scheme exposes to the risk of losses reliability and availability during the period when one of then breaks out for servicing /repair replacement. The Petitioner submits that spare Breakers & Relays for MV & LV switch gear also was, therefore, needed to be procured for running the plant without any generation loss or to minimize the duration of generation loss in case of any breakdown. Since these circuit breakers have a lead time of delivery, the same is needed to be procured and maintained as capital spares. While procurement of these spares, it was found that GE has stopped manufacturing these circuit breakers. Since these breakers have completed their service life (20,000 nos. of operations), therefore, replacement of these breaker is necessary for smooth operations of the plant. Pertinently, different make compatible circuit breaker was procured as spare for each type. [Refer: Annexure P/47 which is *annexed subsequently in the present Petition*]

465. Thus, capital expenditure of Rs. 26.72 lakh in FY 2019-20, Rs. 73.14 lakh in FY 2021-22, Rs. 99.34 lakh in FY 2022-23 and Rs. 40.29 lakh in FY 2023-24 for spare

MAITHON POWER LIMITED

Breakers & Relays for MV & LV Switch gear may be approved by the Hon'ble Commission as capital spare under Regulation 35(1)(6) as per the Tariff Regulations 2019.

xiii. Vacuum Pump

466. It is submitted that present vacuum pumps were supplied under the plant package along with the Project commissioning (supplied in 2011 for Unit 1 and 2012 for Unit 2).

467. All pumps have been in service since commissioning of the respective Units. The vacuum pumps have cast iron impellers which have a service life of about 5 year. Due to the metallurgy, impellers get worn out due to heavy erosion during their service life. Even with welding repair interventions and timely inspections, it is extremely difficult to extend the service life beyond 6-6.5 years without any compromise with operational performance.

468. The Original Equipment Manufacturer (M/s Edwards ltd.) does not recommend any major welding repairs on the impeller as it compromises the safety of impeller during operation. The weld metal deposit does not attain the same strength as original casting and it creates local stresses on the impeller material causing cracks in the material which leads to catastrophic failure of the impeller.

469. During Unit 1 Annual Overhaul (AOH) in November - December 2017 both the vacuum pumps were inspected for Unit 1. Heavy erosion was observed at Unit 1 vacuum pump impellers. Hence, 1 no spare vacuum pump available under Project mandatory spares was installed in place of 01 no pump and local repair was made for the other pump.

470. Similarly, heavy erosion was also recorded at both the impellers at Unit 2 during



its AOH in May-2019. Impeller blade and casing damage has occurred due to dislodging of the worn-out blade causing permanent damage to other blades as well as the casing.

471. Therefore, capital expenditure of Rs. 529.49 Lakh (Rs. 127.68 Lakh, Rs. 85.58 Lakh, Rs. 262.80 Lakh and Rs. 53.43 Lakh respectively) for the procurement of vacuum pumps was incurred which may kindly be approved by the Hon'ble Commission. The said expenditure falls within the scope and purview of Regulation 35(1)(6) of the Tariff Regulations 2019.

xiv. Control Valves

472. The servo valve for the HP bypass, which plays a crucial role in the reliable operation and safety of the power plant, was found to be faulty. As reliable operation is essential, it was promptly replaced with a spare available in the capital stock. Petitioner incurred total expenditure of Rs. 3.30 Lakh in FY 2023-24 replacement of capital spare which may kindly be approved by Hon'ble Commission under Regulation 35(1)(6) of Tariff Regulations 2019 as the Petitioner claims the control valve in capital spare.

xv. Capital Spares Replenishment

473. The expense of Rs. 110.29 lakh for FY 2021-22, Rs. 1753.36 lakh for FY 2022-23 and Rs. 646.53 lakh for 2023-24 related to Capital Spares Replenishment is provided in FORM 17 of the Tariff Formats along with above claimed Capital Spares and the same may kindly be referred. These Capital Spares have actually have been consumed during 2019-24 and, therefore, qualify as Capital Spares under Regulation 35(1)(6) of Tariff Regulations 2019, which may kindly be approved by Hon'ble Commission.



xvi. Total O&M Expanses:

474. Pursuant to aforesaid Regulations, actual expenses and following the approach of the Hon'ble Commission, the O&M expenses claimed for Truing-up for each year of the Tariff Period are as follows:

Table 30: O&M Expenses for the period 2019-24 (Rs. lakh)

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	**O&M expenses under Reg.35(1) (Rs. Lakh/ MW)**	22.51	23.30	24.12	24.97	25.84
1a	Normative	23635.50	24465.00	25326.00	26218.50	27132.00
2	**O&M expenses under Reg.35(6)**					
2a	Water Charges	1600.66	1773.85	2149.43	2236.33	2537.69
2b	Security expenses	723.82	834.98	918.57	1056.85	1039.65
2c	Capital Spares	381.60	613.70	1262.40	2647.89	909.73
3	Ash Disposal expenses	2883.40	3719.98	3023.57	3337.21	5832.29
	Total O&M Expenses	**29224.98**	**31407.51**	**32679.97**	**35496.78**	**37451.36**

Re. INTEREST ON WORKING CAPITAL

475. Regulation 34 of the Tariff Regulations 2019 provides as under:

> *"34. Interest on Working Capital:*
>
> *(1) The working capital shall cover:*
>
> *(a) For Coal-based/lignite-fired thermal generating stations:*
>
> *(i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
>
> *(ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;*

(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;

(v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and

(vi) Operation and maintenance expenses, including water charges and security expenses, for one month.

.....

(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which Tariff is to be determined:

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which Tariff is to be determined.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the Tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of Truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the Tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."

476. This Hon'ble Commission *vide* Order dated 08.01.2022 in Petition No. 408/GT/2020 had approved Interest on Working Capital pertaining to the

Generating Station as shown in the following Table:

Table 31: Approved Interest on Working Capital of Generating Station during Tariff Period 2019-24 (Rs. lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital – Cost of Coal for Stock – 20 Days	11266.15	11266.15	11266.15	11266.15	11266.15
Working Capital – Cost of Coal for generation – 30 Days	16899.20	16899.22	16899.22	16899.22	16899.22
Working Capital for O&M expenses – 1 month of O&M Expenses	2197.81	2288.65	2384.26	2484.77	2590.19
Working Capital – Cost of secondary Fuel Oil – 2 months	315.50	314.64	314.64	314.64	315.50
Working Capital for Maintenance Spares	5274.74	5492.77	5722.21	5963.45	5674.87
Working Capital for Receivables (Fixed Charges for 2 months)	12427.67	13037.68	13544.78	13387.75	13244.30
Working Capital for Receivables (Variable Charges for 2 months)	25582.51	25582.51	25582.51	25582.51	25582.51
Total Working Capital	73963.61	74881.62	75713.77	75898.49	76114.33
Rate of Interest	12.05%	11.25%	10.50%	10.50%	10.50%
Interest on Working Capital	**8912.61**	**8424.18**	**7949.95**	**7969.34**	**7992.01**

477. Due to revision in the various components of Annual Fixed Charges, as discussed above, the interest on working capital is revised. The revised Interest on Working Capital for the 2019-24 tariff period for the purpose of Truing-up is shown in the Table below:

Table 32: Interest on Working Capital of Generating Station during Tariff Period 2019-24 (Rs. lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital – Cost of Coal for 50 Days	28393.18	26540.08	24922.74	27205.37	27540.63
Working Capital for O&M expenses – 1 month of O&M Expenses	2163.33	2256.15	2366.17	2459.31	2559.11
Working Capital – Cost of secondary Fuel Oil – 2 months	308.81	297.58	244.32	299.91	427.02
Working Capital for Maintenance Spares	5192.00	5414.77	5678.80	5902.34	6141.87
Working Capital for Receivables - 2 months	38336.28	36601.15	35601.39	38721.85	39424.77
Total Working Capital	74393.61	71109.73	68813.42	74588.78	76093.40
Rate of Interest	12.05%	11.25%	10.50%	10.50%	10.50%
Interest on Working Capital	**8964.43**	**7999.84**	**7225.41**	**7831.82**	**9131.21**

478. The Petitioner humbly requests the Hon'ble Commission to allow the interest on working capital for the 2019-24 tariff period as shown in the above table

Re. SUMMARY OF ANNUAL FIXED CHARGES

479. Based on the above submissions the Petitioner has computed the annual fixed charges for 2019-24. The Hon'ble Commission is requested to allow the same shown as below:

Table 33: Annual Fixed Charges claimed for the period 2019-24 (Rs. lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	23564.71	23678.33	25256.89	27271.52	27773.39
Interest on Loan	13292.43	11086.83	10855.94	11535.36	10450.13
Return on Equity	27064.28	27175.33	29346.67	31543.12	31689.17
Interest on Working Capital	8964.43	7999.84	7225.41	7831.82	9131.21
O&M Expenses	29224.98	31407.51	32679.97	35496.78	37451.36
Annual Fixed Charges	**102110.83**	**101347.86**	**105364.88**	**113678.60**	**116495.25**

Re. TARIFF PROPOSAL FOR THE TARIFF PERIOD 2024-29

480. This Section deals with the Tariff Proposal of the Petitioner for the Tariff Period 2024-29, which is based on the Tariff Regulations 2024 specified by this Hon'ble Commission. As stated earlier the entire installed capacity of 1050 MW has been contracted with Long Term Beneficiaries and, hence, the entire Installed Capacity of 1050 MW for the Petitioner's Generating Station is projected as Regulated Capacity for the Tariff Period 2024-29.

Re. Capital Cost claimed for the Tariff Period 2024-29

481. It is submitted that in terms of Tariff Regulations 2024, the closing capital cost as on 31.03.2024 has been considered as opening Capital Cost as on 01.04.2024. Based on above, the closing Capital Cost at Rs. 565278.70 Lakh for FY 2023-24 as proposed in the above Truing-Up Sections for the Tariff Period 2019-24 has been considered as the Opening Capital Cost for FY 2024-25 and considering yearly



additions/deletions proposed thereafter, the closing GFA works out to Rs. 604565.29 Lakh for FY 2028-29 as shown in the following Table:

Table 34: Gross Block over the Period FY 2024-25 to FY 2028-29 (Rs. lakh)

Sr No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	Opening Capital Cost	565278.70	572619.86	581005.82	584627.02	602045.69
2	Add: Addition during the year / period	8658.28	10039.55	4763.61	19193.86	2825.00
3	Less: De-capitalisation during the year / period	1317.11	1653.59	1142.42	1775.18	305.41
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Add: Net Discharges during the year / period	0.00	0.00	0.00	0.00	0.00
6	Closing Capital Cost	**572619.86**	**581005.82**	**584627.02**	**602045.69**	**604565.29**
7	Average Capital Cost	568949.28	576812.84	582816.42	593336.35	603305.49

482. As per Tariff Regulations 2024, Return on Equity in respect of Additional Capitalization after the cut-off date shall be computed at base rate of 15.5% for works within original scope and for works beyond the Original Scope excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station. Further, Supplementary Tariff for installation of Emission Control System ("**ECS**") due to



Change in Law is to be determined separately and, hence, the current proposal does not include Additional Capitalization or Tariff for such ECS, which shall be filed separately during 2024-29 at appropriate time. The Petitioner has, therefore, computed separate stream for Additional Capitalisation within the Original Scope and Additional Capitalisation beyond the Original Scope as shown in the following Table.

Table 35: Proposed Capital Cost Under Original Scope of Work (Rs. Lakh)

Sr No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	Opening Capital Cost	560974.88	566463.78	572610.74	575368.33	579268.14
2	Add: Addition during the year/period	6806.02	7800.55	3900.00	5675.00	2350.00
3	Less: De-capitalisation during the year/period	1317.11	1653.59	1142.42	1775.18	305.41
4	Less: Reversal during the year/period	0.00	0.00	0.00	0.00	0.00
5	Closing Capital Cost	566463.78	572610.74	575368.33	579268.14	581312.74
6	Average Capital Cost	563719.33	569537.26	573989.53	577318.24	580290.44

Table 36: Proposed Capital Cost beyond the Original Scope of Work (Rs. Lakh)

Sr No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	Opening Capital Cost	4303.82	6156.08	8395.08	9258.69	22777.55
2	Add: Addition during the year/period	1852.26	2239.00	863.61	13518.86	475.00
3	Less: De-capitalisation during the year/period					
4	Less: Reversal during the year/period	0.00	0.00	0.00	0.00	0.00
5	Closing Capital Cost	6156.08	8395.08	9258.69	22777.55	23252.55



Sr No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
6	Average Capital Cost	5229.95	7275.58	8826.88	16018.12	23015.05

483. The proposed Additional Capitalization within the Original Scope and Additional Capitalization beyond the Original Scope as explained in the subsequent paragraphs has been considered during 2024-29.

Re. ADDITIONAL CAPITAL EXPENDITURE

484. It is humbly submitted that the proposed Additional Capitalization during the period 2024-29 for the Petitioner's Generating Station includes the proposal for the Capitalization of the expenditures under the Original Scope of Work and beyond original scope applicable after the Cut-off Date of the Project as per the provisions of the Tariff Regulations 2024. The summary of Additional Capital Expenditure proposed for the period 2024-29 is given in the Table below:

Table 37: Summary of Additional Capital Expenditure proposed for the period 2024-29 (Rs. Lakh)

Sr No.	Name of the Scheme	Regulation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
(C)	**Additional Capitalisation within the original scope and after the cut-off date:**							
i.	Centrifugal compressor and motor for BTG	25(2)(c)				1000.00		1000.00
ii.	Centrifugal Compressors for Ash Plant	25(2)(c)		1454.00	500	1000		2954.00
iii.	ID fan motor with VFD replacement	25(2)(c)	1200.00	1251.55				2451.55
iv.	Laboratory Instruments	25(2)(a) and 25(2)(c)	50.00	50.00	115.00			215.00
	- Chemical laboratory	25(2)(a) and 25(2)(c)	50.00	50.00	65.00			165.00
	- C&I Laboratory	25(2)(a) and 25(2)(c)			50.00			50.00
v.	Infrastructure - Admin	25(2)(a) & 102	50.00	50.00	50.00	50.00	50.00	250.00
vi.	AVR Retrofitting for Unit 1 &2	25(1)(b) and 25(2)(b)			250.00	250.00		500.00
vii.	Conveyor Belt	25(2)(a) and 25(2)(c)	300.00	200.00	250.00	350.00		1100.00
viii.	Service Water	25(1)(b) and	75.00					75.00

Sr No.	Name of the Scheme	Regulation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
	Pipeline Revamping Work	25(2)(a)						
ix.	Retrofitting of Boiler Elevator	25(2)(a)				100.00	100.00	200.00
x.	Station Battery Bank	25(2)(a)	500.00					500.00
xi.	Upgradation of Mill & Compressor HT Breakers	25(2)(a) and 25(2)(d)	60.00	60.00	60.00			180.00
xii.	Upgradation of AHP & CHP HT & LT Breakers	25(2)(a) and 25(2)(d)	125.00	125.00	125.00	125.00	50.00	550.00
xiii.	Testing Equipment for Electrical Equipment	25(2)(a) and 25(2)(c)	25.00	25.00	25.00			75.00
xiv.	Fire Hydrant System	25(1)(b) and 26(1)(d)	157.37	150.00	150.00	150.00		607.37
xv.	Replacement of Fire Extinguisher	25(1)(b) and 25(2)(a)	25.00					25.00
xvi.	Reheater Upgradation	25(2)(a),25(2)(b)	500.00	500.00	500.00	500.00	500.00	2500.00
xvii.	IT Infrastructure	25(2)(a) and 25(2)(b)	95.57	50.00	50.00	50.00	50.00	295.57
viii.	Upgradation of IT network Switches	25(2)(b) and 25(2)(c)	460.00					460.00
xix.	Installation of SOC for all PLC	25(2)(b)		200.00	200.00			400.00
xx.	Upgradation of Max DNA DCS Hardware System	25(2)(a) and 25(2)(c)				1000.00	1000.00	2000.00
xxi.	Upgradation of Real Time Vibration Analysis	25(2)(a) and 25(2)(c)		250.00	250.00			500.00
xxii.	Upgradation of MRS and ZLD PLC	25(2)(a) and 25(2)(c)		75.00	75.00			150.00
xiii.	Replacement of H2 plant electrolysis module	25(2)(a)	300.00	300.00				600.00
xiv.	Ceramic Lining of Coal Mill	25(2)(a) and 25(2)(b)	180.04					180.04
xxv.	Upgradation of Main Turbine and TDBFP, EHTC System Components	25(2)(a) and 25(2)(c)		200.00	200.00			400.00
xvi.	Replacement of Fire Tenders	25(1)(b) and 25(2)(a)	109.40					109.40
xvii.	Replacement of pneumatic	25(2)(a) and 25(2)(c)			200.00	200.00		400.00



Sr No.	Name of the Scheme	Regulation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
	actuator and control mechanism							
viii.	Economizer Coil Refurbishment	25(2)(a), 25(2)(b) and 26(1)(i)	600.00	600.00	600.00	600.00	600.00	3000.00
xix.	ESP Internals	25(1)(b) and 25(2)(a)	393.64	510.00	300.00	300.00		1503.64
xxx.	RAPH I/L and O/L dampers	25(2)(b) and 26(1)(i)	200.00	250.00				450.00
xxi.	Max DNA DCS Upgradation with Cyber Security SOC	25(2)(b) and 25(2)(c)	1400.00	1400.00				2800.00
xxii.	SCADA Upgradation	25(2)(b) and 25(2)(c)		100.00				100.00
	Sub-Total		**6806.02**	**7800.55**	**3900.00**	**5675.00**	**2350.00**	**26531.57**
(D)	**Additional Capitalization beyond Original Scope of Work**							
Sr. No.	**Name of the Scheme**	**Regulation**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Total**
i.	Coal Pit Run-off Mechanized Drainage systems	26(1)(c)			388.61			388.61
ii.	Construction of EMD Workshop	26(1)(b) and 26(1)(i)	60.00	50.00				110.00
iii.	Stacker cum Reclaimer	26(1)(g) and 26(1)(i)				9543.86		9543.86
iv.	Fire Sealing & Painting for Cables	26(1)(d)	25.00	25.00	25.00	25.00	25.00	125.00
v.	Procurement of Cup Lock Scaffolding	26(1)(b) and 26(1)(d)	200.00	200.00	200.00	100.00		700.00
vi.	Zero Land Fill Waste Processing Unit	26(1)(b)	120.00					120.00
vii.	Ash Silo Loading Arrangement for Railway Wagon	26(1)(e) and 26(1)(i)				2500.00		2500.00
viii.	Extension of Store	26(1)(d) and 26(1)(b)	95.00	85.00				180.00
ix.	Concertina Coil on Top of Boundary Wall	26(1)(d)		50.00	50.00	50.00	50.00	200.00
x.	Installation of CCTV	26(1)(d)	120.00	225.00	150.00			495.00
xi.	Safety (Platform in Coal mill area)	26(1)(d)	100.00	50.00	50.00			200.00
xii.	Upgradation of HP Bypass System	26(1)(i)	650.00	650.00				1300.00
xiii.	Road Over Bridge	26(1)(b), 26(1)(d) and 26(1)(i)				1300.00		1300.00
xiv.	Unit wise segregation of PWS HT Board	26(1)(i)					400.00	400.00



Sr No.	Name of the Scheme	Regulation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
xv.	Relaibility (Structural Strengthening - BTG, CHP)	26(1)(d) & 26(1)(i)	480.86	200.00				680.86
xvi.	Ash wharf	26(1)(b),26(1)(e) and 26(1)(i)	121.40	584.00				705.40
Sub-Total			**1852.26**	**2239.00**	**863.61**	**13518.86**	**475.00**	**18948.73**
Grand Total (C+D)			**8658.28**	**10039.55**	**4763.61**	**19193.86**	**2825.00**	**45480.30**

B.II.C. Additional Capitalisation within the Original Scope and after the cut-off date

xvii. Centrifugal compressor and motor for BTG

485. It is submitted that this Hon'ble Commission, in the Order dated 08.01.2022 in Petition No. 408/GT/2020, had approved the replacement of screw air compressors with centrifugal air compressors based on the recommendations of the OEM. A total amount of Rs. 750 Lakh was sanctioned for this replacement during the control period of 2019–24, with allocations of Rs. 350 Lakh in FY 2020–21 and Rs. 400 Lakh in FY 2021–22.

486. The Petitioner respectfully submits that the order for the replacement of the screw compressors has been placed with the channel partner of a new OEM in FY 2022–23, with the original delivery schedule planned for FY 2023–24 and would now be completed in FY2027-28. The revised project cost is estimated at Rs. 1000 Lakh, proposed to be capitalized in FY 2027–28.

487. The reasons for the time delay and cost overrun have been detailed in the true-up section of this Petition and are not repeated here for the sake of brevity.

488. Through this instant Petition, the Petitioner humbly seeks kind approval of the Hon'ble Commission for the replacement of the screw compressors of the Boiler Turbine and Generator (BTG) system with centrifugal compressors during the current tariff period 2024–29, as per Regulation 25(2)(c) of the Tariff Regulations 2024.

xviii. Centrifugal Compressors for Ash Plant

489. It is submitted that this Hon'ble Commission, in the Order dated 08.01.2022 in Petition No. 408/GT/2020, approved the replacement of the screw air compressors with centrifugal air compressors based on the OEM's recommendation. An amount of Rs. 1200 Lakh was sanctioned for this replacement during the 2019–24 period with Rs. 300 Lakh each in FY 2020-21, FY 2021-22, FY 2022-23 and FY 2023-24.

490. As, elaborated in the True-up Section, the Petitioner respectfully wishes to bring to the attention of Hon'ble Commission that after competitive bidding the order for replacement has already been placed on 08.06.2024 for 4 compressors for Rs. 1292.10 Lakh and along with associated incidental expenditure a total amount of Rs 1453.52 Lakh is expected to be capitalized in FY 2025-26. The reasons for the delay have been elaborated upon in the true-up section, which are not being repeated here for the sake of brevity. Hon'ble Commission is requested to approve Rs. 1453.52 Lakh in FY 2025-26 under Regulation 25(2)(c).

491. For the same reasons due to which 6 screw compressors were allowed to be replaced with centrifugal compressors, the Petitioner *vide* the instant Petition also humbly seeks approval to replace the remaining 8 screw compressor in the ash handling system with 4 centrifugal compressors of similar capacity during the current tariff period 2024-29 under Regulation 25(2)(c) of the Tariff Regulations 2024. The estimated cost is Rs. 1500 Lakh for balance screw compressors, proposed to be capitalized as Rs. 500 Lakh in FY 2026–27 and Rs. 1000 Lakh in FY 2027–28.

xix. ID fan motor with VFD replacement

492. As explained in True up section, this scheme was approved during 2019-24, but



has been deferred to 2024-29 due to uncontrollable reasons, which are not being repeated here for the sake of brevity.

493. It is estimated that the capital expenditure required for procurement and commissioning of this equipment is Rs. 2451.55 lakh and it will be executed in FY 2024-25 (Rs. 1200 Lakh) and FY 2025-26 (1251.55 Lakh). Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 25 (2)(c) of the Tariff Regulations 2024.

xx. Laboratory Instruments

i. Chemical Laboratory

494. It is submitted that the Petitioner's Chemical laboratory instruments are being used for the day-to-day analysis of various parameters. The laboratory was established in 2011, while the instruments were supplied in 2010. Laboratory instruments are getting old i.e., more than 10 years necessitating the procurement of new instruments as the ones currently being used at the site are beyond their useful life. The aging effect causes measurement error or inaccuracy of instruments which may severely hamper the efficiency of the plant. Spares and services support for the old instruments are restricted due to component obsolescence.

495. The OEMs have declared the obsolesce of most spares and stated that most of the instruments cannot be serviced or repaired due to the non-availability of spare and changes in software and technology development as the same have become obsolete in the market. A list of equipment along with available Certificate of Obsolescence issued by OEM in respect of Chemical Laboratory instruments is annexed herewith and marked as **ANNEXURE P/44-A (COLLY.)**.

496. It is pertinent to note that till the time spares were available with the Petitioner, it



continued with the existing setup. Accurate and timely measurement of necessary parameters pertaining to chemical, environmental, water, coal, air and other operational parameters are critical for the smooth and normal operation of the Generating Units.

497. In view of the above constraints i.e., obsolescence of the laboratory equipment and criticality of these equipment in the system for Plant operations, the Petitioner has no choice but to go for complete upgradation of the entire system to a higher version as recommended by OEM in a phased manner from FY 2024-25 to FY 2026-27.

498. In terms thereof, an estimated expenditure of Rs. 165 Lakh as per the initial offer, spread over the years FY 2024-25 to FY 2026-27, shall be incurred for the upgradation of Laboratory instruments. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 25(2)(a) and 25(2)(c) of the Tariff Regulation 2024.

ii. C&I Laboratory

499. It is submitted that in the Petitioner's generating station, Unit 1 & Unit 2 all field instruments are being calibrated by standard Master calibration equipments of the C&I (Control and Instrumentation) Laboratory. In this regard, the following may be appreciated:

(a) Instrument calibration is a crucial process to ensure that field instruments provide accurate and reliable measurements which is essential for maintaining the accuracy, precision and reliability of field instruments over time for quality control and regulatory compliance, contributing to the overall efficiency and safety of industrial processes.

(b) The Calibration laboratories provide documented evidence of the accuracy

and traceability of measurements, ensuring that instruments' accuracy is tied to national or international standards, and fostering confidence in measurement results.

(c) Furthermore, by regularly calibrating instruments and documenting the calibration process, laboratories can provide information on measurement uncertainty, aiding in the decision-making process, contributing to effective equipment lifecycle management as they help to identify and address issues with instruments promptly, extending their useful life and avoiding unexpected failures or inaccuracies.

(d) Conversely, the non-availability of calibrating equipment would lead to Inaccurate Measurements, Quality Issues, Compliance and Regulatory Issues, Risk of Safety Incidents, Unreliable testing and analysis, Increased Cost, Loss of customer trust, Reduced Operational efficiency and Audit Failures.

500. In view thereof, it is crucial to have laboratory equipment capital expenditures so that equipment are technologically up to date. The reason for the upgradation of the calibration instruments is as follows:

(a) The use of cutting-edge technologies such as artificial intelligence and machine learning increases automation which can reduce human error and enhance the efficiency of various processes, from sample preparation to data analysis, improved precision, promote miniaturization and portability which is beneficial in fields such as point-of-care diagnostics, where compact and portable devices enable on-site testing and real-time analysis.

(b) The Calibration instruments use Data Connectivity and Integration as the modern lab equipment are designed with improved data connectivity,



allowing seamless integration with Laboratory Information Management Systems (LIMS) and other data management platforms and facilitating efficient data sharing, analysis and collaboration.

(c) Furthermore, the advancements in Analytical Techniques and Sensitivity of Instruments to contribute to more accurate and precise measurements. This is crucial in fields like analytical chemistry, genomics and proteomics, where researchers demand increasingly sophisticated tools.

(d) Lastly, Sustainability and Energy Efficiency of the upgraded technology aid in reducing the overall environmental impact of laboratory operations.

(e) Therefore, there is an undeniable need to upgrade/procure new calibration instruments to optimally utilize the benefits of modern age technology. Existing instruments are old, outdated and have outlined their service life and, hence, require urgent replacement.

501. It is further submitted that the Calibration lab equipment falls under capital expenditures and is justified due to its nature as a long term asset, the significant upfront cost, its contribution to organizational productivity and alignment with accounting principles that guide financial reporting and decisions. They are considered a long-term asset as its useful life extends beyond a single accounting period, making them eligible for capitalization, also calibration lab equipment involves a substantial upfront cost and capitalizing these costs allows organizations to spread the expense over the useful life of the equipment, reflecting a more accurate representation of the economic benefit derived from the assets.

502. Accordingly, the Petitioner proposes to procure theses calibration equipment at the cost of Rs. 50 Lakh in 2026-27. A copy of the list of calibration equipment is

MAITHON POWER LIMITED

annexed herewith and marked as **ANNEXURE P/44-B**.

503. The total estimated expenditure for the Laboratory Instruments is Rs. 215 lakh for the period 2024-29. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulations 25(2)(a) & 25(2)(c) of the Tariff Regulations 2024.

xxi. Infrastructure - Admin

504. It is submitted that the Infrastructure of the Guest house at Gogna has become very old and the conditions are deteriorating. To give the guest house a proper shape it has now become mandatory to repair and/or replace the old set up to improve the quality of services.

505. It is, therefore, mandatory to provide new kitchen equipment and utensils at Guest Houses, Township and Field hostels, which are long pending. Also, new Beds, chairs (Dining, Office, conference room) and sofas need to be provided. Wooden cupboards in all these areas need to be replaced with steel almirah because those have been damaged and are beyond repair. New electrical gadgets like geysers, fridge, wet grinders, mixer grinders etc. need to be provided in different locations. Few doors and door frames in different locations need to be changed as these are old and have been damaged by termite or have rotten out. ACs of almost all locations are beyond repair and need to be replaced with new ones.

506. Given the dilapidated condition of the guest house, the Petitioner seeks to repair/replace the old set up and comply with the provisions of Factories Act, 1948 which stipulates, maintenance of shelters for the employees in a clean and ventilated manner. The relevant extract is reproduced below for the ease of reference-

> *"47. Shelters, rest rooms and lunch rooms.—*



(1) In every factory wherein more than one hundred and fifty workers are ordinarily employed, adequate and suitable shelters or rest rooms and a suitable lunch room, with provision for drinking water, where workers can eat meals brought by them, shall be provided and maintained for the use of the workers:

Provided that any canteen maintained in accordance with the provisions of section 46 shall be regarded as part of the requirements of this sub-section: Provided further that where a lunch room exists no worker shall eat any food in the work room.

(2) The shelters or rest rooms or lunch rooms to be provided under sub-section (1) shall be sufficiently lighted aid ventilated and shall be maintained in a cool and clean condition.

(3) The State Government may— (a) prescribe the standards in respect of construction, accommodation, furniture and other equipment of shelters, rest rooms and lunch rooms to be provided under this section; (b) by notification in the Official Gazette, exempt any factory or class or description of factories from the requirements of this section"

507. In view thereof, the Petitioner prays to the Hon'ble Commission to admit the aforesaid Additional Capital Expenditure of Rs. 250 lakh under Regulation 25(2)(a) and 102 of Tariff Regulations 2024 to prevent any accidents due to the decaying main infrastructure of the building and to standardize the service quality within the guest houses/field hostel and township.

xxii. AVR Retrofitting for Unit – 1 & 2

508. It is submitted that with the enforcement of modern-day power sector new norms and requirements like minimum technical loading, Automatic generation control, frequent load block revision and meeting other future requirements, the response time with the reliability of AVR needs to be taken care of.

509. Notably, in the Petitioner's Plant, Unit-1&2 in-service AVR is of BHEL make. Major problems associated with in-service AVR are Display unit failure, screen hanging, fault in standby channel, unreal fault alarm annunciation, diagnosis issues, obsolescence of technology, frequent card failure, dependency on OEM experts, long maintenance periods and reliability issues. This is causing difficulty in

adhering to the strict automatic generation control and other regulations.

510. Accordingly, the Petitioner has planned retrofitting of the AVR for Unit 1&2 for complying with later regulations and humbly requests the Hon'ble Commission to allow this additional capital expenditure of Rs. 500 Lakh spread equally in FY 2027-28 and FY 2028-29 under Regulation 25(1)(b) and 25(2)(b) of the Tariff Regulations 2024.

xxiii. Conveyor Belt

511. The conveyor belt is a critical component in the coal handling process, facilitating the efficient movement of coal. The existing conveyor belt system provided by OEM (Tech pro) has been in operation since commissioning. Over this period, routine maintenance and repairs have been conducted to keep the system operational. However, recent assessments have revealed significant wear and tear, posing a potential risk of safety of working personnel as well as disruptions to the production process.

512. Hence, the deteriorating condition of the existing system raises concerns about reliability, safety and increased downtime due to potential failures. The replacement is necessary to enhance safe working operational efficiency, reduce maintenance time and mitigate the risk of unexpected breakdowns.

513. Considering the criticality of the conveyor belt system to maintain the generation schedule and its obsolescence (as the OEM is not there for any support), the replacement of the conveyor belt across the plant is planned in a phased manner from FY 2024-25 to FY 2027-28. The Petitioner sought quotation from three available suppliers for four types of belts, but only M/s Krishna Belts Pvt limited submitted quotation for all four types. Considering the criticality of the conveyor belt, the Petitioner has already initiated the process of procurement and order is



expected to be placed in FY 2024-25.

514. An estimated expenditure of Rs. 1100 Lakh is expected based on rates given by Supplier, who has quoted minimum 5 years belt life. In this regard, a copy of the quotation given by the new supplier (Krishna Belt Pvt Ltd.) is annexed herewith and marked as **ANNEXURE P/45**.

515. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure of Rs. 1100 Lakh under Regulation 25(2)(a) and 25(2)(c) of the Tariff Regulations 2024.

xxiv. Service Water Pipeline revamping work

516. The service water pipeline is an integral part of the Coal handling plant and plays a multifaceted role in supporting critical operations such as the Fog canon system in the track hopper, Dry Fog Dust Suppression (DFDS) system in the coal conveyor, NAVIS system, Rain gun in coal yard and wharf area, which is not only helping to control the dust emission but also contributing to meet the environmental norms. These pipelines are the backbone of the dust suppression system and ensure a consistent supply of water.

517. On account of aging, the existing service water pipeline system faces challenges such as due to heavy corrosion, multiple leaks and reduced capacity causing operational disruptions and increase in environmental dust. The current state not only jeopardizes the efficiency of the dust control system but also poses environmental and safety risks.

518. Accordingly, in order to comply with norms of ground level AAQI as per Notification dated 18.11.2009 issued by Central Pollution Control Board (CPBP) it is necessary to undertake works pertaining to service water pipeline revamping/replacement. [***Refer: Annexure P/15***]. It is further submitted that

MAITHON POWER LIMITED

considering the urgency of the instant scheme, Petitioner has incurred the cost of about Rs 75 Lakh in FY 2024-25.

519. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure of Rs. 75 Lakh for FY 2024-25 under Regulation 25(1)(b) and 25(2)(a) of the Tariff Regulations 2024.

xxv. Retrofitting of Boiler Elevators

520. It is submitted that Boiler elevators (lifts) are necessary equipment to improve accessibility to the boiler, its day to day maintenance and its smooth functioning. The unavailability of the Elevator creates huge problem for material shifting from the ground to the Upper Elevation of Boiler.

521. Pertinently, during FY 2023-24, the Petitioner had some of the major maintenance work in the Unit 2 Boiler Elevator for Rope Replacement and the Compensating Chain replacement which also accounted for the unavailability of the Unit 2 Boiler Elevator for more than 120 Days.

522. Existing Elevator in both the Boilers (Kone Make 2000 kg, Passenger and Material, Rope and Sheeve System) have completed more than 10 years of active service life. While maximizing the useful life of existing Elevators is typically the most financially prudent option, serious issues can arise when the Elevator is unavailable during shutdown times. It must be appreciated that these elevators operate in rough conditions for material and goods handling at boiler elevation. As such, they are used very frequently and are, therefore, prone to high wear and tear. They cannot be equated to elevators operating under normal working conditions.

523. The Hon'ble Commission may appreciate that the repairs if undertaken would be costlier than the new unit as the issue of availability of the spare parts would not



fade away. Furthermore, the replaced elevator would be energy efficient and equipped with the latest models and technology, hence, saving time and cost of repairs on the maintenance. The proposed retrofitting also seeks to provide intangible benefits such as reducing the risk to the operation engineers for day to day maintenance and it will be available for all time runs with minimum breakdown.

524. The estimated capital expenditure on this count is Rs. 200 lakh across FY 2027-28 and FY 2028-29. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 25(2)(a) of the Tariff Regulations 2024.

xxvi. Station Battery Banks

525. It is submitted that batteries and battery chargers are the heart of the Direct Current (DC) system and, hence, they are very important for the protection and control of station and unit related processes. In case of system blackout/startup, batteries feed the DC equipment of the plant and switchyard equipment such as Motor Driven Boiler Feed Pump (MDBFP), Compressors, Lube Oil Pumps (LOPs) and emergency lighting thereby ensuring the safe shutdown of the plant.

526. The Petitioner submits that the existing 220V DC Station batteries are low maintenance Lead Acid (Flooded) Batteries and have completed more than 12 years of service and much more than charging-discharging cycles of its expected life.

527. It is pertinent to highlight that in the "*Report on Bank Health Survey*" for these batteries, Exide Industries Limited have found that (i) majority of the cells have bulged (ii) crack on sealing compound in 80% and (iii) some of cells are in deep discharge condition and have recommended that due to end of service life and



unsatisfactory performance due to above defects, the battery bank may be replaced. For ease of reference, the relevant extracts of the said report dated 20.04.2023 is reproduced below: -

> *"Location: 220V Stn. Battery Bank-1 (U#1).*
> *Yr. of Installation: 2009.*
> *XXX*
> ***Recommendation: Battery Bank is completing its Service Life. You may plan for replacement of the battery bank with a new battery bank.***
> *XXX*
> *Location: 220V Stn. Battery Bank-2 (U#1).*
> *Yr. of Installation: 2009.*
> *XXX*
> ***Recommendation: Battery Bank is completing its Service Life. You may plan for replacement of the battery bank with a new battery bank.***
> *XXX*
> *Location: 220V Stn. Battery Bank-1 (U#2).*
> *Yr. of Installation: 2009.*
> *XXX*
> ***Recommendation: Battery Bank is completing its Service Life. You may plan for replacement of the battery bank with a new battery bank***
> *XXX*
> *Location: 220V Stn. Battery Bank-2 (U#2).*
> *Yr. of Installation: 2009.*
> *XXX*
> ***Recommendation: Battery Bank is completing its Service Life. You may plan for replacement of the battery bank with a new battery bank"***
> [***Emphasis Supplied***]

A copy of the Report issued by the Exide Industries Limited dated 20.04.2023 is annexed herewith and marked as **ANNEXURE P/46**.

Further, the serviceable life of these battery sets is 8 to 10 years under normal application.

528. Thus, it is essential to replace the existing battery set with the new one as they have outlived their life and to improve the overall reliability of the DC system and the safe operation of the plant.

529. It is planned that the batteries will be procured and replaced in FY 2024-25



through the tendering process at an estimated cost of Rs. 500 lakh. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 25(2)(a) of the Tariff Regulations 2024.

xxvii. Upgradation of Mill & Compressor HT Breakers of the main plant

530. It is submitted that HT breakers are critical for equipment safety and reliable unit generation. As coal mills and Instruments Air compressor feeders have the most frequent operation and have standby feeders which need to remain available for timely start-stop operations, their breakers are critical for Unit reliability.

531. It is further submitted that existing Mill and Instruments Air compressor HT Breakers have completed more than 12 years of operations. Due to frequent operations of these breakers, multiple breakdowns have occurred due to breaker internal mechanism failure, rack-in/rack-out assembly issues. As these feeders provide standby equipment frequently and are critical during Unit load variations and feeder changeovers, their non-availability due to issues in breakers affects Unit reliability.

532. Due to high number of operations, particularly SCED and other new operational mandates, these vacuum circuit breakers have served more than their service life of more than 20,000 switching. Pertinently, due to aging, frequent defects and breakdowns occur, thus, affecting unit reliability. Hence, it is planned for phase wise replacement of these breakers through an open tendering process.

533. In this regard, a copy of BHEL's Instruction Manual for O&M of Indoor Vacuum Switch Gear (relevant pages) showing life expectancy of 20000 switching operations is annexed herewith and marked as **ANNEXURE P/47**.

534. The estimated capital expenditure is Rs. 180 lakh across FY 2024-25, FY 2025-26



and FY 2026-27. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 25(2)(a) and 25(2) (d) of the Tariff Regulations 2024.

xxviii. Upgradation of AHP & CHP HT & LT Breakers

535. It is submitted that presently C&S make 415 V Air Circuit Breakers (ACB) are installed in Low Tension Main Switch Board (LTMSB) and Auxiliary Control Panel Control Centre (ACP PMCC) for both the Units. Total number of these breakers is 24 (2500 A) and 40 (800 A) installed in the plant which require replacement.

536. It is further submitted that existing HT and LT breakers in the CHP area have attained the age of more than 13 years with more than 20,000 operations. In this regard, GE manual specifies that breaker's normal service life is 20,000 operations. A copy of the GE Manual (relevant pages) is annexed herewith and marked as **ANNEXURE P/48.**

537. The ageing effect can be seen on LT breaker's performance with the high instances of breakdown which is mainly related to the failure of the operating and rack in-out mechanism. Since the majority of breakers are used in critical switchgears like Unit and station boards, hence, failure of any breaker in operation will directly lead to impact plant generation. Hence, in phase wise manner, HT and LT breakers need to be retrofitted.

538. It is humbly requested that the Hon'ble Commission may kindly allow the estimated additional capital expenditure of Rs. 550 lakh across the 2024-29 Tariff Period under Regulation 25(2)(a) and 25(2)(d) of the Tariff Regulations 2024.

xxix. Testing Equipment for Electrical Equipment

539. It is submitted that to guarantee the optimal performance of electrical installations, it is imperative to consistently monitor the condition of these



devices. The state of these devices is assessed using a variety of testing equipment. The Petitioner has a specific set of tools to supervise the condition of the installed devices. Some of tools devices have aged and require frequent regular maintenance.

540. Non-availability of these Instruments during their maintenance causes deferment of device schedule thereby compromising with reliability of these devices. Further, as time has progressed, new technologies have emerged to better maintain electrical devices. The following three testing equipment are proposed:

(a) Double make Tan Delta test kit;

(b) Meggr make 3 phase injection kit; and

(c) Yokogama high speed recorder.

541. Notably, the OEMs of these equipment have informed that these equipment have become obsolete/outlived their service life and minor or no support is available. In this regard, copies of the Emails exchanged with OEM in respect of testing equipment for electrical equipment are annexed herewith and marked as **ANNEXURE P/49**.

542. Therefore, the replacement of outdated testing devices and the incorporation of new technologies necessitate the procurement of new testing equipment, which is the pressing need of the hour.

543. It is estimated that the Capital expenditure required for procurement and commissioning of this equipment is Rs. 75 lakh through an open tendering process and it will be executed in FY 2024-25 to FY 2026-27. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 25(2)(a) and 25(2)(c) of the Tariff Regulations 2024.



xxx. Fire Hydrant System

544. It is submitted that this scheme is a continuation of Fire Hydrant System initiated in 2019-24 period. The Petitioner craves leave to reply upon the reason and justifications given in True up section in this regard.

545. The estimated capital expenditure is Rs. 607.37 lakh across FY 2024-25 to FY 2027-28. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 25(1)(b) and 26(1)(d) of the Tariff Regulations 2024.

xxxi. Replacement of Fire Extinguisher

546. It is submitted that the fire hydrant system is integral to Petitioner's plant safety measures, complemented by strategically placed fire extinguishers conforming to IS 2190 and fire load calculations. These extinguishers are crucial for Plant safety protocols, serving as immediate responses to potential fires, preventing substantial damage to plant assets and ensuring personnel safety. They play a pivotal role in preventing small fires from escalating, enabling swift containment before they endanger lives or cause extensive disruption.

547. Moreover, they enhance evacuation procedures by providing critical time for safe evacuation routes. Tailored to specific fire hazards, different extinguisher types cater to diverse fire classes, from combustibles to electrical equipment, ensuring targeted protection. Compliance with fire safety regulations is paramount, underscoring the need for regular maintenance and timely replacement of expiring extinguishers as per IS 2190 standards. A copy of the IS 2190:2010 standard specifying life of CO2 extinguisher as 25 years (relevant pages) is annexed herewith and marked as **ANNEXURE P/50**.

548. Accordingly, in FY 2024-25, the project focuses on replacing expiring CO2 fire



extinguishers to uphold safety standards and fulfil operational requirements. This initiative not only mitigates fire risks during the incipient stage but also enhances overall firefighting system reliability and performance across the plant, safeguarding assets and reinforcing our commitment to workplace safety and compliance. Accordingly, estimated expenditure of Rs. 25 Lakh is being proposed in FY 2024-25 under Regulation 25(1)(b) & 25(2)(a) of the Tariff Regulations 2024.

xxxii. Reheater Upgradation

549. It is submitted that this scheme is a continuation of reheater upgradation initiated in 2019-24 period. The reasons and justifications for this expenditure are provided in the true-up section and are not repeated herein for the sake of brevity.

550. Accordingly, the Petitioner proposes to replace balance tubes in a phased manner to enhance the reliability further noting the BHEL recommendations/improvements and in order to have better monitoring and control of tube metal excursions, installation of additional Manometric temperature measurement (MTM) thermocouples in Re-heater coils have to be undertaken over and above the existing ones immediately.

551. In addition to the installation of thermocouples, associated item viz. junction boxes, Distributed Control System ("**DCS**") hardware etc, are also required tio be installed. The estimated project cost is Rs. 500 Lakh in FY 2024-25, Rs. 500 Lakh in FY 2025-26, Rs. 500 Lakh in FY 2026-27, Rs. 500 Lakh in FY 2027-28, and Rs. 500 Lakh in FY 2028-29.

552. Therefore, the total estimated cost for the above works planned in the period 2024-29 is Rs. 2500 Lakh. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation



25(2)(a) and 25(2)(b) of the Tariff Regulations 2024.

xxxiii. Infrastructure - IT

553. The Petitioner submits that the rapid technological advancement in the present era of digitalization has compelled the Petitioner to update the Hardware and Software continuously which is further in consonance with the Petitioner's Laptop allocation Policy. Under the Laptop Allocation Policy, the eligibility for new laptops arises after 4 years of their asset life so as to keep the software and hardware updated to prevent any cyber security breach.

554. The said Additional capitalization expenditure includes new Laptops, Desktops, printers which have been considered as per specific technical requirements of the departments. This is being proposed in compliance of Article 7(a) and (b) of CEA (Cyber Security In Power Sector) Guidelines 2021 (***Refer ANNEXURE P/17***) which are quoted below:

> *"Article 7 Phasing out of Legacy System*
> *a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.*
> *b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter* ***CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors."***
>
> [***Emphasis supplied***]

555. The estimated cost of the project is Rs. 295.57 lakh for the period 2024-29, The Petitioner prays to the Hon'ble Commission to approve the aforesaid Additional Capital Expenditure under the Regulation 25(2)(a) and 25(2)(b) of Tariff Regulations 2024.

xxxiv. Upgradation of IT Network Switches

556. It is submitted that with technological advancement, switchover from standalone virtual CISCO Aironet Access Point (Cisco Aps) are proposed across diverse locations within the Petitioner's generating station, including the CHP, Site Office, Control Room, and Gogna office. The shift towards virtual servers reflects a broader trend away from standalone server systems, necessitating higher configuration servers that can be subdivided into virtual machines (VMs) tailored to specific needs. This flexibility allows for scalable resource allocation and longevity of use compared to traditional standalone setups.

557. In the Petitioner's case, the current RFID server in the Tata Power Data Center faces significant challenges as it runs on unsupported Windows Server 2008, lacks backup and utilizes outdated hardware. In this regard, a copy of the CISCO's Obsolescence Notice of existing CISCO network switches is annexed herewith and marked as **ANNEXURE P/51.**

558. Adopting virtual servers eliminates procurement delays and financial hurdles associated with acquiring new servers, firewall license and security measures. It expedites IT project implementation, ensuring timely access to computing resources and swift deployment of applications critical to plant operations and business functions. Delaying or not implementing this migration project risks disrupting operational efficiency, hindering laptop distribution as per policy, necessitating repetitive procurement processes and impeding timely application functionality and report generation.

559. Pertinently, embracing virtualization not only mitigates technological obsolescence but also enhances security features and operational agility across the Petitioner's generating station infrastructure as required under the



aforementioned CEA Guidelines 2021 quoted above in IT Infrastructure.

560. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure of Rs. 460 lakh for the period 2024-29 under Regulation 25(2)(b) and 25(2)(c) of the Tariff Regulations 2024.

xxxv. Installation of Security Operation Center (SOC) for all PLC

561. It is submitted that recently, there has been an upsurge in the Cyber-attacks / intrusion attempts on the critical infrastructure sector such as the power sector wherein the attackers have become more sophisticated and organized, employing advanced techniques such as ransomware and supply chain attacks. The traditional "air gap" between Information Technology (IT) and Operational Technology (OT) systems is no longer effective in protecting power systems against cyber threats, the need of the hour is to deploy the latest technology to safeguard the Plant from any cyber security breach.

562. This brings our attention to the Programmable Logic Control (PLC) which is essential to avail 24x7 power generation. At the generating station, PLCs are being used for the Control & Operation of BOP area plants like CHP, AHP, DMP, RWPH, MRS, Fire Water plant, Stacker/Reclaimer, Paddle feeders etc. Each of the PLC system consists of two redundant controllers with number of Input/Output control modules and various networking instruments. BOP area all processes along with critical closed loops are being measured and controlled by each PLC system. Hence, it is pertinent to safeguard the PLC from any kind of failure & mainly from cyber-attacks. The PLC system consists of the following:

(a) Measurement & Control System: The function of measurement & Control System is to display the measured process parameter at the Workstation and also to perform control functions. This system comprises of



Processors, Signal Conditioning & Monitoring cards and function cards.

(b) Data bus system: Data bus system comprises Control bus, communication controller to transfer the data between Measurement function cards and the Operator Workstation system.

(c) Operator cum Engineer Workstations: The functions of the OWS cum EWS system are to convert the data to various types of displays on the monitor and communication of commands from the Monitor/ Keyboard to the final control element. It can also perform the function of logic generation in addition to functions of Operator workstations.

(d) Sequence of event recording & Annunciation System- Perform the functions of recording the Sequence of events as well as notifying the event through Annunciator.

(e) Software- Comprises of System & Application software to carry out Engineering, Monitoring and Operation, Maintenance functions and Management Information system. The complete software for Microprocessor based control systems also includes Communication software between systems.

563. Power sector specific Cyber Security Regulations may be traced back to the CERC (Communication System for Inter-State Transmission of Electricity) Regulations, 2017 wherein under Regulation 7.1 it had specified Central Electricity Authority (CEA) to formulate the guidelines for cyber security. However, it was in 2021 and under Section 3(10) in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019; CEA issued Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021 wherein all power sector utilities are mandated to follow the Guidelines to ensure cyber



security in the power sector.

564. Furthermore, the importance of cyber security was also duly considered under the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023 dated 29.05.2023; the joint reading of Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandates that all users shall comply with the applicable Regulations such as the Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021(CEA Guidelines, 2021) dated 07.10.2021 [***Refer: Annexure P/17***]. The relevant Regulation is produced below for the ready reference -

> *"7. Compliance with Existing Rules and Regulations (1) All Users connected to or seeking connection to the grid shall comply with all the applicable regulations as enacted or amended from time to time, such as:*
> *....*
> *(k) Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021."*
> *...*
> *"51. Cyber Security Audit All users, NLDC, RLDCs, SLDCs, CTU and STUs, power exchanges, QCAs, SNAs, shall conduct Cyber Security Audit as per the guidelines mentioned in the CEA (Cyber Security in Power Sector) Guidelines, 2021 and any other guidelines issued by an appropriate Authority."*

565. Since the CEA guidelines, 2021 are binding on the Petitioner as a legal mandate to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded. The relevant regulation is presented below for reference -

> *"Article 7 Phasing out of Legacy System a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded."*

566. Therefore, to prevent a primary attack on the PLC system, it should be equipped with the latest technology like SOC (Security Operation Centre), SEIM, Threat Detection & Prevention System etc. Furthermore, Article 14 of CEA Guideline 2021, mandates that every Power generating station should go through a CERT-In



Empanelled Cyber Security OT Auditor for IT/OT Systems audited at least once in every 6 (six) months. The relevant regulation is presented below for reference -

> *"Article 14 Cyber Security Audit*
> *a) The Responsible Entity shall implement Information Security Management System (ISMS) covering all its Critical Systems.*
> *b) The Responsible Entity shall through a CERT-In Empanelled Cyber Security OT Auditor shall get their IT as well as OT System audited at least once in every 6 (six) months and shall close all critical and high vulnerabilities within a period of one month and medium as well as low non-conformity before the next audit. Effective closure of all non-conformities shall be verified during the next audit.*
> *c) The Cyber Security Audit shall be as per ISO/IEC 27001 along with sector specific standard ISO/IEC 27019, IS 16335 and other guidelines issued by appropriate Authority if any. These mentioned standards shall be current with all amendments if any and in case if any standard is superseded, the new standard shall be applicable. CISO shall ensure immediate closure of non-conformance, based on the criticality and by means all non-conformances are to be closed before the next audit.*
> *d) The Responsible Entity shall ensure that CISO has all the required systems and documents in place, as mandated by NSCS for base line cyber security audit."*

567. It was also advised by CERT-In, in the Audit Report dated 24.01.2023 and 01.08.2023 for Unit 1 and 2 respectively, to conduct cyber security audit of entire Cyber infrastructure including IT/OT system at regular interval through CERT-In empanelled Auditors to identify gaps and appropriate corrective actions to be taken in cyber security practices and the Security Operation Centre (SOC) which will provide necessary analysis and evidence to support the audit. The relevant extract of the aforesaid audit report is reproduced below for ready reference:

> *" Recommendations*
> - *All unwanted ports & services running on the systems should be disabled. During this process, it is always good to check the effect on running SCADA system performance (with the help of SCADA vendor). System availability is more important in OT environment.*
> - *Unused ports of network/OT devices such as switch should be disabled.*
> - *Device control and application control policy for OT environment*



should be implemented.

- *Upgradation of Network Device Firmware should be carmed out are regular intervals and should be implemented*
- *Upgradation of system OS should be conducted, and the systems should be on latest OS. be on latest Firmware.*
- *Antivirus definitions and OS patch update rule should be defined and implemented .*
- ***Monitor and implement security controls for the communication involving DCS systems (System PC and PLC) which are having the data flow between DCS systems and third-party sources/ devices for security checks (with the support of vendor). This will add another layer of security in third party communication involving TCP/IP, OPC, Modbus, etc between DCS systems and third-party sources/devices"***

[***Emphasis supplied***]

A copy of the CEA Guideline 2021 (relevant pages) along with Grant Thornton's Audit Report dated 24.02.2023 are annexed herewith and marked as **ANNEXURE P/52**.

568. Considering above important and legal mandatory requirements, the Petitioner has already communicated with M/s Allen Bradly and GE Fanuc, the OEM to implement SOC in PLC system that includes all existing BOP area like CHP, AHP, DMP, RWPH, MRS, Fire Water plant, Stacker/Reclaimer, Paddle feeders etc. The Key benefit of implementing SOC in PLC systems is that the Integration with IT Security will be possible safeguarding from any cyber security breach and ensure compliance with the aforementioned Regulatory Requirements.

569. Thus, the Hon'ble Commission may allow the aforesaid proposed additional capital expenditure of Rs. 200 Lakh for FY 2025-26 and Rs. 200 Lakh for FY 2026-27 for the implementation of SOC in the PLC system under Regulation 25(2)(b) of the Tariff Regulations 2024.

xxxvi. Upgradation of MAX DNA DCS Hardware System

570. It is submitted that the Distributed Control System (DCS) system is the Heart of the Plant as operation, monitoring and control of the system is achieved with the



help of the DCS system and any abnormality or malfunction in the system may adversely affect the Generation schedule. Hence, the availability of a modern and upgraded DCS system is very important for the smooth & normal operation of the Petitioner's generating station to meet its desired generation schedule for the beneficiaries and avoid any discomfort to the end consumers.

571. Notably, Unit-1 and Unit-2 have been commissioned and declared COD in September 2011 and July 2012 respectively making DCS almost 15 years old. As per the OEM recommendation, DCS hardware like DPUs, I/O modules and other associated control modules are prone to failure after 15 years of age. At this juncture, the Petitioner is faced with the following two restrictions vis-à-vis its ageing DCS hardware:

(a) The first restriction which is usage life and obsoleteness of the hardware of DCS making the cost of repair very expensive and exhaustive. Till now Petitioner has managed the old system, with the existing inventories and the support extended by BHEL.

However, now, BHEL has expressed its inability to provide further support and has recommended for complete up-gradation of existing DCS hardware to the higher version with the upgraded version of MAX DNA DCS to ensure services and necessary spares.

(b) The second restriction is with respect to the adherence to new Cyber security requirements under CEA (Cyber Security in Power Sector) Guidelines 2021. The malicious Cyber intrusion attempts and Cyber-attacks in any critical sector lead to compromise with the Power security in the country, leading to mal-operations of equipment, equipment damages or even in a cascading grid brownout/blackout and such risk of



cyber-attacks is mainly on OT system like DCS, PLC or IT/OT integration network and to reduce such risk CEA has mandated every power generating entity to place various cyber risk mitigating technologies.

Therefore, again to adhere to new cyber security requirements DCS system should be modern and updated with all aspects like both hardware & software part. Even OEM has confirmed that the hardware has to be upgraded with a higher version to mitigate cyber threats. A copy of the OEM letter dated 23.05.2022 on obsolescence of software is annexed hereto and marked as **ANNEXURE P/53 A.** A copy of Email Communication dated 01.03.2024 for obsolescence of Hardware is annexed hereto and marked as **ANNEXURE P/53 B.**

572. At this juncture, it is relevant to note that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations such as the Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021(CEA guidelines, 2021) dated 07.10.2021 [***Refer: Annexure P/17***]. The relevant Regulation is produced below for the ready reference -

> *"7. Compliance with Existing Rules and Regulations (1) All Users connected to or seeking connection to the grid shall comply with all the applicable regulations as enacted or amended from time to time, such as:*
> ....
> *(k) Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021."*
> ...
> *"51. Cyber Security Audit All users, NLDC, RLDCs, SLDCs, CTU and STUs, power exchanges, QCAs, SNAs, shall conduct Cyber Security Audit as per the guidelines mentioned in the CEA (Cyber Security in Power Sector) Guidelines, 2021 and any other guidelines issued by an appropriate Authority."*

573. Further, since the CEA guidelines, 2021 are binding on the Petitioner as a legal

mandate to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded and legacy system should be phased out. The relevant regulation is presented below for reference -

> *"Article 7 Phasing out of Legacy System a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.*
> *b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up the replacement plan and put up the replacement plan for approval before the Board of Directors"*

574. In this context, in order to overcome the aforementioned restrictions and improve the DCS reliability by mitigating the risk of non-availability of services and spares and cyber security threats, it is proposed to Upgrade the MAX DNA DCS Hardware System. Therefore, according to the recommendation of OEM M/s BHEL and the substantial risk of continuing with the ageing DCS system, it proposed to upgrade DCS system hardware like DPU, I/O module, Communication module, and Power supply module to a higher version. For Unit 1 the execution is planned in the ensuing Annual Shutdown Plan in FY 2027-28 and for Unit-2 is planned in FY 2028-29 with the estimated project cost at Rs. 2000 Lakh.

575. In view thereof, the Hon'ble Commission may allow the above proposed additional capital expenditure of Rs. 1000 Lakh for FY 2027-28 (for Unit 1) and Rs. 1000 Lakh for FY 2028-29 (for Unit 2) under Regulation 25(2)(a) and 25(2)(c) of the Tariff Regulations 2024.

xxxvii. Upgradation of Real time Vibration Analysis System

576. It is submitted that at the Petitioner's generating station, Boiler, Turbine control & operation are being handled by numbers of big machines, rotating drives like



High-speed Steam turbine, Steam turbine driven boiler feed pumps, Coal Mills, PA, FD, ID fan, Pumps like CW, ACW, DMCW, CEP, CHP etc. The combination of all machines generates 24 hrs xx365 days of continuous power to the grid to meet electricity demand. Hence, availability of those load bearing machines is very important and plays a very crucial role in power generation.

577. Vibration monitoring is a crucial part of any machine's operating and maintenance program as it helps in monitoring and maintaining their health, ensuring optimal performance and preventing potential failures by providing insights into their condition and ultimately contributing to improved reliability, safety and cost-effectiveness in industrial operations.

578. Further, vibration analysis offers a plethora of advantages, such as it aids in detecting early signs of mechanical issues or abnormalities in machinery and safety of both the equipment and personnel due to early warning detection, reducing the risk of unexpected breakdowns and lastly, it helps in enhancing safety as Vibration analysis helps in identifying and rectifying issues before any mishap. Hence, the importance of the Vibration system is undisputable.

579. However, there is a need for upgradation of the present Vibration Monitoring System (VMS) due to four primary reasons:

(a) At present the existing vibration analysis system (supplied by Forbes Marshall) is Windows XP-based system and has reached its end of life. Each unit is provided with two servers (Windows XP based HP server) for analysis purposes, one client and one monitoring purpose. But for the last five years the Petitioner was unable to utilize the analysis system due to lag in software and issues in data fetching from VMS panel due to frequent failures of AP-10H1 servers.



(b) As per OEM, existing RV-100 series software and AP-10 analyzer both have become obsolete and no service is available from OEM.

(c) In addition to it, in the existing scheme, key phasor raw signal for all HT drives is being fetched to AP10H1 processor for analysis application. As AP10 analyzer is in stage of end of life and not working, no HT drives speed signal is available for vibration analysis and the analysis vibration pattern of critical load bearing HT drives on real time basis is not possible. Copies of the End of Sale Announcement/ Discontinuation/ Obsolescence documents of AP-10 and RV-100 services hardware/software are annexed herewith and marked as **ANNEXURE P/54 (COLLY.)**.

(d) Further, both Unit TDBFP turbine VMS package (Axial shift, vibration and expansion signals) is not included in the existing vibration analysis system and, therefore, vibration related analysis is not possible for critical pumps like both Unit TDBFPs.

(e) And lastly, as both the hardware AP10 module and software RV100 are out of usage life, no vibration analysis is possible for the main turbine as well as all HT drives and critical load bearing equipment across the BTG area.

580. In order to utilize the VMS optimally, M/s Forbes Marshall Pvt. Ltd. (OEM) was contacted for suitable solution for the upgradation of vibration analysis system with higher version software & hardware and the upgradation project. Pertinently, OEM will support in complete installation and configuration of new vibration analysis system, compatible with existing vibration measurement system in both Units, which will include upgradation works of the server system to latest version Windows 11 OS and renewing the analysis software tools license compatible to the upgraded OS. Both Unit 1&2 Main Turbine TSI all dynamic



vibrations & axial/expansion signals hookup with latest version RV200 series software. Both Unit 1 and 2 TDBFP all dynamic vibrations & axial/expansion signals hookup with RV200 series software. Upgradation includes configuration of Key-phasor (Speed) signal of all HT drives individually through rpm card in VMS rack and then feeding it to vibration analysis processor, Upgradation of AP-10 analyzer with latest version analyzer hardware compatible with RV200 series software and latest version Windows 11 OS. All associated modules like Sampling card, Trigger card, Modbus modules to be upgraded with AP-10 upgradation and the procurement of new software/hardware license warranty, for making it compatible with Windows-11 platform.

581. The upside of the upgradation of the VMS will be the prevention of Costly Downtime, ensuring timely repairs, if need be, ensuring that machines are running longer and more efficiently and since the repairs are timely there is less likelihood to shut down the equipment because of extensive damage allowing the Petitioner to act proactively to avoid major production failures and reduce the cost of repair.

582. Hence, the upgradation of the VMS being technical mandatory requirement is essential for the improved availability of the plant equipment, which in turn ensures generation requirement as per the schedule. The Petitioner invokes Regulation 25(2)(a) & 25(2)(c) to support its Additional Capitalization expenditure and requests Hon'ble Commission to allow the proposed capitalization of Rs. 250 Lakh for FY 2025-26 and Rs. 250 Lakh for FY 2026-27.

xxxviii. Upgradation of MRS and ZLD PLC

583. It is submitted that the PLC system consists of Measurement & Control system (CLCS & OLCS), Data bus system, Operator Workstations, Engineer Workstation, Software including data diagnostics and data bus system with Control and



Communication with the process. All operation, monitoring and control automation is achieved with the help of this PLC system. Petitioner states that the PLC system was installed and implemented on GE Fanuc platform supplied by M/s Macawber Beekay. This system is implemented on Genius Bus Controllers which has been declared as obsolete by OEM, and hence, need to be upgraded to latest Profinet technology.

584. Petitioner also states that existing human machine interface (HMI) Software 'FT View' installed in Zero Liquid Discharge (ZLD) Plant area are obsolete owing to the obsolesces of 32-bit Windows 7 OS and needs to be upgraded to the latest & compatible Windows 11 Prof OS. Therefore, OEM has recommended to upgrade the Engineering work station and Operator work station terminal of zero liquid discharge plant. Copies of the Obsolescence Letter dated 12.05.2021 and obsolescence letter dated 01.01.2024 issued by the respective OEM is annexed hereto and marked as **ANNEXURE P/55 (COLLY.)**.

585. The estimated total cost for the software upgradation is Rs. 150 Lakh, proposed to be capitalized as Rs. 75 Lakh in FY 2025–26 and Rs. 75 Lakh in FY 2026–27. Accordingly, the Hon'ble Commission may be pleased to allow the additional capital expenditure for the proposed upgradation of PLC software under Regulations 25(2)(a) and 25(2)(c) of the Tariff Regulations 2024.

xxxix. Replacement of H2 Plant Electrolysis Module

586. It is submitted that the generating station of the Petitioner has installed Hydrogen (H2) generation plant of capacity 2 X 200 SLM (Standard Liter per minute). Each H2 Generating Plant has 2 nos. of electrolysis modules. Therefore, there are a total of 4 nos. of electrolysis modules. This electrolysis module is the main component that generates pure hydrogen gas at 99.99 % purity. This hydrogen gas is used for



the cooling of the Exciter (Dynamo) during electricity generation.

587. At present, 3 nos. of the Electrolysis Modules out of 4 have completely deteriorated and are beyond repair. The Electrolysis Modules have been in service for approximately 12 years, which is significantly more than its recommended service life of 7 to 8 years (as mentioned by OEM in their letter dated 15.04.2024) with frequent repairs in recent past. Currently, the operation is being run with highly deteriorated performance which may fail any time. Now, the OEM *vide* its letter dated 15.04.2024 has informed that these modules are beyond repair and has advised their replacement. A copy of the OEM Letter dated 15.04.2024 is annexed hereto and marked as **ANNEXURE P/56**.

588. In view thereof, it is requested that the Hon'ble Commission may allow proposed additional capital expenditure of Rs. 300.00 lakh in FY 2024-25 and Rs. 300 lakh in FY 2025-26 under Regulation 25(2)(a) of Tariff Regulations 2024.

xl. Ceramic Lining of Coal Mill

589. It is submitted that the Petitioner had undertaken the project of ceramic lining of the Coal Mill during the last control period, with the balance work scheduled for completion in the FY 2024-25.

590. It is a matter of fact that the coal received at the Petitioner's plant contains higher ash content than stipulated in the Fuel Supply Agreement (FSA). The elevated ash content, coupled with the presence of high-abrasive mineral species, has significantly increased the erosion propensity of the coal mill internals and piping.

591. To complete the balance work undertaken, estimated expenditure is Rs. 180 lakh for FY 2024-25.

592. In light of the above, the Petitioner respectfully prays to the Hon'ble Commission to approve additional expenditure of Rs. 180.04 lakh for FY 2024-25 for the



ceramic lining of the Coal Mill under Regulation 25(2)(a) and 25 (2)(b) of the Tariff Regulations 2024.

xli. Upgradation of Main Turbine and TDBFP Electro-hydraulic governing system components

593. It is humbly submitted that at Petitioner's generating station, main turbine and TDBFP turbine control system is governed by electro-hydraulic system for controlling the speed and output of turbines. This electro-hydraulic system comprises of many critical components like proportional valves, solenoid valves and hydraulic operated devices to ensure safe operation of equipment. This governing system is, thus, responsible for control of the Prime mover by means of opening and closing of control valves and stop valves during start-up, normal and emergency operation. Other than carrying out the major governing activity, its basic functions include acting as man-machine interface for the operation of the turbine, control start-up and synchronization of the machine, control turbine load when running in parallel with generating set etc.

594. Keeping in view the aforementioned functions, the governing system is a critical component for the plant as it enables the plant to efficiently manage load fluctuations and ensure that system stability is maintained.

595. Further, critical control circuits, such as Emergency Stop Valve (ESV) reset and operation, Automatic Turbine Trip (ATT) system and protection circuits, utilize solenoid operation and electro-hydraulic controllers with proportional valves to operate control valves. Ensuring the availability of these Solenoid-Operated Valves (SOVs) is crucial for equipment protection, as their failure can impact safety and lead to generation loss. The currently installed SOVs, including those manufactured by Heroin and Norgren (OEM) were supplied by BHEL during the



early phases of construction. Since the plant has been under operation since 2012 while also considering that these SOVs are integral for turbine protection trip circuits and Cold Reheater (CRH) Line non return valve (NRV) Operations, most of these SOVs have been in service for over 12 years, exceeding the OEM's recommended service life of five years and are proposed to be replaced. A copy of the Heroin and Norgren (OEM) Recommendation dated 10.08.2022 is annexed herewith and marked as **ANNEXURE P/57**.

596. In view of the above, the Petitioner requests the Hon'ble Commission to allow the projected additional capital expenditure of Rs. 200.00 lakh in FY 2025-26 and Rs. 200.00 lakh in FY 2026-27 under Regulation 25(2)(a) and 25(2)(c) of the Tariff Regulations 2024

xlii. Replacement of Fire Tenders

597. It is submitted that this scheme is also continuation of the scheme proposed under the 2019-24 tariff period scheme. The Petitioner has made appropriate submissions in true-up section of the present Petition which are not being repeated herein for the sake of brevity.

598. The Petitioner humbly submits that the existing two fire tenders have reached the end of their 15-year service life and need to be deregistered. However, according to the Government Notifications & Directives, vehicles with emissions ratings below BS 4 are not eligible for re-registration. [***Refer: Annexure P/28***] As a result, new vehicles were required to be procured. Given the crucial role fire tenders play in thermal power stations this expenditure is necessary.

599. Therefore, in order to maintain the fire safety standards, two new fire tenders (Multipurpose and Water Tenders) were ordered to meet the requirements one of the two fire tenders was delivered in FY 2023-24 and other in FY 2024-25.



Accordingly, the Petitioner request the Hon'ble Commission to allow the additional capital expenditure of Rs. 109.40 lakh towards the said work in FY 2024-25 under Regulation 25(1)(b) and 25(2)(a) of the Tariff Regulations 2024.

xliii. Replacement of pneumatic actuator and control mechanism

600. It is submitted that a pneumatic actuator and control mechanism work together in plant applications to control the movement of various mechanical components, such as valves, dampers and other process equipment.

601. The pneumatic actuator and control mechanism work collaboratively to enable the precise and automated control of industrial processes. The actuator translates compressed air energy into mechanical motion, while the control mechanism manages the airflow and positions the actuator to achieve the desired control outcomes.

602. Due to ageing and the deteriorated condition of actuators and control mechanism, the instances of failure have increased and they shall be de-commissioned and replaced/upgraded phase wise one by one. The upgraded actuators and control mechanism shall be procured from respective vendors.

603. The Project shall be executed by the Petitioner wherein above upgraded actuators and control mechanism shall be procured followed by the replacement of existing actuators and control mechanism. The estimated project cost is Rs. 400 Lakh.

604. In view of the above, the Petitioner proposes to incur an additional capital expenditure of Rs. 200 lakh in FY 2026-27 and Rs. 200 lakh in FY 2027-28 and, accordingly, requests the Hon'ble Commission to allow the same under Regulation 25(2)(a) and 25(2)(c) of the Tariff Regulations 2024.

xliv. Refurbishment of Economizer Coil

605. It is submitted that the economizer, along with the air preheater, enhances boiler



efficiency by approximately 20%. However, due to the characteristics of coal and the high ash content in Petitioner's generating station, the economizer is prone to leakage. Additionally, the economizer tubes have thinner walls compared to other boiler tubes. The increased velocity of flue gases, caused by the reduced flow path, exacerbates erosion in the economizer.

606. The economizer in the 2nd pass of the boiler comprises 198 coils arranged in an inline configuration, arranged into the Top Bank and Bottom Bank. The Top Bank contains 33 rows of tubes, each measuring 13,716 mm in length, while the Bottom Bank consists of 30 rows of tubes of the same length. Access is available to the top and bottom rows of each coil; however, the areas between the economizer coils are inaccessible for testing and are equally susceptible to erosion.

607. Due to the complex design, position and mounting of the economizer tube banks, damage occurring between the Top and Bottom Banks cannot be repaired in situ. This necessitates the complete replacement of the affected tube bank. Furthermore, during annual overhauls, it is not feasible to inspect and measure the thickness of all tubes due to the design limitations.

608. As has been explained in True up section, the failure history of economizer tubes is concerning, as the Petitioner has reported 21 forced outages since the commissioning of both units. When tube leakage occurs in this zone, repairs can take between 36 to 116 hours, depending on the location and severity of the damage. During this period, the Unit remains shut down, leading to a loss of generation ranging from 18 MU to 61 MU per year. This was mainly due to poor coal quality and high ash content in coal. The OEM, BHEL has also, in MoM dated 13-14th June 2018, attributed these failure to coal properties having high ash content. The Petitioner craves leave of this Hon'ble Commission to rely on the



submissions made in the true-up section which are not repeated herein for the sake of brevity.

609. While BHEL has advised replacement of Economizer sections in next 4 years, based on afore-mentioned condition, it is noteworthy that the same was initiated in 2019-24 and its refurbishment pending replacement and subsequent replacement will continue in 2024-29. Thorough inspections are critical to preventing failures, but in situ inspections are hindered by the minimal gap between economizer coils. Creating additional space for inspection is not feasible and lowering the coils for inspection requires cutting all coils and connection tubes linked to the inlet and outlet headers.

610. During a typical 30-day overhaul, only about 30 coils can be inspected, leaving the majority unexamined and compromising system reliability. To address these challenges, the removal of economizer coils to ground level for inspection and repair has proven to be an effective method. This involves dismantling all top and bottom hangers from the economizer during the annual overhaul, bringing them to ground level for inspection and repair for which Economiser Platform has been proposed earlier.

611. The Petitioner maintains a spare set of economizer top and bottom coils, which are installed in place of the old ones after repair. Based on past experience, inspecting and repairing old economizer coils takes approximately six months, with high costs for both materials and services. With a set of pre-repaired economizer hangers, overhauling time can be reduced, enabling the replacement of 100% of the economizer coils within 25 to 28 days of the annual shutdown. The old coils are then refurbished and prepared for the next overhaul cycle.

In view of the current scenario, the Petitioner, through this instant Petition,



humbly seeks approval for the refurbishment of economizer coils to enhance the reliability of the plant.

612. The estimated total project cost for the refurbishment and replacement of economizer coils is Rs. 3000 Lakh, proposed to be capitalized as Rs. 600 Lakh each in FY 2024–25, FY 2025–26, FY 2026–27, FY 2027–28 and FY 2028–29. Accordingly, the Hon'ble Commission may be pleased to allow the expenditure in terms of Regulation 25(2)(a), 25(2)(b) and 26(1)(i) of the Tariff Regulations 2024.

xlv. ESP Internals

613. It is submitted that the need for replacement of ESP internals has been elaborated in the True-Up scheme for 2019-24, and the Petitioner craves leave of this Hon'ble Commission to rely on the submissions made in the true-up section which are not repeated herein for the sake of brevity.

614. It is highlighted that some part of the work has been done in 2019-24 and balance is proposed to be done during 2024-29. Therefore, Petitioner seeks Hon'ble Commission's approval for replacement of balance Electrostatic precipitator internals to improve reliability of plant under Regulation 25(1)(b) and 25(2)(a) of Tariff Regulations 2024.

615. The estimated total project cost is Rs. 1503.64 Lakh, which is proposed to be capitalized Rs. 393.64 Lakh in 2024-25, Rs. 510 Lakh in FY 2025-26, Rs. 300 Lakh in FY 2026-27 and Rs. 300 Lakh in 2027-28.

xlvi. RAPH I/L and O/L dampers

616. It is submitted that the Regenerator Air Pre- heater (RAPH) I/L (Inlet) and O/L (Outlet) dampers are crucial components located in the flue gas exit path above and below the RAPH (Regenerative Air Preheater). These dampers manage the flow of flue gas, which contains abrasive ash particles due to coal combustion in



the boiler's first pass. The quality of coal used has high ash content from 40-44% (as against 36% design value). This change requires burning more coal to achieve the necessary heat generation, resulting in higher quantities of flue gas and ash passing through the dampers.

617. The increased ash content compared to the original design value has led to significant erosion of the flue gas dampers. Repairing these dampers in situ during short maintenance overhauls is ineffective, costly and time-consuming, often requiring replacement rather than repair due to severe erosion. This effectively is due to high ash content in coal, the quality of which is beyond the control of Petitioner and qualifies as force majeure reason.

618. During any forced shutdown of one RAPH, it is critical to isolate it completely from the gas side to protect its rotor from temperature variations across different sectors (flue gas, primary air, secondary air). Failure to isolate a static RAPH from the flue gas system can lead to permanent rotor damage, resulting in extended outages and substantial generation losses.

619. Effective isolation of a malfunctioning RAPH using the flue gas dampers prevents the need for a complete Unit shutdown. This capability ensures that maintenance or repairs can be performed on one RAPH without affecting the entire Unit's operation, thereby enhancing overall Unit reliability. By avoiding complete Unit shutdowns, the approach reduces costs associated with generation losses and startup procedures following forced shutdowns.

620. The estimated cost of the project is Rs. 450 lakh with capitalization of Rs. 200 lakh in FY 2024-25 and Rs. 250 lakh in FY 2025-26. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 25(2)(b) and 26(1)(i) of the Tariff Regulations,



2024.

xlvii. Max DNA DCS Upgradation with Cyber Security SOC

621. The Petitioner's power plant is equipped with a Max DNA Distributed Control System (DCS) provided by OEM BHEL, which plays a critical role in the operation, monitoring, and control of the power plant. The DCS system, which consists of Measurement & Control System (CLCS & OLCS), Data Bus System, Operator Workstations, Engineer Workstations, Sequence of Event Recording and Annunciation System, is essential for ensuring the smooth operation of generating units, meeting generation schedules and avoiding disruptions for consumers.

622. Initially, the Max DNA DCS system was operated on Microsoft Windows XP platform. However, since 2014, Microsoft declared Windows XP obsolete and ceased providing support, including security updates. To mitigate risks, the DCS system was upgraded to Windows 7. Unfortunately, Microsoft ended support for Windows 7 also, leaving the system vulnerable to security threats due to the unavailability of updates, security patches and technical support.

623. The current HMI systems, based on Windows XP and 7, have reached the end of their service life, leading to slow performance and frequent system failures. Additionally, due to component obsolescence, spare parts and support are no longer available, posing a significant risk to the uninterrupted operation of the plant. New workstations, equipped with the latest Windows Operating System, are not compatible with the old systems, making replacement difficult in case of hardware failure. A copy of Recommendation Letter for obsolescence and upgradation of HMI-Max Stations dated 23.05.2022 is annexed herewith and marked as **ANNEXURE P/58A**.

624. The CEA's 2021 Cybersecurity Guidelines mandate that all obsolete or un-



serviceable communicable intelligent devices be phased out and replacement plans be approved by the Board of Directors. The absence of support for Windows 7 makes the DCS system vulnerable to cyber threats, compromising the safety and security of critical operational technology (OT) systems. The implementation of a Security Operations Centre (SOC) for continuous monitoring of the OT system is essential to safeguard against cyber risks and ensure operational safety.

625. At this juncture, it is relevant to note that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations such as the Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021(CEA Guidelines, 2021) dated 07.10.2021 [Refer: **Annexure P/17**]. The relevant Regulation is produced below for the ready reference -

> *"7. Compliance with Existing Rules and Regulations (1) All Users connected to or seeking connection to the grid shall comply with all the applicable regulations as enacted or amended from time to time, such as:*
> ....
> *(k) Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021."*
> ...
> *"51. Cyber Security Audit All users, NLDC, RLDCs, SLDCs, CTU and STUs, power exchanges, QCAs, SNAs, shall conduct Cyber Security Audit as per the guidelines mentioned in the CEA (Cyber Security in Power Sector) Guidelines, 2021 and any other guidelines issued by an appropriate Authority."*

626. Further, since the CEA Guidelines, 2021 are binding on the Petitioner as a legal mandate to ensure that its IT technologies in the Power System Equipment/System have the ability to be upgraded and legacy system should be phased out. The relevant regulation is presented below for reference -

> *"Article 7 Phasing out of Legacy System a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.*
> *b) The Responsible Entity shall ensure that the Information Security*



Division shall draw the list of all communicable equipment/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up the replacement plan and put up the replacement plan for approval before the Board of Directors"

627. Pursuant to aforesaid, the Petitioner also conducted Operational Technology assessment by CERT-In empanelled Auditors. Based on the Impact, risk rating and recommendations highlighted, the Petitioner has proposed a capital expenditure scheme for the upgradation of the DCS system, which will improve system reliability and mitigate the risks posed by outdated software.

Report recommendation is as follows:

"

i. *It is recommended to regularly update your operating system to avoid these issues and ensures optimal performance and security of the device. Immediate upgrade of OS is required since current control system are running on obsolete OS.*

ii. *It is strongly recommended to upgrade the OS of DCS workstation/servers so that Antivirus support is available in the form latest AV definitions It is also recommended to have a centralized AV manager so that AV definition can be updated regularly from it.*

iii. *Create a policy and Procedure inline to the OEM that OEM has to provide the validate patches as per patch management life cycle for OEM managed critical system/devices.*
Patch manager needs to be integrated with DCS network so that workstations/server can be updated from centralized location and can be mapped with the OS update cycle. It is strongly recommended that you regularly install windows patches and updates to ensure the device is protected from security threats, runs smoothly, and remains compatible with newer software and hardware."

Copy of audit report conducted for Unit 1 dated 24.01.2023 and for Unit 2 dated 01.08.2023 are attached hereto and marked as **ANNEXURE P/58 B.**

628. Given the vulnerabilities associated with the existing Windows 7-based system, and compliance of the mandate under Cybersecurity Guidelines 2021 read with IEGC Regulations, 2023, the Petitioner respectfully requests this Hon'ble



Commission for approval of 1400 lakhs in FY 2024-25 (for unit 1) and 1400 Lakhs in FY 2025-26 (for unit 2) for upgradation of the DCS system to a higher version of the Windows operating system under regulation 25(2)(b) and 25(2)(c) of tariff regulation 2024. Considering the necessity of the capital expenditure, Petitioner has placed order on L1 bidder in FY 2024-25. This upgrade will enable compliance of the mandate and ensure the continued safe and reliable operation of the power plant, mitigate cybersecurity risks and provide long-term support for the critical operational systems.

xlviii. SCADA Up-gradation

629. The upgradation of the SCADA system at Petitioner's 400 kV switchyard of the Generating Station is crucial due to the obsolescence of the current system, which lacks support for critical security updates.

630. In view of above and in order to be compliant with cybersecurity requirements, the Petitioner on 05.03.2024 made proposal to OEM with two options; Option 1 (adding extra IOs and SNMP license upgrades) and Option 2 (upgrading to a higher version with additional CPUs and upgraded software). Option 2 was initially recommended but deemed infeasible due to cybersecurity concerns and hardware/software obsolescence.

631. However, OEM further informed that the existing IT hardware and software of SCADA System do not meet the minimum requirements for the latest Micro-SCADA platform and service support for the same is no longer available. A copy of E-Mail communication dated 06.05.2022 regarding SCADA are annexed as **ANNEXURE P/59**. The relevant extracts of mail communication dated 06.05.2024 are also extracted below for ready reference -

1. The existing IT hardware (Servers, OWS/EWS) will not perform with

new Windows Server 2022/ Micro-SCADA X as it is not as per minimum hardware requirement of Micro-SCADA X platform. So, this hardware needs to be changed / replaced with new Hardware with enhanced CPU & RAM capacity.

2. *Service support for old IT hardware also not available right now.*
3. *Existing OS don't have support from OEM (Microsoft) for security patches and Windows system related updates. Hence this need to be upgraded to latest platform.*
4. *Antivirus also need to be upgraded with new platform as existing one does not have support of the latest OS.*
5. *Further, the new OS, Micro-SCADA have many updated features/benefit and complaint to new Cyber Security requirements, refer enclosed documents."*

632. As evident from the aforesaid recommendation, Upgrading to the latest Micro-SCADA platform is the only option left with the Petitioner to be compliant with the cybersecurity requirements and prevent potential operational disruptions. Needless to say, such upgradation shall safeguard against vulnerabilities, thereby supporting continuous power generation and safety of the Grid.

633. At this juncture, it is relevant to note that Regulation 7 and Regulation 51 of IEGC Regulations, 2023 explicitly mandate that all users shall comply with the applicable Regulations such as the Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021(CEA Guidelines, 2021) dated 07.10.2021 [Refer: Annexure P/17] which as stated earlier requires dated system to be replaced. The relevant Regulation is produced below for the ready reference -

"7. Compliance with Existing Rules and Regulations (1) All Users connected to or seeking connection to the grid shall comply with all the applicable regulations as enacted or amended from time to time, such as:

....

(k) Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021."

...

"51. Cyber Security Audit All users, NLDC, RLDCs, SLDCs, CTU and STUs, power exchanges, QCAs, SNAs, shall conduct Cyber Security Audit as per the guidelines mentioned in the CEA (Cyber Security in Power Sector) Guidelines, 2021 and any other guidelines issued by an appropriate Authority."



634. Accordingly, the Petitioner requests the Hon'ble Commission to allow the projected additional capital expenditure by the Petitioner of Rs. 100 lakh in FY 2025-26 under regulation 25(2)(b) and 25(2)(c) of Tariff Regulations 2024.

B.II.D. Additional Capital Expenditure Beyond the Original Scope of Work

i. Coal Pit Run-off Mechanized Drainage systems

635. It is submitted that the Hon'ble Commission *vide* Order dated 08.01.2022 in Petition No. 408/GT/2020 had allowed additional capital expenditure of Rs. 399.53 lakh during FY 2019-20 towards the Coal Pit Run-off Mechanised Drainage systems under Regulation 26(1)(c) of the Tariff Regulations 2019. However, as explained in True- up section for 2019-24, the scheme could not be executed due to local agitation. In this respect, it is noteworthy that that the Petitioner has already spent Rs. 10.92 Lakh in FY 2019-20 and the balance scheme will be executed in FY 2026-27.

636. Accordingly, the Petitioner respectfully submits before the Hon'ble Commission that the Capital Expenditure estimated amounts to Rs. 388.61 lakh in FY 2026-27. In light of the same, the Petitioner prays that the Hon'ble Commission may kindly approve the said expenditure for FY 2026-27 in accordance with Regulation 26(1)(c) of Tariff Regulations 2024.

ii. Construction of EMD Workshop

637. It is submitted that the High Tension (HT) motors count in the Petitioner's Plant is 101 and with the addition of FGD, it will increase to 120 units. The Petitioner is facing a challenge in carrying out in-house overhauling, repair and storage of any HT Motor since no dedicated space or workshop is available. This results in unsafe working conditions, an increased maintenance period and also impacts the quality

of maintenance too.

638. Presently, ID/FD/PA fan spare motors are kept at Unit-2 ID fan area and due to the open atmosphere moisture ingress threat prevails. During Annual Overhaul (AOH), the difficulty is faced for in-house overhauling of HT Motors as both the TG unloading bays get engaged for TG related jobs and lack of adequate space for carrying out parallel overhauling is not only unsafe but also leads to huge delays with non-favorable dusty atmosphere for stator winding.

639. The availability of dedicated workshop for electrical maintenance department (EMD) would ensure adequate and safe space for working during maintenance and overhaul, which would improve the availability by reducing the time for maintenance and overhaul also. In this regard, the relevant extracts of Indian Standard (IS:7293) 'The safety code for working with construction machinery' and the Factories Act, 1948 are reproduced below:

> **IS:7293-1974**
> *"2.3 Safe Access - Safe and adequate means of access including handholds and footholds shall be provided to all parts where a person may have to walk, climb or work."*
> **Factories Act, 1948,**
> *"Section7A. General duties of the occupier.*
> *—(1) Every occupier shall ensure, so far as is reasonably practicable, the health, safety and welfare of all workers while they are at work in the factory.*
> *(2) Without prejudice to the generality of the provisions of sub-section (1), the matters to which such duty extends, shall include— (a) the provision and maintenance of plant and systems of work in the factory that are safe and without risks to health; (b) the arrangements in the factory for ensuring safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances; (c) the provisions of such information, instruction, training and supervision as are necessary to ensure the health and safety of all workers at work;* ***(d) the maintenance of all places of work in the factory in a condition that is safe and without risks to health and the provision and maintenance of such means of access to, and egress from, such places as are safe and without such risks;***
> *....."*

640. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the additional capital expenditure of Rs. 60 Lakh in 2024-25 and Rs. 50 Lakh in 2025-

26 under Regulation 26(1)(b) and 26(1)(i) of the Tariff Regulations 2024.

iii. Stacker cum reclaimer

641. It is humbly submitted that the coal feeding system of Petitioner's Plant was originally designed with rail wagons unloading the coal directly at the track hopper of 4200 MT capacity that has 15 hoppers. To unload the coal continuously, the track hopper is required to be regularly emptied on conveyor belts. The conveyor belts take the coal to crusher and thereafter the crushed coal is either:

(a) fed to the desired bunker where the coal is temporarily stored for firing pulverised coal in boiler through coal mills; or

(b) sent to coal yard for stacking depending upon the quality and quantity of coal required for generation at that time.

The crushed coal is stacked in the coal yard with Stacker-cum-Reclaimer, which is also used for reclaiming this coal back and feeding again to the bunker for blending as per quality and quantity requirement for generation. As Rail wagons arrive in irregular intervals at times convenient to Indian Railways, which is not in sync with coal requirement for generation at that time, Stacker-cum-reclaimer plays very crucial role to stack the excess coal and feed the bunker with blended coal not only during the non-availability of coal in hopper when there is no wagon to unload or problem with track hopper but also during the non-availability of Crusher.

642. If the crushing/scoop system is under maintenance or under breakdown due to foreign material, red stone etc. reclaiming could be done through Stacker-cum-Reclaimer. Since coal stacking and reclaiming may be parallelly required with Rail transportation to meet the coal flow requirement for generation, the generating stations similar to the Petitioner have two Stacker-cum-Reclaimers, which also

ensures availability of one Stacker-cum-Reclaimer in case the other is out due to breakdown or maintenance.

643. Until March 2022 , when coal supply started from Railway Wagons, the coal was being received by trucks/Hyvas, most of which were directly being unloaded at track hopper as continuous flow of desired quality and quantity of coal to be sent to bunkers could be mostly controlled. Hence, the balance uncrushed (Run of Mine) coal was directly sent to coal yard by trucks/Hyvas.

644. Thus, Stacker-cum-Reclaimer was required to be operated only when the coal unloaded on track hopper was slightly different from desired quality and quantity. Further, with trucks/Hyvas lower length of track hopper was required for unloading and, hence, only 13 out of 15 hoppers were in use. As per normal practice, the original design had two Stacker-cum-Reclaimers.

645. However, due to peculiar case of Petitioner getting coal through trucks/Hyvas due to reasons beyond the control of the Petitioner that were duly acknowledged by Hon'ble Commission in Order dated 08.01.2022 also, the usage of Stacker-cum-Reclaimer was very low and, therefore, only one Stacker-cum-Reclaimer supplied by M/s Elecon was commissioned and is in operation presently for last 12 years.

646. However, upon commencement of Railway Wagons from March 2022, the coal supply is gradually shifting from Road to Rail mode. This in turn has led to following challenges: -

(a) As per the FSA with Coal Companies (CCL and BCCL), the supply of coal could be made from either from Rail or Road or Rail-cum-Road mode at the discretion of Coal Companies depending distance of or availability of Rail head at the coal mines allotted to the Petitioner (more than 40 in number). Coal supply from shorter distance mines is invariably through Road mode.



Even for mines having Rail head, the availability of rakes affects the mode of transport.

(b) Shortage of rakes/congestion for coal transportation through rail mode has been a major reason for shortages of coal in power plants dependent solely on Rail mode of transportation in the past few years. Therefore, the Sub-Group (IPP's) constituted by Infrastructure Constraints Review Committee under the aegis of Ministry of Coal reviews the weekly position of coal shortages and allocates the available rakes to different generating stations based on criticality of coal stock.

(c) The Petitioner has been seeking about 1.5 rakes per day but lower rakes are allocated to it and sometimes even allocated rake quantum is not actually materialised. In this regard, Petitioner seeks to rely on copies of relevant Communication which is annexed herewith and marked as **ANNEXURE P/60-A**.

(d) Obviously, due to discretion of Coal Companies and the Sub-Group for allocating transport mode/rakes, the proportion of coal supply from Rail or Road is not within the control of the Petitioner. However, it is expected that with removal of rail constraints by Indian Railways, the proportion of coal received from Rail mode would go up in near future. This is also evidenced by the increase in proportion of actual supply through Rail mode in last 2 years, which is shown below:

Year	Coal Received (MT)	Road Mode	Rail Mode
2022-23	4419908	71%	**29%**
2023-24	4898810	65%	**35%**

(e) Pertinently, the proportion through Rail mode has increased from 29% to 35% last year and is expected to increase by 5%, i.e. to 40%, in current year i.e. FY 2024-25 and 5% every year thereafter. Every 5% increase in Rail Mode is going to increase Rail mode quantity by about 2.5 Lakh MT of coal. Hence, FY 2023-24 level of about 17 Lakh MT receipt from Railways out of about 49 Lakh MT total coal purchase shall increase by 2.5 Lakh MT each year.

(f) From March 2022, with unloading of coal through Rail wagons, entire crushed coal of Rail mode is unloaded on track hopper and the movement of uncrushed coal to coal yard directly through trucks/Hyvas has reduced considerably with corresponding increase in stacking requirement of crushed coal unloaded by Rail wagons on track hopper. Further, all 15 track hoppers have been made operational to optimally utilise the existing infrastructure. This has led to full capacity utilization of track hopper and, hence, further increase in coal going for stacking after crushing.

(g) Thus, single track hopper is handling both rake and road mode, which needs to be emptied regularly for continuous coal feeding as per station requirements and the coal needs to be scooped out by operating the system either under bunkering or stacking. However, due to high uncertainty of the coal quality (Stone and foreign material content) and irregular timing of the Rake coal, the Petitioner cannot feed 100% Rake coal in bunkers as it may impact station parameters and may lead to forced outages.

(h) For continuous feeding, the rakes cannot be unloaded slowly as they have to be emptied and returned back in stipulated time. On the other hand, if bunker levels are healthy, the unloaded crushed coal necessarily needs to



be stacked. In effect, most of the coal from Rail mode is required to be stacked and reclaimed for parallel and continuous blending as per operational requirement. Stacking and reclaiming in parallel is possible only with two Stacker and Reclaimers.

(i) In fact, reliance is also placed on Minutes of 862nd Meeting of Sub-Group (IPPs) constituted by Infrastructure Constraints Review Committee to look into the issues of Critical Power Houses wherein it was, *inter-alia*, directed that all TPPs have to take necessary actions to optimize unloading time as to reduce the rake turnaround time as the reduced turnaround time is necessary for supply of optimum numbers of rakes. Hence, it is evident that there is a necessity of emptying the rakes early with parallel stacking and reclaiming, which requires another Stacker Cum Reclaimer. A copy of the Minutes of 862nd Meeting of Sub-Group (IPPs) constituted by Infrastructure Constraints Review Committee dated 25.10.2024 is annexed herewith and marked as **ANNEXURE P/60-B.**

(j) Further, stacking and reclaiming requirement is not continuous as it depends solely on dynamic station requirement as per beneficiary schedule. Therefore, it is not possible to use the only Stacker-cum-Reclaimer continuously for 24x365 hours. Further, there would be need for outages in working hours due to breakdown or maintenance activities.

(k) As of now, only 35% of total coal is received from Rail mode and the existing Stacker-cum-Reclaimer is being used for stacking/reclaiming more than twice the quantity it used to handle earlier with only Road mode. With further increase in Rail mode transport in coming years, that would require more parallel operation of stacking and reclaiming, working with



only one Stacker-cum-Reclaimer would not be possible as it would lead to frequent reduction/outage of generation capacity. Further, due to the non-availability of the second Stacker-cum-Reclaimer, the Petitioner would not be able to stack or reclaim the coal in parallel and during the non-availability of the succeeding feeding stream in cases of non-availability of track hopper or crusher.

(l) With the increase in operational hours of stacker reclaimer after railway operationalization, the need for redundancy in the coal handling system has become unavoidable. Further, the existing Stacker-cum-Reclaimer alone shall not be able to handle the increase in Rail mode of coal supply, delineating the need for additional Stacker-cum-Reclaimer without which additional rakes cannot be handled.

647. Hence, the acquisition of an additional Secondary Stacker cum Reclaimer is necessary not only to enhance operational efficiency and also provide redundancy in the coal handling process to avoid any generation loss, but also to ensure uninterrupted operations even in the case of maintenance, breakdowns or increased demand, contributing to the overall reliability of the power plant.

648. In addition to afore-mentioned changes, following factors have also necessitated the need for an additional Secondary Stacker cum Reclaimer: -

(a) Apart from the coal, as per the present mandate of Ministry of Power (MoP) biomass pellet firing is mandatory for every thermal plant to promote renewable sources by blending at least 5% biomass pellets, the percentage of which shall be increased gradually. As compared to coal, Pellets are not only voluminous but also very difficult to handle as their chemical properties pose fire peril.



(b) Therefore, the Petitioner has to stack these pellets in shed area (separate from Stockpile) and has to feed in bunker in the ratio of at least 5% of the total feed as per the norms. Since biomass Pellet density is almost half (700 kg/m3) that of coal (1300 kg/m3) and has lower GCV of about 3400 kCal/kg as compared to around 4000 kCal/kg, the 5% blending shall require about additional 5% (5%x4000x1300/3400/700) volume to be handled. This entire quantity i.e. 10% by volume shall be required to handled only by Stacker-cum-Reclaimer to ensure blending requirement as per the mandate.

(c) Thus, owing to higher volume of biomass pallets the handling requirement by stacker cum reclaimer shall increase further. A copy of MoP's Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants is annexed hereto and marked as **ANNEXURE P/60-C**.

(d) In order to implement the above mentioned coal receiving and biomass pallets handling plan as per above mandate along with generation requirements, a second stacker cum reclaimer is a necessity for the coal handling plant.

(e) Therefore, the acquisition of another Secondary Stacker Cum Reclaimer is not only a strategic necessity but also a vital investment in operational redundancy, efficiency and long-term sustainability.

(f) The increase in coal receipt via rake mode and the current constraints imposed by a single stacker cum reclaimer emphasizes the critical need for this expenditure to secure the plant's operational continuity and resilience.

649. Now, in this context, it is necessary to explain the claim of Stacker Cum Reclaimer:

(a) Envisaging the commencement of Railway System soon, the Petitioner had



taken quotation of second Stacker-cum-Reclaimer from the OEM, M/s Elecon on 11.11.2020. A copy of Quotation dated 11.11.2020 issued by Elecon is annexed herewith and marked as **ANNEXURE P/60-D**.

(b) As Railway System could be operationalised only by March 2022, this procurement was deferred to see operational difficulties first and since now it has become essential to procure it, the work is proposed to start in FY 2025-26 and capitalised in FY 2027-28 at total cost of Rs. 9543.86 Lakh. Actual cost shall be ascertained after competitive bidding, which shall be provided during true up process. The estimated cost break-up is as follows:

Item Description	Rate (Rs. Lakh)	Total Cost (Rs. Lakh)	Remarks
Budgetary offer received for Stacker Reclaimer Received on dated 11.11.2020	24,10,00,000.00	3448.04	5.25% Escalation considered from 2020-21
Supervision of Erection Testing & Commissioning of Reclaimer (Excluding to & fro travel charges, local lodging and boarding charges and local conveyance charges)	18,000/man/day (10x365 days)	939.98	5.25% Escalation considered from 2020-21
Supply, Erection and commissioning of Yard Conveyor including technological structure	150000.00.mtr (800 m)	1200.00	



Civil Work, E&I Works		2500.00	
Total Cost (Without Tax)		8088.02	
Total Cost with GST	@18%	9543.86	

(c) Since the above cost was based on quotation received in November -2020, the Petitioner further requested quote from other potential suppliers to ascertain such projected cost. It is relevant to mention here that M/s Thysssenkrupp India ltd. submitted their budgetary quote of Rs. 8150 lakh without GST which works out to Rs. 9617 lakh at current price level and is very close to projected cost. However, actual cost shall be ascertained after competitive bidding, which shall be provided during true up process. A copy of Quotation received through Email dated 27.01.2025 issued by Thysssenkrupp India ltd. is annexed herewith and marked as **ANNEXURE P/60-E.**

(d) For cost benefit analysis of the scheme, the Petitioner has worked out the estimated savings in ECR in FY 2023-24 passed on to beneficiaries by shifting to Rail mode transportation in the following table:

Particulars	**UoM**	**Actual**					**Projected Only Road**	**Savings**
		Only Road			**Rail/Road**			
		2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2023-24**	**2023-24**
ECR-Coal	*Rs/kWh*	2.031	1.751	1.828	2.159	2.252	2.252	-
ECR-Freight	*Rs/kWh*	0.520	0.652	0.601	0.474	0.443	0.695	0.25
ECR-Other charges	*Rs/kWh*	0.050	0.062	0.064	0.070	0.072	0.072	-
ECR-Oil	*Rs/kWh*	0.024	0.020	0.024	0.035	0.033	0.033	-
ECR billed:	*Rs/kWh*	2.625	2.485	2.518	2.737	2.800	3.052	0.25
Total Scheduled generation (PPA)	*MUs*	6348	5819	7211	7455	8017	8017	-
Total billed amount for Coal	*Cr.*	1289	1019	1318	1610	1805	1805	-
Total billed amount for	*Cr.*	330	379	434	353	355	557	202.10



Freight								
Amount billed for Other charges	*Cr.*	32	36	46	52	58	58	-
Amount billed for oil	*Cr.*	15	12	17	26	26	26	-
Total amount billed to beneficiaries	*Cr.*	1667	1446	1815	2040	2245	2447	202.10

For projection of ECR- Freight only Road Mode in FY 2023-24, CAGR from 2019-20 to 2021-22 (only Road Mode) has been applied on 2021-22 value of Rs. 0.601/kWh.

(e) Thus, with 35% Rail mode transportation in FY 2023-24, there has been a saving of about 25 paise/kWh for one year. Thus, with each additional 5% increase in Rail mode, there shall be additional saving of about 3.5 paise/kWh (25x5%/35%) and with about 7000 MUs of scheduled energy in one year, this savings corresponds to about Rs. 24.5 Crore/annum making the payback period as about 4 years.

(f) This period would further decrease if Rail mode proportion increases beyond 5% in subsequent years and all such savings shall accrue to beneficiaries thereafter. These savings would not materialise if the proposed second Stacker-cum-Reclaimer is not commissioned and may even lead to lesser availability if existing old Stacker breaks-down or is taken out for maintenance.

650. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure of Rs. 9543.86 Lakh in FY 2027-28 under Regulation 26(1)(g) and 26(1)(i) of the Tariff Regulations 2024.

iv. Fire Sealing & Painting for Cables

651. It is submitted that the fire risk is most significant risk the operation of the Power



Plant. Despite all efforts to mitigate its occurrence, the risk of fire remains. Therefore, the Petitioner employs both active and passive fire protection measures. Passive Fire Protection refers to the systems implemented in a building or structure to minimize the risk of fire damage. These systems inhibit fire without the need for activation or movement, slowing its progression by preventing the spread and reducing the heat of fire systems from the source. These systems are typically required post initial installation and can function autonomously without human intervention.

652. On 24.01.2024, the Office of Chief Factories Inspector, Jharkhand directed the Petitioner to submit the Safety report in accordance with the Factories Act, 1948 and rules made thereinunder. Accordingly, the Safety Report submitted by Competent Authority after Site Audit on 14th-15th June 2024 [***Refer: ANNEXURE P/31-B.***] recommended for providing fire retardant coatings and fire stops in cable galleries and cable routes as per IS 12459. For ease of reference, the Recommendation of Safety Audit Report (relevant page 36) is reproduced below:

> *"(R)* ***Documents of system of Management of change/process/plant modification/change of procedure***
>
Observation	*Recommendation*
XXX	*XXX*
2. Fire Sealing & Painting for Electrical Cables is not adequate	*Fire retardant coatings & fire stops have not been provided in cable galleries & cable vaults which are not complying the standards of IS 12459 (CODE OF PRACTICE FOR FIRE SAFETY IN CABLE RUNS) which may put the plant safety at risk.* ***MPL has been advised to comply with IS 12459-5 standards and cable to be tied with properly***

[***Emphasis supplied***]

653. Consequently, to comply with the above direction there is a need for certified cable

coating of the highest standard. It should offer more than 120 minutes of fire protection and possess the lowest toxicity index in its class. It should also ensure no toxic outgassing upon fire exposure of coated cables and switch boards, making it one of the most superior systems for Passive Fire Protection in India.

654. The requirement for this type of Fire Sealing paint and Fire retarding board varies across different areas. It is particularly necessary for fire-prone areas such as Coal Handling Plant (CHP), Boiler, Transformer area and High Tension (HT) & Low Tension (LT) panels.

655. The estimated capital expenditure is Rs. 125 lakh across the period of 2024-29. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 26(1)(d) of the Tariff Regulations 2024.

v. Procurement of Cup lock scaffolding

656. It is submitted that Cuplock scaffoldings play a crucial role in accessing the front pass of the boilers during annual overhauls at the generating station. Since 2011, the Petitioner has relied on a single set of Cuplock scaffolding supplied by BHEL to facilitate inspections and maintenance up to the goose neck area of the boilers at a height of about 50 m. Further, over the past 11 years of continuous operation, this scaffolding set has endured significant wear and damage due to frequent use and aging.

657. Given the Petitioner's boilers have been in continuous operation since their installation, there is a pressing need to inspect and address issues in critical areas above goose neck area . such as the Divisional super heater, platen super heater, and reheater at roof level at height of about 70 m. These areas are prone to tube leakage, necessitating thorough inspection, rectification and potential



replacement of components during upcoming overhauls. As existing scaffoldings is unable to reach these heights , a temporary scaffolding was being used, which poses safety threat. This is proposed to be replaced with new cuplock scaffolding of adequacy height to meet the requirement of maintenance of safety under Section 7A of Factories Act, 1948. The relevant section is reproduced below for ease of reference-

> *"7A. General duties of the occupier.—(1) Every occupier shall ensure, so far as is reasonably practicable, the health, safety and welfare of all workers while they are at work in the factory.*
> *(2) Without prejudice to the generality of the provisions of sub-section (1), the matters to which such duty extends, shall include—*
> ***(a) the provision and maintenance of plant and systems of work in the factory that are safe and without risks to health:***
> *(b) the arrangements in the factory for ensuring safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances;*
> *(c) the provisions of such information, instruction, training and supervision as are necessary to ensure the health and safety of all workers at work:*
> *(d) the maintenance of all places of work in the factory in a condition that is safe and without risks to health and the provision and maintenance of such means of access to, and egress from, such places as are safe and without such risks;*
> *(e) the provision, maintenance or monitoring of such working environment in the factory for the workers that is safe, without risks to health and adequate as regards facilities and arrangements for their welfare at work……."*

658. To facilitate safe and efficient operations during the overhauls, the Petitioner plans to procure an additional set of Cuplock scaffolding. This additional set will specifically support reaching and working on the Divisional super heater, platen super heater and reheater at roof level. By replenishing the damaged components of the existing scaffolding and sourcing additional material, the Petitioner aims to enhance safety and ergonomics during annual overhauls. This initiative is crucial for maintaining operational integrity and ensuring that inspection and maintenance tasks can be carried out safely effectively in these critical boiler areas



above the goose neck level during boiler overhaul. Skyclimber and Scaffold is an integrated part of boiler and required to work at height safely in terms of Section 7A of Factories Act, 1948.

659. In this regard the Competent Person in its Report of Safety Audit dared 14th-15th June 2024 [Refer Annexure P/31-B] has recommended as follows:

> *"Observation:*
> *Height at Work*
> .....
> *Skyclimber is required for internal inspection and maintenance of boilers.*
> *Recommendation:*
> *a) Some equipment like Sky climber need rectification as any operational malfunction may lead to serious injury. MPL team has been advised to properly maintain/replace equipment which are having high safety impact while doing maintenance jobs at site."*

660. Accordingly, the Petitioner humbly requests the Hon'ble Commission to approve this expenditure of a total of Rs. 700 lakh [i.e., Rs. 200 Lakh each in FY 2024-25, 2025-26 and 2026-27 and Rs. 100 Lakh in FY 2027-28] under Regulation 26(1)(b) and 26(1)(d) of Tariff Regulation 2024.

vi. Zero Land Fill Waste Processing Unit

661. The Jharkhand State Pollution Control Board (JSPCB) through its letter dated 13.03.2024 has directed State Government to ensure implementation of Zero Landfill Policy in terms of Solid Waste Management Rules, 2016. Following are the said Rules:

> *"56. **"waste generator" means and includes every person or group of persons**, every residential premises **and non-residential establishments** including Indian Railways, defense establishments, **which generate solid waste;***
> *57. **"waste hierarchy" means the priority order in which the solid waste is to should be managed** by giving emphasis to prevention, reduction, reuse, recycling, recovery and disposal, **with prevention being the most preferred option and the disposal at the landfill being the least;***
> *4 Duties of waste generators.- (1) Every waste generator shall,-*
> *(a) segregate and store the waste generated by them in three separate streams*



namely bio-degradable, non-biodegradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorized waste pickers or waste collectors as per the direction or notification by the local authorities from time to time;
(b) wrap securely the used sanitary waste like diapers, sanitary pads etc., in the pouches provided by the manufacturers or brand owners of these products or in a suitable wrapping material as instructed by the local authorities and shall place the same in the bin meant for dry waste or non- bio-degradable waste;
(c) ***store separately construction and demolition waste****, as and when generated, in his own premises and shall dispose off as per the Construction and Demolition Waste Management Rules, 2016; and (d) store horticulture waste and garden waste generated from his premises separately in his own premises and dispose of as per the directions of the local body from time to time.*
(2) ***No waste generator shall throw, burn or burry the solid waste generated by him, on streets, open public spaces outside his premises or in the drain or water bodies.***
16. Duties of State Pollution Control Board or Pollution Control Committee.- (1) ***The State Pollution Control Board or Pollution Control Committee shall,- (a) enforce these rules in their State through local bodies*** *in their respective jurisdiction and review implementation of these rules at least twice a year in close coordination with concerned Directorate of Municipal Administration or Secretary-in-charge of State Urban Development Department;"*

[***Emphasis supplied***]

A copy of JSPCB's Letter dated 13.03.2024 is annexed herewith and marked as **ANNEXURE P/61-A.** A copy of Solid Waste Management Rules, 2016 (dated 08.04.2016) (relevant pages) is annexed herewith and marked as **ANNEXURE P/61-B**.

662. It is submitted that the Landfill Directive of JSPCB aims to protect both human health and the environment. It aims to prevent or reduce as much as possible, any negative impact from landfill on surface water, groundwater, soil, air and human health and hence mandates zero land fill.

663. As per the Solid Management Rules 2016, the landfill site shall be 100 meters away from a river, 200 meters from a pond, 200 meters away from highways, habitations, public parks and water supply wells and 20 km away from airports/airbase.



664. Accordingly, this project is being initiated with the alignment of the above mandate and sustainability policy of Tata Power i.e., the establishment of "ZERO WASTE TO LANDFILL". The Petitioner has consulted with the Central Mechanical Engineering Research Institution (CMERI) for providing it with suitable technology to process its municipal waste to convert into the circular economy. According to the guidelines of the CMERI on processing of waste as a part of a circular economy, the Petitioner propose setting up of waste management/processing unit

665. In this regard, a capital expenditure of Rs. 120 lakh is planned for the FY 2024-25 to set up the "Zero Waste to Landfill" waste processing unit. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 26(1)(b)of the Tariff Regulations 2024.

vii. Ash Silo Loading Arrangement for Railway Wagons

666. It is submitted that after the commissioning of Plant's Railway infrastructure, movement of Rail borne coal as well as loading/dispatch of CFA/Pond Ash from Ash Silos/Pond to the newly constructed Wharf has commenced. Approximately 14000 MT/ Day of Road/Rail borne coal is being received to cater to the needs of both the Units of the Petitioner's Plant to achieve the station PLF target whereas around 5000 MT/day of ash is being generated during the utilisation of coal.

667. The generated ash quantity is being allocated to the different agencies which is collected and transported through Hyva & bulker from Ash silos to abandoned mines & cement plants respectively. Pond ash is dispatched for low land filling through road and rail transportation. For rail transportation internal shifting of ash is being made by Hyva to the newly constructed Ash Wharf for loading/unloading to the Ash Rakes as per MOEF guidelines and thereby



dispatched to the distant Cement Industries/ embankment Construction.

668. In order to increase ash Utilization, the Petitioner, with the commissioning of Railway Infrastructure has tied up with various Cement Industries of North East as well as Ash Traders for the Supply of both Fly Ash to Cement Industries and Pond Ash and for Embankment Construction.

669. As of now the Petitioner has successfully dispatched 72 Nos of Ash Rakes. Off late, the Petitioner has also constructed a dedicated Ash Wharf for the dispatch of ash to the distant Cement Industries for which the Petitioner appoints Transporters for carrying out the internal ash shifting from Main Silo/ ash Pond to the Ash wharf by Hyva covering a distance of almost 10 km up and down from Ash Pond to the Ash Wharf.

670. In doing so, there are some perpetual limitations associated with this type of Mode of Operation such as Hyva for internal transportation run on a 24X7 basis and use the plant's internal service road which becomes highly unsafe for pedestrians as well as passing bikes or small cars. During transportation, there is fugitive dust emission as well and the road becomes unclean due to spill over of ash from the Hyva. The ash which is stocked in the Ash Wharf inspite of suitable spraying arrangement is susceptible to dry wind, causing pollution to the nearby villages, for the entire operation, manpower is involved increasing the risk of accidents and lung disease. A huge cost is associated with the entire operations of internal shifting right from deployment of Hyva to water tankers for spraying and covering the stowed ash with tarpaulin.

671. Often during agitation at the Plant's main Silo, loading of Hyva for internal shifting gets hampered leading to delays in building up stock at the ash wharf.

672. This Project aims at building two numbers of Ash Siloes at the Ash Wharf of 2000

MT each such that Ash from the inlet point of the existing Main Silo can be diverted and stored in the newly constructed Ash Wharf Silo through a Piping Arrangement following which Railway wagons can be directly loaded from the newly constructed Ash Wharf Silo. This would not only reduce ash disposal cost but also fugitive emission in the silo/wharf area. Detailed computation in respect of the cost benefit analysis has been provided in section dealing with Ash Disposal Expenses for FY 2024-25 to FY 2028-29.

673. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure of Rs. 2500 lakh in FY 2027-28 under Regulation 26(1)(e) and 26 (1)(i) of the Tariff Regulations 2024.

viii. Extension of Store

674. This scheme is continuation of store renovation initiated in 2019-24, the reasons and justifications for which have been given in true-up section and the Petitioner craves leave of this Hon'ble Commission to rely on the submissions made in the true-up section which are not repeated herein for the sake of brevity.

675. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure with total estimated cost of Rs. 180 Lakh in the FY 2024-25 and FY 2025-26 under Regulation 26(1)(d) and 26(1)(b) of Tariff Regulations 2024.

ix. Concertina Coil on Top of Boundary Wall

676. It is submitted that in November 2018, the Intelligence Bureau (IB) conducted a security inspection at the plant premises of the Petitioner, identifying critical security vulnerabilities and issuing directives to enhance safety measures due to perceived threats from nearby areas with a presence of CPI (Maoist) cadre and frequent gate blockades by affected local communities.



677. The IB's assessment highlighted inadequate and unsustainable sections of concertina wire along the perimeter wall, stressing the urgent need for its continuous deployment to regulate security issues effectively. Concertina wire, due to its flat design, offers quick deployment and serves as a robust obstacle against intrusions, ensuring enhanced security, affordability, low maintenance, and durability.

678. The Petitioner, now having completed the boundary wall in 2019-24 tariff period and to address these security concerns comprehensively, proposes a phased project to install a concertina coil on top of the boundary wall, covering approximately 13,500 meters by FY 2028-29. This initiative aims not only to deter crime and protect assets but also to prevent sabotage and unauthorized access, thereby, safeguarding enterprise interests and ensuring a secure working environment for employees. Additionally, the project promises cost savings compared to traditional security measures like foot patrols, offering a reliable and efficient solution to maintain the integrity and safety of the plant premises. The IB Report was submitted in the proceedings for Petition No. 408/GT/2020, relevant extract of which is as follows:

> *"SECURITY RECOMMENDATIONS:*
> *(1) PHYSICAL SECURITY*
> *1. Barbed wire fence on both sides of the village road passing through the middle of installation may be replaced with masonry perimeter wall on both sides with the provision of concertina coil overhang.*
> ***2. Concertina coil overhang may be provided all over the perimeter wall.***
> *3. The patrolling track along the perimeter wall is not metalled. It is away from the perimeter at several points and it is not continuous. The continuity of the motorable patrolling track is essential for reaching of security personnel and fire tenders in the remotest areas.. A metalled patrolling track may be laid all along (near) the perimeter for seamless movement of security personnel and fire tenders....."*
>
> [***Emphasis supplied***]

679. In terms thereof, the project is proposed to be executed phase wise:

(a) In FY 2025-26, 4500 m, starting from Main gate to ATM gate via underpass to TPSDI gate.

(b) In FY 2026-27, 4500 m, starting from TPSDI gate to ATM gate via Intake water gate.

(c) In FY 2027-28, 4500 m, starting from the Underpass to Main gate via CHP, Sana boundary along with rail line.

(d) In FY 2028-29, rest Ash pond area.

680. The total project cost is estimated to be Rs. 200 lakh (in FY 2025-26 to FY 2028-29). Further, the Capitalization phasing and the details of apportioned Project Cost are as shown in the following Table.

Financial Year	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Total**
Estimated Cost in Rs. Lakh	50	50	50	50	200

681. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 26(1)(d) of the Tariff Regulations 2024.

x. Installation of CCTV

682. It is respectfully submitted that the surrounding areas of the Petitioner's generating station are known to be strongholds of CPI (Maoist) cadre, thereby posing a significant security concern. Additionally, there exists a persistent risk of damage to the plant's infrastructure and operations caused by outsourced workers and employees, particularly during strikes or agitations. Several such disturbances have been reported in the past, underscoring the critical need for

enhanced security measures.

683. In light of the foregoing, the Petitioner prays that this Hon'ble Commission may kindly consider the installation of CCTV systems across the plant premises. Such a measure would act as a deterrent to potential security threats and enable real-time monitoring of activities within and around the plant, thereby ensuring the safety and security of its operations and infrastructure. In this regard, the Intelligence Bureau (IB), in its recent report dated 15-16th February 2024, has strongly recommended that:

> *"14 Security recommendations.....*
>
> *3. CCTV at gates may be installed at persons height so that clear image of driver, occupants of vehicle and vehicle number may be captured.*
> *4. CCTV footage may be kept for a minimum of 90days.*
> ***5. CCTV cameras should be aligned, positioned, numbered and laid out to allow operators to easily follow and intruder from one view to another."***

As submitted earlier, a copy of the IB Report (confidential) shall be submitted as and when directed by this Hon'ble Commission.

684. In view of the IB report referenced above, the Petitioner proposes the installation of new cameras at strategic locations within the plant premises to enhance the safety and security of the plant. In view thereof, it is necessary to install 108 cameras during 2024-29 which also includes installation of Video Analytics.

685. In view thereof, the estimated total cost for procurement and installation of new camera is Rs. 495 Lakh, which is proposed to be capitalized as Rs. 120 Lakh in FY 2024–25, Rs. 225 Lakh in FY 2025–26 and Rs. 150 Lakh in FY 2026–27.

686. Accordingly, the Petitioner humbly requests this Hon'ble Commission to grant approval for this proposal under Regulation 26(1)(d) of Tariff Regulation 2024, which is critical for enhancing the security, operational efficiency and reliability of



the system

xi. Safety (platform in coal mill area)

687. This scheme is continuation of true-up period and, accordingly, the reasons and justifications for which have been given in true-up section and the Petitioner craves leave of this Hon'ble Commission to rely on the submissions made in the true-up section which are not repeated herein for the sake of brevity.

688. The Estimated cost of the project is Rs. 100 lakh in FY 2024-25, Rs. 50 lakh in FY 2025-26 and Rs. 50 lakh in FY 2026-27. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure under Regulation 26(1)(d) of the Tariff Regulations 2024.

xii. Upgradation of HP Bypass system

689. It is submitted that the Steam Turbine operates under normal conditions with steam temperatures reaching approximately 540°C. During a shutdown event, the turbine undergoes coasting down from its synchronous speed of 3000 RPM. To prevent boiler tripping and maintain operational stability, the High-Pressure Bypass (BD & BPE) system plays a crucial role, originally integrated as part of the Unit's initial project package.

690. Over time, the need for system upgrades has become necessary to align with future demands and mitigate inherent operational challenges. The current servo control principle used in valves and actuators relies on pressurized oil, where servo valves operate by controlling oil flow through 3-micron holes. However, these tiny holes are prone to clogging from dust and dirt in the oil, even with diligent maintenance, leading to temporary system failures during emergencies or frequent operations.

691. To address these issues, an upgraded solution using proportion control valves has

been successfully implemented but only for the Low-Pressure Bypass (LPBP) system supplied by M/s. CCI, has demonstrated stable performance since commissioning. Failure incidents with HP Bypass valve stems and actuators, resulting in partial generation losses, have highlighted the need for improvement. Failures were attributed to factors such as sharp cross-sectional changes, poor material quality due to inadequate heat treatment and manufacturing imperfections like improper alignment and sharp transitions. A copy of the Communication dated 04.07.2023 issued by M/s CCI in this regard is annexed herewith and marked as **ANNEXURE P/62.**

692. To enhance valve reliability and longevity, a non-weld seat design patented by M/s. CCI has been chosen. This design eliminates sharp areas in valve and actuator stems, utilizes high-strength materials for components like the X19 spindle and undergoes rigorous manufacturing, heat treatment and surface hardening processes. Additional design features include specially designed flat sealing surfaces to minimize erosion from flashing condensate, hard facing on erosion-prone areas and a quick-change seat that simplifies maintenance without welding and Post-Weld Heat Treatment (PWHT), thereby improving overall valve safety and ease of maintenance.

693. The proposed project aims to achieve several benefits such as mitigating risks of partial or complete generation loss due to sudden HP Bypass valve or actuator failures. Reduce DM (Demineralized) water loss and noise emissions by avoiding prolonged venting of safety valves to the atmosphere. Ensure sustained flow through boiler heating surfaces, crucial for protecting the re-heater during Unit start-ups. Enable the Unit to continue operating on house load in case the grid cannot accept power, maintaining operational flexibility and reliability.

694. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital expenditure of Rs. 650 Lakh in FY 2024-25 and Rs. 650 Lakh in FY 2025-26 under Regulation 26(1)(i) of the Tariff Regulations, 2024.

xiii. Road Over Bridge

695. It is submitted that the Petitioner's generating station receives nearly 14,000 metric tons of coal daily via road and rail, generating 5,000 metric tons of ash daily. This ash is allocated to various agencies for collection and transportation as per environmental guidelines.

696. The need for a Road Over Bridge (ROB) arose due to disruptions in vehicle movement caused by the regular receipt of coal rakes and the placement of empty ash rakes for loading at the newly constructed wharf. The ROB aims to ensure the safe and efficient movement of vehicles, including emergency services and personnel across the plant's critical areas. Furthermore, the Standards for Road Rail Level Crossings also stipulates that the road rail level crossings despite being adequately designed are accident prone and, therefore, where it is not possible to construct over/under bridges due to technical/financial constraint, the safety standards must be adhered to. In this regard, reliance is placed on Railway Standards for Railroad Level Crossing (dated 1999) and its relevant extract is reproduced below for ease of reference-

> *"1.1.* ***Road-rail level crossings, however, adequately designed and constructed, are accident prone.*** ***<u>However, where it is not possible from engineering and economic considerations</u>*** *to provide road over/under bridges, and level crossings have to be provided, the standards given here under should be followed in the interest of maximum safety."*
>
> [***Emphasis Supplied***]

A copy of the Railway Standards for Railroad Level Crossing (dated 1999) (relevant pages) is annexed herewith and marked as **ANNEXURE P/63.**

697. Hence, initially, the project considered a Foot Over Bridge (FOB) but was later revised to an ROB due to increased complexity and safety concerns. The ROB will be constructed near the OHE Mast–MPL-13/39 to facilitate uninterrupted movement of heavy vehicles and personnel. A detailed field survey was conducted to record the topography and elevation of the area and an engineering plan was prepared and finalized after Petitioner's scrutiny. Geotechnical investigations have been carried out and the findings are being analyzed to prepare a comprehensive report. The ROB will significantly improve safety and operational efficiency by providing a dedicated route for vehicles and personnel, reducing the risk of accidents and ensuring smooth coal and ash handling operations.

698. The estimated cost of the ROB project is Rs. 1300 lakh. The project aims to enhance safety and operational efficiency at the Petitioner's Plant by providing a reliable and safe route for vehicle and personnel movement.

699. In view of the above, the Petitioner plans to incur an additional capital expenditure of Rs. 1300 lakh in FY 2027-28 towards the Road Over Bridge and accordingly, requests the Hon'ble Commission to allow the same under Regulation 26(1)(b), 26(1)(d) and 26(1)(i) of the Tariff Regulations 2024.

xiv. Unit wise segregation of PWS HT Board

700. It is submitted that at the Petitioner's generating station, currently there is a dedicated and common HT Power and Motor Control Centre (PMCC) Primary Water Supply ("**PWS**") catering to the water requirement of both Units. The 6.6 kV switchboard supplies the entire raw water and cooling water system for both Units.

701. However, with the increasing age of the plant, the risks of breakdown are increasing as well and any fault in PWS Bus or bus-coupler may result in forced

outage of both Units. Additionally, during the Annual Overhaul of one of the Units, it is not possible to carry out the outage of both the buses of the HT board as the other Unit remains under operation, this creates a very high risk in maintenance of Bus-Coupler panel, due to which the maintenance of bus-coupler cannot be carried out.

702. In the current setting, there are 2 CW Pumps namely CWP#1A and CWP#2A in Bus A and similarly, 2 CW Pumps namely CWP#1C and CWP#2C in Bus B. Therefore, during the Annual Overhaul of a Unit when either Bus A or Bus B is taken down for maintenance, generation of the running Unit needs to be brought down due to unavailability of one CW Pump.

703. The situation leads to generation being carried out on part load for a minimum of 8 hrs (i.e. 4hrs for maintenance of each of the bus), this problem can simply be avoided if there are separate HT Board for Unit-1 and Unit-2 as the running unit will not be affected during the Annual Overhaul of the other Unit.

704. Hence, the need has arisen to have completely separate PWS HT Boards for Unit-1 and Unit-2 along with dedicated Unit-wise switchboard catering to Unit-wise Cooling Water (CW) Pumps, ACW Pumps and Cooling Tower (CT) Fans.

705. Therefore, the aforesaid expenditure may kindly be allowed at Rs 400 lakh for FY 2028-29. The Petitioner prays to the Hon'ble Commission to approve the aforesaid Additional Capital Expenditure for increased efficiency and reliability of the plant under the Regulation 26(1)(i) of Tariff Regulations 2024.

xv. Reliability (Structural Strengthening - BTG, CHP)

706. This is continuation of the scheme of Structural Strengthening of BTG, CHP and Crusher House executed in 2019-24. Detailed reasons and justifications have been provided in true-up section and the Petitioner craves leave of this Hon'ble



Commission to rely on the submissions made in the true-up section which are not repeated herein for the sake of brevity.

707. In view of the above, it is humbly prayed before the Hon'ble Commission to allow Rs. 480.86 lakh in FY 2024-25 and Rs. 200 lakh in FY 2025-26 in this regard and accordingly, requests the Hon'ble Commission to allow the same as additional capital expenditure under Regulation 26(1)(d) and 26(1)(i) of the Tariff Regulations 2024.

xvi. Ash Wharf

708. It is submitted this in continuation of the scheme proposed in the true-up section of the present Petition and the contentions raised are reaffirmed and not being repeated for the sake of brevity.

709. Accordingly, the Petitioner requests the Hon'ble Commission to allow the projected additional capital expenditure by the Petitioner of Rs. 121.40 lakh in FY 2024-25 and Rs. 584 lakh in FY 2025-26 under Regulation 26(1)(b), 26(1)(e) and 26(1)(i) of the Tariff Regulations 2024

Re. DECAPITALIZATION

710. Decapitalization against the proposed Capital Expenditure Schemes involving complete or partial Replacement of the assets have been worked out by de-escalating the value of the new asset by 5% per year until the year of capitalisation of the old asset and the same has been considered for arriving at net Addition during 2024-29.

711. However, it may kindly be noted that such decapitalization is on a provisional basis and is subject to truing-up at the end of the Tariff Period. Detailed working for Decapitalization for the proposed Capital Expenditure Schemes is enclosed and marked as **ANNEXURE P/64**. Proposed decapitalization for 2024-29 is



summarized in the following Table:

Table 38: Summary of Proposed Decapitalization for 2024-29

Historical/Original Value	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Decapitalization	1317.11	1653.59	1142.42	1775.18	305.41	6193.71

712. The Petitioner humbly requests that in the event if certain additional capital expenditures are not being considered by the Hon'ble Commission after prudence check, the decapitalization corresponding to said ACE may kindly be excluded for the purpose of tariff. This shall avoid double deduction from the capital cost being allowed and the same would be fair and just.

Re. NORMATIVE IDC ON EXCESS EQUITY FOR 2024-29

713. The Petitioner humbly submits that the proposed additional capital expenditures for period 2024-29 has been envisaged to be funded through internal accruals without any actual loan. With regard to claim of Normative IDC on Normative Loan in excess to 30% of the equity, the Petitioner humbly seeks liberty of the Hon'ble Commission to claim the Normative IDC on excess equity at the time of truing-up for 2024-29 based on actual cash flows pertaining to these capital expenditures on quarterly basis.

Re. ANNUAL FIXED CHARGES FOR 2024-29

714. The Annual Fixed Charges comprise of the following components:

(f) Return on Equity;

(g) Interest on Loan;

(h) Depreciation;

(i) O&M Expenses; and

(j) Interest on Working Capital.



Re. RETURN ON EQUITY

715. Regulation 30 of Tariff Regulations 2024 stipulates the following norms for Return on Equity,

> *"**30. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.*
>
> *(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:*
>
> *(3) Return on equity for new project achieving COD on or after 01.04.2024 shall be computed at the base rate of 15.00% for the transmission system, including the communication system, at the base rate of 15.50% for Thermal generating station and run-of-river hydro generating station and at the base rate of 17.00% for storage type hydro generating stations, pumped storage hydro generating stations and run-of-river generating station with pondage;*
>
> *Provided that return on equity in respect of additional capitalization beyond the original scope, including additional capitalization on account of the emission control system, Change in Law, and Force Majeure shall be computed at the base rate of one-year marginal cost of lending rate (MCLR) of the State Bank of India plus 350 basis points as on 1st April of the year, subject to a ceiling of 14%; Provided further that:*
>
> *i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*
>
> *ii. in case of an existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, the rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;*
>
> *iii. in the case of a thermal generating station:*
>
> *a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate as specified under Regulation 45(9) of IEGC Regulations, 2023.*
>
> *b) an additional rate of return on equity of 0.125% shall be allowed for*



every incremental ramp rate of 0.50% per minute achieved over and above the ramp rate specified by Central Electricity Authority, subject to the ceiling of additional rate of return on equity of 1.00%

31. Tax on Return on Equity. *(1) The rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. The effective tax rate shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the concerned generating company or the transmission licensee by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon.*

Provided that in case a generating company or transmission licensee is paying Minimum Alternate Tax (MAT) under Section 115JB of the Income Tax Act, 1961, the effective tax rate shall be the MAT rate, including surcharge and cess;

Provided further that in case a generating company or transmission licensee has opted for Section 115BAA, the effective tax rate shall be tax rate including surcharge and cess as specified under Section 115BAA of the Income Tax Act, 1961.

(2) The rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

(3) The generating company or the transmission licensee, as the case may be, shall true up the effective tax rate for every financial year based on actual tax paid together with any additional tax demand, including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2024-29 on actual gross income of any financial year. Further, any penalty arising on account of delay in deposit or short deposit of tax amount shall not be considered while computing the actual tax paid for the generating company or the transmission licensee, as the case may be.

Provided that in case a generating company or transmission licensee is paying Minimum Alternate Tax (MAT) under Section 115JB, the generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year with the applicable MAT rate including surcharge and cess.

Provided that in case a generating company or transmission licensee is paying tax under Section 115BAA, the generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year with the tax rate including



surcharge and cess as specified under Section 115BAA.

Provided that any under-recovery or over recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on a year to year basis."

716. Based on the above quoted Regulations, the opening equity base for period 2024-29 pertaining to the Petitioner's Generating Station has been arrived at corresponding to the closing Equity as on 31.03.2024 along with equity additions in 2024-29 and RoE has been computed accordingly.

717. It is humbly submitted that the Petitioner is currently paying MAT and the same has been considered as effective Tax Rate for the purpose of Grossing-up of the Rate of Return. Further, based on the Additional Capitalization during Tariff Period 2024-29, as discussed in the above Sub-Sections, computation of actual RoE (Pre-Tax) for Assets under Original Scope of Work and Assets beyond the Original Scope of Work for Tariff Period 2024-29 pertaining to the Petitioner Generating Station has been tabulated as follows:

Table 39: Proposed RoE during 2024-29 – Assets Under Original Scope of Work (Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Opening Equity	168292.46	169939.14	171783.22	172610.50	173780.44
Net Addition during the year	1646.67	1844.09	827.28	1169.95	613.38
Closing Equity	169939.14	171783.22	172610.50	173780.44	174393.82
Average Equity	169115.80	170861.18	172196.86	173195.47	174087.13



Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Rate of Return (Pre-Tax)	18.78%	18.78%	18.78%	18.78%	18.78%
Total RoE	**31763.33**	**32091.15**	**32342.01**	**32529.57**	**32697.05**

Table 40: Proposed RoE during 2024-29 – Assets beyond the Original Scope of Work (Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Opening Equity	1291.15	1846.82	2518.52	2777.61	6833.26
Net Addition during the year	555.68	671.70	259.08	4055.66	142.50
Closing Equity	1846.82	2518.52	2777.61	6833.26	6975.76
Average Equity	1568.98	2182.67	2648.07	4805.44	6904.51
Rate of Return (Pre-Tax)	14.70%*	14.70%	14.70%	14.70%	14.70%
Total RoE	**230.64**	**320.85**	**389.27**	**706.40**	**1014.96**

**One year SBI MCLR as on 01.04.2024 + 350 bps Grossed with MAT Rate*

718. It is, therefore, humbly prayed that the Hon'ble Commission may kindly approve the proposed Return on Equity (Pre-Tax) on Original and Beyond the Original Scope of work for Tariff Period 2024-29 as shown in the above Tables for computation of the Annual Fixed Charges pertaining to the Generating Station.

Re. INTEREST ON LOAN

719. Regulation 32 of Tariff Regulations 2024 stipulates the Interest on Loan Capital norms:

> *"32. Interest on loan capital:*
> *(1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered gross normative loans for the calculation of interest on loans.*
> *(2) The normative loan outstanding as on 1.4.2024 shall be worked out*



by deducting the cumulative repayment as admitted by the Commission up to 31.3.2024 from the gross normative loan.

(3) The repayment for each of the years of the tariff period 2024-29 shall be deemed to be equal to the depreciation allowed for the corresponding year or period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis, and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed of by the generating company or the transmission licensee, as the case may be, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio or allocated loan portfolio;

Provided that if there is no actual loan outstanding for a particular year but the normative loan is still outstanding, the last available weighted average rate of interest of the loan portfolio for the project shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have any actual loan, then the weighted average rate of interest of the loan portfolio of the generating company or the transmission licensee as a whole shall be considered.

Provided that the rate of interest on the loan for the installation of the emission control system commissioned subsequent to date of commercial operation of the generating station or unit thereof, shall be the weighted average rate of interest of the actual loan portfolio of the emission control system, and in the absence of the actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered, subject to a ceiling of 14%;

Provided further that if the generating company or the transmission licensee, as the case may be, does not have any actual loan, then the rate of interest for a loan shall be considered as 1-year MCLR of the State Bank of India as applicable as on April 01, of the relevant financial year.

(6) The interest on the loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."

720. The Petitioner has claimed the Weighted Average Rate of Interest for computation of Interest on the Loan to be calculated on the basis of the Loan Portfolio during

the year and for the interest rate, the Petitioner, in terms of 1st proviso of Regulation 32(5) of Tariff Regulations, 2024, has considered the rate as applicable for 2023-24 for FY 2024-25 to FY 2028-29.

721. Accordingly, the following Table shows the computation of Interest on Loan for the period 2024-29. Interest on Loan has been computed by applying Rate of Interest on the Average Loan for the year which has been arrived at after considering the Opening Balance for the year, Debt component of Additional Capitalization, Deemed Repayment of Loan (Annual Depreciation) and Closing Balance derived therefrom:

Table 41: Proposed Interest on Loan during 2024-29

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Gross Normative loan – Opening	395695.09	400833.90	406704.07	409238.91	421431.99
Cumulative repayment of Normative loan up to previous year	291150.90	306946.52	323207.24	340336.47	358135.47
Net Normative loan – Opening	104544.19	93887.38	83496.84	68902.44	63296.51
Add: Increase due to addition during the year / period	6060.80	7027.69	3334.53	13435.70	1977.50
Deletion during the year	1317.11	1653.59	1142.42	1775.18	305.41
Deletion during the year (70% of de-cap)	921.98	1157.51	799.69	1242.63	213.79
Less: Decrease due to de-	712.23	929.23	668.43	1074.71	191.46

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
capitalisation during the year / period					
Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Repayment of Loan	16507.85	17189.94	17797.66	18873.71	20066.93
Net Normative loan - Closing	93887.38	83496.84	68902.44	63296.51	45184.75
Average Normative loan	99215.78	88692.11	76199.64	66099.47	54240.63
Weighted average rate of interest	8.93%	8.93%	8.93%	8.93%	8.93%
Interest on Loan	**8855.54**	**7916.25**	**6801.23**	**5899.73**	**4841.27**

722. It is, therefore, humbly requested that the Hon'ble Commission may kindly approve the proposed Interest on Loan for the period 2024-29 as computed in the above Table for computation of the Annual Fixed Charges pertaining to the Generating Station.

Re. DEPRECIATION

723. Regulation 33 of Tariff Regulations 2024 stipulates the following norms for Depreciation: -

> *"**33. Depreciation**: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In the case of the tariff of all the units of a generating station or all elements of a transmission system including the communication system for which a single*



tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that the effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which a single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, the weighted average life for the generating station or the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In the case of commercial operation of the asset for a part of the year, depreciation shall be charged on a pro rata basis.

(3) The salvage value of the asset shall be considered as 10%, and depreciation shall be allowed up to the maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in the case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for the development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of the sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system, as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for a reservoir in case of a hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing the depreciable value of the asset.

(5) Depreciation for Existing Projects shall be calculated annually based on the Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of



the year closing after a period of 12 years from the effective date of commercial operation of the generating station or transmission system, as the case may be, shall be spread over the balance useful life of the assets.

Provided further that in the case of an existing hydro generating station, the generating company, with the consent of the beneficiaries, may charge depreciation at a rate lower than that specified in Appendix I and Appendix II to these Regulations to reduce front loading of tariff.

(6) Depreciation for New Projects shall be calculated annually based on the Straight Line Method and at rates specified in Appendix-II to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 15 years from the effective date of commercial operation of the generating station or the transmission system, as the case may be, shall be spread over the balance useful life of the assets.

Provided further that in the case of a new hydro generating stations, the generating company, with the consent of the beneficiaries, may charge depreciation at a rate lower than that specified in Appendix II to these Regulations to reduce front loading of tariff.

(7) In the case of the existing projects, the balance depreciable value as on 1.4.2024 shall be worked out by deducting the cumulative depreciation as admitted to by the Commission up to 31.3.2024 from the gross depreciable value of the assets.

(8) The generating company or the transmission licensee, as the case may be, shall submit the details of capital expenditure proposed to be incurred during five years before the completion of useful life along with proper justification and proposed life extension. The Commission, based on prudence check of such submissions, shall approve the depreciation by equally spreading the depreciable value over the balance Operational Life of the generating station or unit thereof or fifteen years, whichever is lower, and in case of the transmission system shall equally spread the depreciable value over the balance useful life of the Asset or 10 years whichever is higher.

(9) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalised asset during its useful service."

724. The Plant will complete 12 years after COD on 31.03.2024, therefore the remaining depreciable value has been spread across the balance useful life in accordance with Regulation 33(5) of the Tariff Regulations 2024.

725. The computation of depreciation is provided in the Table below:



Table 42: Proposed Depreciation for Tariff Period 2024-29 (Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Opening Capital Cost	565278.70	572619.86	581005.82	584627.02	602045.69
Closing Capital Cost	572619.86	581005.82	584627.02	602045.69	604565.29
Average Capital Cost	568949.28	576812.84	582816.42	593336.35	603305.49
Freehold land	17639.91	17639.91	17639.91	17639.91	17639.91
Rate of depreciation	3.33%	3.42%	3.50%	3.64%	3.81%
Depreciable value	496178.44	503255.64	508658.86	518126.80	527099.02
Balance useful life at the beginning of the period	12.42	11.42	10.42	9.42	8.42
Remaining depreciable value	205027.54	196309.12	185451.62	177790.33	168963.55
Depreciation (for the period)	**16507.85**	**17189.94**	**17797.66**	**18873.71**	**20066.93**
Cumulative depreciation at the end of the period (w/o adjustment)	307658.75	324136.47	341004.90	359210.18	378202.40
Less: Cumulative depreciation adjustment on account of de-capitalisation	712.23	929.23	668.43	1074.71	191.46
Net Cumulative depreciation at the end of the period	**306946.52**	**323207.24**	**340336.47**	**358135.47**	**378010.95**

726. It is humbly submitted that the Hon'ble Commission may kindly approve the proposed Depreciation for Tariff Period 2024-29 as computed in the above Table for computation of the Annual Fixed Charges for the Generating Station.

Re. O&M EXPENSES

727. Regulation 36 of Tariff Regulations 2024 stipulates the Normative O&M Expenses,

> *"36. **Operation and Maintenance Expenses:***
> *"(1) **Thermal Generating Station:** Normative Operation and*



Maintenance expenses of thermal generating stations shall be as follows:

(1) Coal based and lignite fired (including those based on Circulating Fluidized Bed Combustion (CFBC) technology) generating stations, other than the generating stations or units referred to in clauses (2), (4) and (5) of this Regulation:

Year	***200/210/ 250 MW Series***	***300/330/350 MW Series***	***500 MW Series***	***600 MW Series***	***800 MW Series and above***
FY 2024-25	*40.92*	*34.04*	*27.17*	*25.78*	*23.20*
FY 2025-26	*43.07*	*35.83*	*28.60*	*27.13*	*24.42*
FY 2026-27	*45.33*	*37.71*	*30.10*	*28.56*	*25.70*
FY 2027-28	*47.71*	*39.69*	*31.68*	*30.06*	*27.05*
FY 2028-29	*50.21*	*41.78*	*33.34*	*31.64*	*28.47*

Provided also that operation and maintenance expenses of generating station having a unit size of less than 200 MW not covered above shall be determined on a case-to-case basis

"36

...

(6) The Water Charges, Security Expenses, Ash Transportation Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:

Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system or water agreement with state govt./utilities, and the norms specified by the Ministry of Environment, Forest and Climate Change subject to prudence check. The details regarding the same shall be furnished along with the petition;

Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses along with the petition seeking the determination of tariff;

Provided also that the generating station shall submit the details of year-wise actual capital spares consumed individually costing above ₹10 Lakh at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance as per Regulation 17 of Central Electricity Regulatory Commission 73 (Terms and Conditions of Tariff) Regulations, 2014 or Special Allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization."

Re. Raw Water Charges, Security Expenses

a. Water Charges:

728. Regulation 36(6) of the Tariff Regulations, 2024 stipulates that the water charges

shall be allowed separately, it is reiterated that the Petitioner's Generating Station is a Coal-based Thermal Power Plant with Induced Draft Cooling Towers utilizing a Circulating Water system for the cooling of the condenser and the ancillary equipment. Further, Raw Water is also utilized for various purposes the majority of which are listed below:

(a) Preparation of the De-mineralized Water utilized for the generation of Steam in the Boiler.

(b) De-ashing of Bottom Ash

(c) Plant usage and cleaning as Service Water

(d) Fire Hydrant System

729. It is submitted that the Water Charges are based on the Gross Generation during the year and estimated Specific Raw Water Consumption per Unit. Specific Raw water consumption in FY 2023-24 is 2.49 m^3 per MWh which is below the MoEFCC guidelines and the same is taken for projection. It is, therefore, humbly requested that the Hon'ble Commission may kindly approve the proposed Raw Water Charges for Tariff Period 2024-29 as computed in the Table below.

Table 43: Raw Water Charge proposed for Tariff Period 2024-29 (in Rs. Lakh)

Particulars	UoM	2024-25	2025-26	2026-27	2027-28	2028-29
Gross Generation	Mus	7818.30	7818.30	7818.30	7839.72	7818.30
Specific Raw water Consumption for FY 2023-24	m^3/Mwh	2.49	2.49	2.49	2.49	2.49
Total Raw Consumption	m^3	19,486,825	19,486,825	19,486,825	19,540,214	19,486,825
Rate of Raw Water Charges	Rs. /m^3	17.14	18.85	20.73	22.81	25.09
Total raw water Expenses	Rs. Lakh	3339.22	3673.15	4040.46	4456.68	4888.96

b. Security Expenses:

730. Regulation 36(6) of the Tariff Regulations, 2024 stipulates that Security expenses shall be allowed separately, and the generating station shall submit the assessment of the security requirement.

731. Based on the actual security expenses for the period FY 2019-20 to FY 2023-24, the Compounded average growth rate (CAGR) of the actual security expenses works out to 9.475% for the above period.

732. For the purpose of estimating the security expenses for the period FY 2024-25 to FY 2028-29 with the existing set-up, the security expenses of 2023-24 has been escalated year on year with the rate of 9.475%. The following table shows computation of CAGR for 2019-24 alongwith the projected Security Expenses for the generating station for the period FY 2024-25 to FY 2028-29.

Table 44: Security Expenses for the period 2019-24

Particulars	Unit	2019-20	2020-21	2021-22	2022-23	2023-24
Security Expenses	Rs. lakh	723.82	834.98	918.57	1056.85	1039.65
CAGR	%					9.475

Table 45: Projected Security Expenses for the period 2024-29

Particulars	Unit	2024-25	2025-26	2026-27	2027-28	2028-29
Security Expenses	Rs. lakh	1138.15	1245.99	1364.04	1493.28	1634.77

Re. Ash Disposal Expenses

733. As submitted in the True-up Section, due to limited capacity of Ash Pond, it is required to be evacuated regularly in accordance with the statutory provisions of

the MoEF mandating 100% ash utilization. The Petitioner has considered the options of disposing of the unutilized Ash through bulkers to sites for back filling of mines and to other approved locations for land filling and offtake by Cement companies through rakes and Ash bulkers thereby incurring the cost towards excavation and transportation of Pond Ash/Fly Ash.

734. Since inception, the Petitioner has been utilizing the nearby abandoned mines of ECL located at about 20 km from MPL's Generating Station for backfilling. However, in absence of availability of abandoned mines nearby due to deallocation in recent past and the newly allotted mine at a significantly longer distance of about 65-70 km from MPL Plant, Petitioner has presently considered the rate of disposal considering an average distance of about 41 km by also considering utilization of the nearby approved low lying areas for land filling. Relevant Documents in this regard is have been provided in True-up Section of the Petition and not repeated here for brevity. Considering the unavailability of nearby mines and in order to bring down the overall Ash Disposal Expenses year on year, Petitioner is exploring ways to increase the cost effective utilisation of Ash i.e., increase the offtake by Cement Companies through Rakes/bulkers with subsidy and simultaneously enhancing the facilities by constructing Ash Wharf and Ash Silos loading arrangement for Railway Wagon at the Petitioner's Plant for optimizing transportation logistics, controlled storage of Ash and facilitating efficient & quick loading of Ash Rakes in all seasons in addition to minimizing environmental impact.

735. With such endeavours under execution/ or in Plan, Petitioner in the instant Petition has proposed Capex Schemes namely Ash Wharf (about Rs 7 Cr) and Ash Silos loading arrangement for Railway Wagon (about Rs 25 Cr) for kind

consideration and approval of the Hon'ble Commission. As per estimation, by having these facilities in place as per Capitalization phasing proposed in the Petition, Petitioner can avoid Ash Disposal Expenses of about 40 Cr in the tariff period 2024-29 itself as summarized below.

Table 46: Projected Savings/ Avoided Ash Disposal Expenses with ACE for the period 2024-29

FY	Ash Disposal Expenses w/o ACE -A (Rs. Lakh)	Ash Disposal Expenses with ACE - B (Rs. Lakh)	Savings/Avoided Ash Disposal Expenses (A -B) (Rs. Lakh)
2024-25	6468.93	5873.93	595.00
2025-26	6792.38	6254.62	537.76
2026-27	6792.38	6254.62	537.76
2027-28	7144.22	6578.62	565.59
2028-29	7129.39	5477.36	1652.02
Total			**3888.13**

736. The Petitioner is further enclosing a calculation of projected Ash Disposal Expenses under both the Scenarios i.e. with and without having such Additional Capital Expenditure as **ANNEXURE-P/65 (COLLY.)** for kind perusal of the Hon'ble Commission. The Petitioner for the purpose of tariff has considered the projected Ash Disposal Expenses considering the benefits of the proposed Additional Capitalisation as discussed above.

737. Further, it is relevant to mention that the Hon'ble Commission after considering the submissions of the Petitioner in the previous Tariff Petitions acknowledged the cost towards 100% Ash utilization as a statutory requirement as per MoEF Notification dated 3.11.2009 and allowed Ash Disposal Expenses as claimed by the Petitioner subject to true-up at the end of the tariff period. Moreover, the Hon'ble

Commission after considering the comments of all stakeholders has duly acknowledged this cost under Regulation 36(1)(6) of Tariff regulation 2024 to be allowed separately after prudence check.

738. In view of above, Petitioner alike previous years has to incur expenses towards 100% utilization of the Fly Ash as mandated under MoEF notification for ensuing years as well due to reasons beyond the control of the Petitioner. Thus, the Hon'ble Commission is humbly requested to allow recovery of proposed Ash Disposal Expenses for FY 2024-25 to FY 2028-29. The Petitioner has projected Ash Disposal Expenses in the following Table subject to true-up.

Table 47: Projected Ash Disposal expenses for FY 2024-25 to FY 2028-29

FY	Consumption Plan MT(As Per 85% PLF) (MT)	Ash Generation (MT)	Fly Ash & Bottom Ash (Cost effective Utilisation) (MT)	FLY Ash (Stowing of Mines) (MT)	Bottom Ash Stowing to mines (MT)	Pond Ash Evacuation (MT)	Ash Disposal Cost (In Rs. Lakh)
FY-25	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	5873.93
FY-26	4555195	1883573	9,12,757	4,91,367	5,27,119	4,30,000	6254.62
FY-27	4555195	1883573	9,12,757	4,91,367	5,27,119	4,30,000	6254.62
FY-28	4567675	1888733	9,15,257	4,92,713	5,28,563	4,30,000	6578.62
FY-29	4555195	1883573	10,09,319	4,29,946	4,91,978	4,30,000	5477.36

**Detailed Computations and assumptions are provided in Tariff Forms and ANNEXURE P/65 and significant reduction in cost in FY 29 is due to the proposed Additional Capital Expenditure. Weight in col 3 is w/o Moisture and in Col 4 to 7 are with moisture.*

Table 48: Projected Ash Disposal expenses for FY 2024-25 to FY 2028-29 (Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Ash Disposal Expenses	5873.93	6254.62	6254.62	6578.62	5477.36



Re. Capital Spares

739. Further, as stipulated in the above Regulations i.e 36(1)(b), the Capital Spares can also be admitted separately if the same does not form a part of the Additional Capitalization claimed in the Tariff Period 2024-29. It is humbly submitted that the Petitioner requires several Capital Spares for the critical equipment during the present Tariff Period in order to ensure the reliability and availability of the main equipment. Further, these Capital Spares have not been included in the Additional Capitalization claimed in the earlier Section of the present Petition. The Petitioner, therefore, humbly requests the Hon'ble Commission to approve the Capital Spares as shown in the following Table for the Tariff Period 2024-29.

Table 49: Summary of Capital Spares for the Tariff Period 2024-29

Sr. No.	Name of the Scheme	2024-25	2025-26	2026-27	2027-28	2028-29	Total
i.	400 kV Switchyard	25.00	25.00	45.00	45.00		140.00
ii.	Crusher Rotor Assembly		200.00			250.00	450.00
iii.	Procurement of Condensate Extraction Pump Rotor Assembly			125.74			125.74
iv.	Procurement of Standby CW Pump and Motor			400.00	800.00		1200.00
v.	FD Fan Rotor Assembly		300.00				300.00
vi.	ID Fan Rotor Assembly			100.00			100.00
vii.	Cooling Tower Internals	200.00	200.00				400.00
viii.	IP Turbine Blades Replacement	900.00					900.00
ix.	PA Fan Rotor Assembly			300.00			300.00



Sr. No.	Name of the Scheme	2024-25	2025-26	2026-27	2027-28	2028-29	Total
x.	Procurement of TDBFP Drive Turbine Rotor Assembly			400.00			400.00
xi.	Boiler Circulating Water Pump Assembly	800.00					800.00
xii.	Procurement of LT Breaker & Relays	100.00	100.00	60.00	60.00		320.00
xiii.	Turbine Bearing set procurement	261.01					261.01
xiv.	LTSH Coil Assembly	950.00	550.00	500.00			2000.00
xv.	Procurement of Upgraded Coal Burner Tip and Nozzle			200.00	100.00		300.00
xvi.	Procurement of Sky Climber components and spares.				150.00	150.00	300.00
xvii.	ID Fan and VFD Transformer	50.00	50.00				100.00
xviii.	Replenishment of Capital Spares	675.61					675.61
	Total	**3961.62**	**1425.00**	**2130.74**	**1155.00**	**400.00**	**9072.36**
	Less 10% Residual Value	396.16	142.50	213.07	115.50	40.00	907.24
	Net Capital Spares	**3565.46**	**1282.50**	**1917.67**	**1039.50**	**360.00**	**8165.12**

740. Reasons for procurement of the above Capital Spares are provided hereunder:

i. 400 kV Switchyard

741. It is submitted that the 400 kV Switchyard encompasses essential equipment and the failure of any of these components could result in generation losses. The currently installed Isolators, Breakers, Lightning Arresters and Current

Transformer are experiencing issues such as frequent hot spots in the Isolator, alignment problems, leakage issues in the breaker, pole discrepancies and failed Lightning Arresters.

742. During a recent bay upgrade, the existing central breaker isolator was replaced with a double breaker system. The same upgrade was applied to the lightning arrester, wave trap and current transformer, enhancing them with a higher rating capacity.

743. Currently, the aforementioned equipment lack sufficient spares. If any equipment fails, it could lead to generation losses. The available spare parts are also outdated and their manufacturing lead time is extensive. In this regard, reliance is placed on OEM Recommendation *vide* Email dated 08.02.2024 which is being annexed herewith and marked as **ANNEXURE P/66**. Therefore, there is a necessity to procure spare parts to prevent any disruption in generation.

744. Consequently, the Petitioner seeks to procure 1 unit of a 3000 A Breaker set, 3 units of Current Transformer with a 3150 A current rating, 1 set of 3-phase double breaker Isolator, 1 set of a 3-phase Central breaker Isolator, 1 unit of a Wave trap and 3 units of a 336 kV Lightning arrester. This procurement will ensure the continuity of power generation, provide a swift and cost-effective solution to equipment breakdowns and minimize downtime and lost productivity.

745. It is humbly requested before the Hon'ble Commission to approve the estimated cost of Rs 140 lakh spread across the period FY 2024-25 to FY 2027-28 under Regulation 36(1)(6) of the Tariff Regulations 2024.

ii. Crusher Rotor Assembly

746. It is submitted that Rotor Assembly is the main component of Crusher (Ring Granulator) (RG1 & RG2). The Crusher crushes to the tune of 12000-15000 MT of



coal on a daily basis. Different measures are in place to segregate stones & other foreign materials from coal at different stages in the coal flow path prior to feeding into the crusher, however, still the feeded coal contains a high quantity of foreign material like stones & non-magnetic metallic material etc. Since the Crusher is directly handling ROM coal, so its internals are most vulnerable to foreign materials and over period of time its internals such as the Suspension Bar, arm and shaft have worn out.

747. It is pertinent to mention that OEM Guidelines state that the rotor assembly needs to be replaced every 3 years to avoid unplanned shutdowns and to ensure smooth functioning of the plant. In this regard it is important to note that the last replacement was carried out on 03.05.2020 and 12.09.2020 for RG#2 and RG#1 respectively.

748. Taking into account the current state of the rotor assembly and the OEM recommendations, Capital expenditure of Rs. 450 lakh for procurement of Crusher rotor assembly is planned in FY 2025-26 and FY 2028-29. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024 .

iii. Procurement of Condensate Extraction Pump Rotor Assembly

749. It is submitted that the Condensate Extraction Pump (CEP) plays a critical role in Petitioner's generating station's power generation process, circulating condensate water from the Hot well to the Deaerator at a pressure of 22 kg/cm2 through low pressure (LP) heaters, crucial for creating high-pressure steam in the cylinders. Currently, the Petitioner operates with 2 CEPs running simultaneously under normal conditions, with 1 CEP on standby.

750. However, due to the complex nature of the multistage, multi-shaft vertical pump,



any breakdown requires extensive inspection and repair, taking up to 7 days. This process involves lifting the entire assembly, opening all 6 stages and reassembling it, during which time the Unit operates without a standby pump, leading to potential genèration losses.

751. To mitigate these risks and reduce downtime, the Petitioner proposes the installation of a complete spare CEP rotor assembly that can be readily deployed in case of emergencies. This initiative aims to shorten the repair time from 7 days to just 1 day by swiftly replacing the faulty assembly with the spare. This proactive measure not only minimizes the risk of generation loss during breakdowns but also enhances maintenance efficiency during shutdowns. The availability of a standby rotor assembly will streamline annual overhauling processes, ensuring that operational parameters remain within limits and bolstering overall unit availability and reliability.

752. In summary, implementing this project will ensure uninterrupted power generation by eliminating extended downtime due to CEP failures, thereby optimizing operational continuity and safeguarding against potential generation losses associated with unplanned outages. Accordingly, the Petitioner is planning to incur the estimated total Project expenditure cost of Rs. 125 lakh in FY 2026-27 based on quotation received in FY 2021-22 as shown below.

Sl. No	Bearing Details to procure	Price Estimated (in Rs. Lakh)
01	EN6J40 CEP assembly (De-Staged, 5 stage Condensate Pump). Rotor and stator parts complete assembly	55.68
02	Considering 7.5% escalation for 5 years FY 2021-22	76.56

	to FY-2026-27	
03	Cost of other Accessories-Yoke piece in between CEP & Motor, Coupling Set, Seal Assembly	30.00
04	Total Base Price of Assembly	106.56
05	Total Cost inclusive GST	125.74

753. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024 .

iv. Procurement of Standby CW Pump and Motor

754. It is submitted that the Cooling Water Pumps (CWP) at Petitioner's generating station play a crucial role in maintaining efficient operation by cooling exhaust steam in the condenser and circulating it back to the wet cooling tower. Currently, each Unit is equipped with 3 CW Pumps operating at 100% capacity, without any standby pump available. This setup poses a significant risk as any tripping of a running pump during normal operation directly translates into generation losses due to the absence of backup. The CW Pumps are designed as multistage and multicasting units, requiring a minimum of 12-15 days for inspection and repair in case of breakdown during operation, leading to prolonged partial generation losses.

755. To mitigate these risks and ensure continuous operation, the Petitioner proposes the installation of one standby Common CW Pump assembly and interconnecting it with both Units. This standby pump can be activated as needed for either Unit, effectively eliminating the risk of generation losses caused by the sudden failure of a running pump. The necessary provisions for installation at the site have already been made through previous projects, including the interconnection setup for the standby pump.

756. The benefits of this project are substantial in terms of:

(a) **Elimination of Generation Losses**: The availability of a standby CW Pump assembly ensures uninterrupted operation even if one of the primary pumps breaks down, thereby preventing any downtime-related generation losses.

(b) **Operational Reliability**: With a standby pump in place, the Petitioner can maintain operational reliability by quickly switching to backup during maintenance or unexpected pump failures.

(c) **Cost Savings**: By preventing downtime and associated generation losses, the project contributes to significant cost savings over the long term, offsetting the initial investment in the standby pump assembly.

757. In conclusion, implementing a standby CW Pump assembly at Petitioner's generating station is crucial for enhancing operational resilience, minimizing downtime and ensuring continuous power generation without interruptions due to pump failures. This proactive approach will enhance overall operational efficiency and reliability, aligning with Petitioner's goals of optimizing plant performance and reducing operational risks.

758. The proposed estimated project cost is Rs. 1200 lakh with apportionment of Rs. 400 lakh in FY 2026-27 and Rs. 800 lakh in FY 2027-28. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulation 2024 .

v. FD Fan Rotor Assembly

759. It is submitted that at the Petitioner's generating station, the four Fans play a critical role in achieving full load for each Unit, with two fans installed per Unit i.e. 4 in all and no standby fan available. These fans are essential for maintaining



operational capacity and any sudden failure results in a unit tripping, leading to significant generation losses. Even a planned shutdown of one FD Fan reduces the Unit capacity to half load.

760. Over the past decade, these FD Fans have operated continuously amidst challenging conditions, positioned near ash and coal reject pipelines that contribute to high levels of abrasion and wear. The coal used at Petitioner's generating station contains a substantial amount of ash, up to 46%, which is due to reasons beyond the control of Petitioner and exacerbates erosion within the coal reject lines and occasionally causes leaks, resulting in spillage onto the FD Fan foundations.

761. In the past, the ingress of foreign materials has caused internal damage to FD Fan components. Each Unit can generate up to 315 MW with one FD Fan operational, indicating potential generation losses of approximately Rs.1.1 Crore (5.04 MU) per day due to reduced capacity. The static components of the FD Fans, such as ducts and casings, are less susceptible to damage compared to the rotating parts, including the rotor assembly comprising bearings, shafts, impeller blades and associated components.

762. To mitigate risks associated with FD Fan failures, the Petitioner currently maintains one spare complete rotor assembly. However, to ensure readiness for emergencies or scheduled maintenance, the Petitioner plans to procure an additional FD Fan rotor assembly in FY 2025-26, with the purchase order slated for FY 2024-25 and delivery expected within 12 months.

763. This proactive approach aims to minimize downtime, reduce the potential for forced outages, and optimize maintenance schedules, thereby safeguarding against significant generation losses and ensuring operational reliability at the



generating station.

764. The estimated expenditure for the planned scheme is Rs. 300 lakh in FY 2025-26. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024.

vi. ID Fan Rotor Assembly

765. It is submitted that at Petitioner's generating station, the ID Fans, crucial for handling hot flue gases, have been operational for a decade. Over time, they have faced significant challenges due to corrosion and erosion. These fans adjust their speed based on the load requirements of the Unit, facilitated by Variable Frequency Drives (VFDs). This variable operation places considerable stress on the ID Fan bearings, necessitating periodic replacements to maintain optimal performance and reliability.

766. Currently, the Petitioner maintains only 3 spare bearing assemblies against the 8 ID Fan bearing assemblies in operation. To ensure preparedness for emergencies or scheduled maintenance, the Petitioner plans to procure additional ID Fan bearing assemblies. This proactive measure aims to mitigate risks associated with sudden failures, which have the potential to cause forced outages and significant generation losses due to prolonged revival times.

767. The timely availability of spare ID Fan bearing assemblies is critical for swiftly restoring units to full operational capacity in the event of fan failures. This approach not only enhances equipment reliability and performance but also eliminates revenue losses resulting from Unit unavailability. By bolstering the spare parts inventory, the Petitioner aims to optimize maintenance practices, minimize downtime and uphold operational excellence at the facility. The estimated expenditure is Rs. 100 lakh in FY 2026-27.

768. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024.

vii. Cooling Tower Internal

769. It is submitted that this capital spare procurement is a continuation of 2019-24 period, the details of which are not repeated here for sake of brevity. Balance part of the procurement/replacement is being proposed in 2024-29. It is submitted that the Availability of Cooling Towers ("**CT**") are vital for any thermal power station. Each Unit of Petitioner's plant is having 22 nos. of Cooling Tower Cells and in total 44 nos. CT Cells for two Units. The effectiveness of Cooling Towers is essential to reduce the temperature of Circulating Water for condensation of exhaust steam inside the Condenser and maintenance of TG Vacuum.

770. Over a period of continuous use under a highly moist environment combined with the effect of ageing has resulted in more chances of premature failures of Cooling Tower Internals. Therefore, for reliable operation of the Cooling Tower healthiness of all components, viz, PVC fills, drive shaft, drift eliminators, flow control butterfly valves and blades of axial flow fans of the Cooling tower is very much essential.

771. Hence, it is planned to replace the Cooling tower Parts to avoid any breakdown. In view of the above facts and to increase availability and reliability of Units for smooth, uninterrupted power supply, Rs. 500 Lakh has been incurred in the procurement of IDCT Internal Spares during 2019-24 and for 2024-29 an amount of Rs. 400 Lakh spread over FY 2025-26 to FY 2026-27 is proposed here to replace the existing ones for smooth running of plant.

772. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024 .

viii. IP Turbine blades replacement

773. It is submitted that the major overhaul of Unit #2 conducted in July-August 2019 marked a significant milestone as the first capital overhaul since the Unit's commissioning in 2012. Overseen by original equipment supplier (OES) SIEMENS, the inspection revealed severe damage to the first three rows of blades on the turbine side of the IP rotor, attributed to foreign object damage (FOD). The OES in its report, apart from other operational strategy to be adopted, has recommended the following :

"spare blades to be kept in stock....damaged blades to be replaced in next MOH"

A copy of the Report (relevant pages) issued by the OES (M/s Siemens Ltd. India) is annexed herewith and marked as **ANNEXURE P/67**.

774. Given the turbine's critical role in extracting thermal energy from pressurized steam to generate power, maintaining the health and integrity of all turbine components is paramount for reliable and safe power plant operation.

775. The damage to the IP turbine blades occurred due to impacts from foreign objects, affecting the friction tightening method used to secure blades within each row. Each row typically includes one "lock blade" positively locked to the rotor, with other blades tightened through friction and pressure against each other. The impact of foreign particles can compromise this friction grip, potentially loosening blades over time.

776. During operations such as load throw-offs, tripping or over speeding, these loose blades pose a risk of dislodging due to centrifugal forces during turbine rotation. Such dislodgements can lead to catastrophic failures, damaging the turbine casing and other rotating blades, and resulting in substantial asset loss and extended periods of generation downtime.

777. In light of OES recommendation during the overhaul, it is proposed to replace the damaged blades promptly. This proactive measure aims to eliminate unsafe operational conditions within the turbine and mitigate the risk of catastrophic failure.

778. By replacing the damaged blades, continuous and healthy turbine operation can be ensured, improving overall physical parameters such as bearing vibration and other turbovisory indicators. This initiative not only safeguards personnel and machinery but also prevents potential losses from extended generation downtime and asset damage, thereby maintaining operational reliability and safety at the power plant. The estimated cost of the capital spare proposed project is Rs. 900 lakh in FY 2024-25.

779. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024.

ix. PA Fan Rotor Assembly

780. It is submitted that previously, the Petitioner experienced damage to primary air (PA) Fan blades due to the ingress of foreign materials, which disrupted operations significantly. Each Unit at the Petitioner's generating station relies on PA Fans and with loss of one PA Fan the Unit is able to achieve a maximum generation capacity of 315 MW (60% of full load only). Consequently, the partial loss of one PA Fan results in the Petitioner incurring substantial generation losses amounting to approximately Rs.1.1 Crore (5.04 MU) per day.

781. The static components of the PA Fan, such as ducts, upper and lower casings and diffusers, are relatively less susceptible to damage. However, the rotating components—comprising the PA Fan rotor assembly, including the rotor housing, bearing assembly, shaft, impeller blade bearing assembly, servomotor assembly,



blades, fasteners and lubrication oil system—are prone to wear and damage over extended periods of operation in harsh environments.

782. Currently, the Petitioner maintains one spare complete rotor assembly and blades for emergency replacements. However, with only one spare available for four operational PA Fans across Units #1 and #2 at the Petitioner's generating station, there is a need to procure an additional PA Fan rotor assembly to meet the OEM-recommended level of critical spare parts.

783. The proposed project to procure an additional PA Fan rotor assembly aims to ensure timely availability for full-load Unit revival in case of PA Fan failure. This proactive measure is expected to reduce Unit downtime, thereby enhancing equipment reliability and performance. Moreover, it will eliminate revenue losses attributed to Unit unavailability caused by PA Fan failures, which have previously led to forced outages and significant generation losses. Given the history of consecutive failures in two PA Fans, ensuring adequate spare parts availability is crucial for maintaining operational continuity and minimizing financial impacts associated with downtime and repairs.

784. It is humbly requested before the Hon'ble Commission to approve the expenditure proposed to be incurred to the tune of Rs. 300 lakh in FY 2026-27 under Regulation 36(1)(6) of the Tariff Regulations 2024.

x. Procurement of TDBFP Drive Turbine Rotor Assembly

785. It is submitted that the Turbine Driven Boiler Feed Pump (TDBFP) at the Petitioner's generating station plays a critical role in drawing feed water from the deaerator and supplying it to the boiler economizer via HP heaters at a discharge pressure of approximately 200 kg/cm2. There are two TDBPs in each Unit and four in all for both Units. During normal operations, both TDBFPs are essential at



100% capacity to achieve full Unit load. To ensure operational reliability, there is one Motor Driven Boiler Feed Pump (MDBFP) held on standby, which becomes active during Unit start-up or in the event of steam unavailability to drive the TDBFPs. Additionally, MDBFP substitutes for any non-operational TDBFP, but its operation requires significant auxiliary power due to its 1 MW motor.

786. Currently, the plant lacks a spare rotor for the drive turbine of the TDBFP. This critical component has a long lead time of at least 12 months for delivery. Therefore, any sudden failure of the drive turbine rotor would render the TDBFP unavailable for this extended period, resulting in heightened auxiliary power consumption. Moreover, breakdowns of either the remaining TDBFP or MDBFP during this waiting period would directly cause generation losses, reducing unit capacity to 50% with only one operational BFP.

787. The above capital spare proposal aims to procure a spare rotor assembly for the drive turbine, thereby mitigating risks associated with extended downtime and high auxiliary power consumption. By having a spare rotor assembly readily available, the downtime for repairing the drive turbine can be reduced to 7 days, effectively preventing an increase in auxiliary power consumption and eliminating the possibility of partial generation losses due to the breakdown of running pumps during the procurement period for a failed rotor set.

788. In summary, the implementation of the Spare Rotor Assembly project is expected to yield several benefits such as avoidance of increased auxiliary power consumption during extended breakdown periods of the TDBFP drive turbine, elimination of partial generation losses caused by breakdowns of operational pumps during the procurement period for a replacement rotor set, prevention of extended shutdown periods for TDBFP due to rotor defects identified during



annual overhauls, as a ready spare assembly will be available for immediate replacement. The estimated capital spare cost is Rs. 400 lakh in FY 2026-27.

789. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024.

xi. Boiler Circulating Water Pump Assembly

790. It is submitted that the Petitioner's generating station operates with 6 Boiler Circulating Water (BCW) Pumps across its two Units, each Unit equipped with 3 pumps following a 2 operational and 1 standby scheme. In June 2023, the Petitioner's generating station encountered a critical operational issue with BCW Pump-2C failing to start due to overcurrent protection during startup. This failure necessitated bringing the standby BCW Pump-2B into operation for Unit-2 synchronization with the grid. Subsequently, BCW Pump-2B exhibited rising cavity temperatures nearing tripping values after a few days of operation, despite attempts with OEM consultations to resolve the issue which proved ineffective. Consequently, Unit-2 had to be shut down to rectify both pumps on-site.

791. An OEM service engineer assessed the situation, replacing BCW Pump-2C with an available old spare pump after condition assessment. However, BCW Pump-2B was found to have an unacceptable Insulation Resistance (IR) value upon inspection, rendering it unusable for further operation. BCW Pump-2C underwent partial on-site overhauling and was placed back into operation as a standby, pending OEM clearance for regular operation. Since Unit 2 could not be run on single healthy pump, there was generation loss for 10 days.

792. These failures led to a 10-day outage of Unit-2, resulting in significant generation losses. To prevent such incidents in the future, the OEM also recommends inspecting and overhauling each BCW Pump every 4-5 years, with motor



rewinding and comprehensive inspection every 8 years. A copy of the relevant pages of OEM's recommendations are annexed hereto and marked as **ANNEXURE P/68**.

793. To align with the OEM's maintenance schedule, the Petitioner plans to replace 2 pumps annually per Unit, using spare pumps for replacement during scheduled shutdowns. This approach ensures that replaced pumps can be overhauled and cycled into the other Unit's operational rotation the following year.

794. Currently, the Petitioner holds only 1 spare BCW Pump against the 6 pumps in operation, highlighting the need to procure an additional spare to adhere strictly to the OEM-recommended maintenance schedule. With 2 spare BCW Pumps in stock, the Petitioner aims to manage scheduled shutdowns effectively, minimizing the risk of forced outages and mitigating the associated high costs of generation loss.

795. Given the critical nature of BCW Pumps within the boiler's water and steam circuit, any repair or replacement necessitates a full Unit shutdown, typically lasting 10 to 15 days depending on the availability of essential spares and spare pumps. Recognizing the importance of these pumps in maintaining operational continuity, the Petitioner proposes the replacement of 2 pumps per Unit to ensures readiness with essential spares to respond promptly to emergencies and minimize downtime impacts. The estimated expenditure for the project is Rs. 800 lakh in FY 2024-25.

796. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024.

xii. Procurement of LT Breaker & Relays

797. It is submitted that the Petitioner has identified the need to replace its existing LT



breakers and protection relays, which have been in operation for over 13 years and have surpassed 20000 operational cycles which is beyond recommended operational life [***Refer Annexure P/48***].

798. The ageing equipment has shown significant performance degradation, leading to frequent breakdowns, particularly in critical switchgears like Unit and station boards. This situation poses a direct threat to plant generation. The protection relays, crucial for identifying and isolating defective parts to prevent catastrophic losses, are also outdated and have reached the end of their useful life. Therefore, the Petitioner plans to retrofit these components in a phased manner to ensure the plant's smooth and reliable operation.

799. The necessity of the procurement stems from the need to enhance the reliability and stability of plant operations. New LT breakers and relays equipped with advanced technology will help in significantly improving plant performance. The inclusion of inbuilt Disturbance Recorders in the new relays will enable precise fault identification, further contributing to operational efficiency. This upgrade is essential to mitigate the risks associated with the failure of ageing equipment, which directly impacts power generation.

800. The procurement involves a comprehensive scope that includes the procurement and retrofitting of LT breakers and relays in a phased manner. The benefits of this procurement are substantial. It will eliminate frequent breakdowns, reduce inventory management complexities and ensure reliable plant operation. Additionally, the introduction of new technology and digitalization will modernize the plant's infrastructure, leading to improved efficiency and performance. These upgrades are crucial for maintaining the plant's operational integrity and supporting its long-term sustainability.

801. The estimated capital spares cost is Rs. 320 Lakh. In view of the above, the Petitioner plans to incur expenditure of Rs. 100 lakh in FY 2024-25, Rs. 100 lakh in FY 2025-26, Rs. 60 Lakh in FY 2026-27 and Rs. 60 Lakh in FY 2027-28 towards the procurement of LT breakers and relays.

802. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024.

xiii. Turbine Bearing Set procurement

803. During the Annual Overhaul of Unit-1 carried out by the Petitioner in October-November 2017, TG Bearing sets were found in non-usable condition and a new set of bearings was installed as per the recommendation of M/s BHEL [***Refer Annexure P/43***], as M/s BHEL was engaged as the principal service provider for TG Overhauling. Since only one set of bearings was procured as Initial Spares the current stock for Turbine Bearing is Nil.

804. Considering the application criticality of the installed spare and following the recommendation by M/s BHEL another set of bearings needs to be procured as capital spare. The absence of ready-to-use spare bearings can lead to extended shutdown periods, resulting in significant generation losses and potential secondary damage to other critical components due to high vibration. The benefits of this expenditure are multifaceted:

(a) Firstly, having a ready-to-use spare set of bearings will mitigate the risk of prolonged shutdowns and generation losses, which can amount to 12.6 MUs/day.

(b) Secondly, it ensures that any sudden breakdowns due to bearing failure can be addressed promptly, thereby maintaining the reliability and availability of the power Units.

(c) Thirdly, the procurement from the OEM guarantees the reliability and fitment cum interchangeability of the bearings, which is crucial given the critical application area.

805. The estimated spare cost is Rs. 261.01 lakh in FY 2024-25. Accordingly, it is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulation 36(1)(6) of the Tariff Regulations 2024.

xiv. LTSH Coil Assembly

806. It is submitted that Low-Temperature Superheater (LTSH) Coils are located in the upper section of the second pass of the boiler. The flue gas generated from coal combustion in the first pass contains a significant amount of abrasive ash particles. As these ash particles flow through the LTSH zones, they gain momentum due to the negative draft created by the suction pressure of the Induced Draft (ID) fan. The high-velocity passage of flue gas over the LTSH tubes results in erosive wear on the tube surfaces.

807. The boiler was originally designed to accommodate coal with an ash content of 36%. However, the quality of coal being fired has deteriorated, with ash content increasing to 40–44%. To generate the required heat, a higher quantity of coal must be burned, leading to increased flue gas production. The excess ash in the flue gas, compared to the design specifications, significantly impacts the LTSH tube surfaces, causing premature failures. Repairing such failures typically takes 50 to 80 hours, provided spare parts are readily available.

808. During annual shutdowns, measuring the thickness of all pressure part tubes is part of the scheduled maintenance. The LTSH section comprises 118 coils arranged in an inline configuration within the second pass, divided into a Top Bank and a Bottom Bank. The Top Bank consists of 24 rows of tubes, each

measuring 13,716 mm in length, while the Bottom Bank has 18 rows of similar length. Accessibility is limited to the top and bottom rows of each coil, leaving the areas between the coils unapproachable for testing. These inaccessible regions are equally susceptible to erosion.

809. Due to the complex design, positioning and mounting of the LTSH tube banks, damage occurring between the Top and Bottom Banks cannot be repaired on-site and often necessitates the full replacement of the affected bank. Incomplete mapping of LTSH tube thickness has led to unplanned boiler outages caused by tube failures in recent years.

810. After studying past failures, BHEL, the OEM in the MoM dated 13-14 June 2018 recommended the replacement of LTSH sections in next 4 years. For ease of reference, the relevant extracts of BHEL's recommendations in the MoM dated 13-14 June 2018 (Refer Annexure P/22B) is reproduced below:

> *"MPL presented the failure history, inspection findings for the Economizer banks, and LTSH Tubes. BHEL stated the major root cause resulting in erosion in LTSH and Economizer banks also on account of Coal Characteristics and properties. Since MPL is required to continually required to operate with .coal properties having higher ash content i.e. towards worst side of the designed coal, as per availability in the local region,* ***additional care may be exercised to ensure replacement of above Economizer and LTSH sections, at least once in next 4 years,*** *followed by scheduled periodic maintenance to maintain the safety and reliability of boiler operation for plant generation."*

811. In light of the identified issues, this proposal underscores the importance of periodic renewal of all coils to maintain the system's reliability and availability.

812. Accordingly, the Petitioner, through this instant Petition, respectfully seeks the Hon'ble Commission's approval for the replacement of 59 sets of lower and 59 sets of upper hangers of low-temperature superheater coils as capital spares to enhance the reliability of the plant, as per Regulation 36(1)(b) of the Tariff

Regulations 2024.

813. The estimated total spares cost is Rs. 2000 Lakh, proposed to be incurred as Rs. 9500 Lakh in FY 2024–25, Rs. 5500 Lakh in FY 2025–26 and Rs. 500 Lakh in FY 2026–27. We humbly request the Hon'ble Commission to approve this proposal in the interest of ensuring the plant's sustained reliability and performance.

xv. Procurement of Upgraded Coal burner Tip & Nozzle

814. It is submitted that the operation of coal burners in tangential fired boilers subjects them to significant wear and metallurgical failures. Several factors contribute to this wear, including the high ash content typically ranging from 35% to 40% and the specific chemical composition of the ash. The velocity at which the fuel-air mixture moves through the burners, the fineness of the coal particles (with 70% passing through a 200-mesh sieve) and the geometric design and material composition of the coal nozzles and tips also influence the burner's durability and performance.

815. At the generating station, failures in boiler tubes and coal nozzle tips have led to shutdowns, highlighting the critical need for proactive measures. The proposed procurement focuses on replacing the coal burner nozzles and tips to mitigate wear and improve overall performance. By doing so, the project aims to optimize coal combustion within the boiler, enhancing energy efficiency. This enhancement not only improves the utilization of coal but also contributes to the overall performance of the existing boiler system.

816. Furthermore, the improved burner technology ensures that the boiler operates efficiently even at partial loads, reducing energy wastage and enhancing operational flexibility.

817. Moreover, the upgraded components are expected to reduce boiler cycling,



thereby lowering stress on critical components such as water wall tubes. This reduction in cycling helps in prolonging the lifespan of the boiler and minimizing the frequency of maintenance interventions.

818. Ultimately, the project anticipates lowering maintenance costs associated with coal nozzle and tip replacements due to reduced wear. The procurement and installation of upgraded coal burners at the generating station represent a strategic initiative aimed at achieving higher operational efficiency, and cost-effectiveness. By addressing wear and metallurgical challenges comprehensively, the project supports the plant's objectives of sustainable energy production and reliability adherence in the power generation sector.

819. The estimated cost of the spare is Rs. 200 lakh in FY 2026-27 and Rs. 100 lakh in FY 2027-28. It is humbly requested before the Hon'ble Commission to approve the above expenditure under Regulations 36(1)(6) of the Tariff Regulations 2024.

xvi. Procurement of Sky Climber components and spares

820. Sky Climbers are essential components for accessing the entire front pass of the boilers during scheduled outage periods at the generating station. Since their initial supply by BHEL in 2011 the Petitioner has relied on two sets of Sky Climbers with 4 Hoists, for inspecting boiler pressure parts during annual maintenance over the past 12 years. However, due to continuous use over this period, many components of the existing Sky Climbers have suffered damage, necessitating regular repairs to ensure their functionality during outage periods.

821. Given that the Petitioner's generating station's boilers have been in continuous operation since 2011, frequent tube leakage issues in the water wall tubes necessitate thorough inspection and timely maintenance actions. To maintain operational efficiency and prevent Boiler Tube Leakage (BTL) conditions, it is

imperative to ensure that the Sky Climbers are maintained in a ready-to-use condition. This involves replacing damaged components and ensuring that both sets of Sky Climbers are fully operational for timely inspections and maintenance tasks during outage periods. Accordingly, the Petitioner proposed to replace the vulnerable and worn out component and spares for safe and efficient operation of sky climber.

822. The Sky Climbers which hang on and can go up and down with slings, play a crucial role in facilitating the inspection, rectification and replacement work on water wall tubes and other critical boiler components in a safe and efficient manner the photograph of sky climber is shown below:

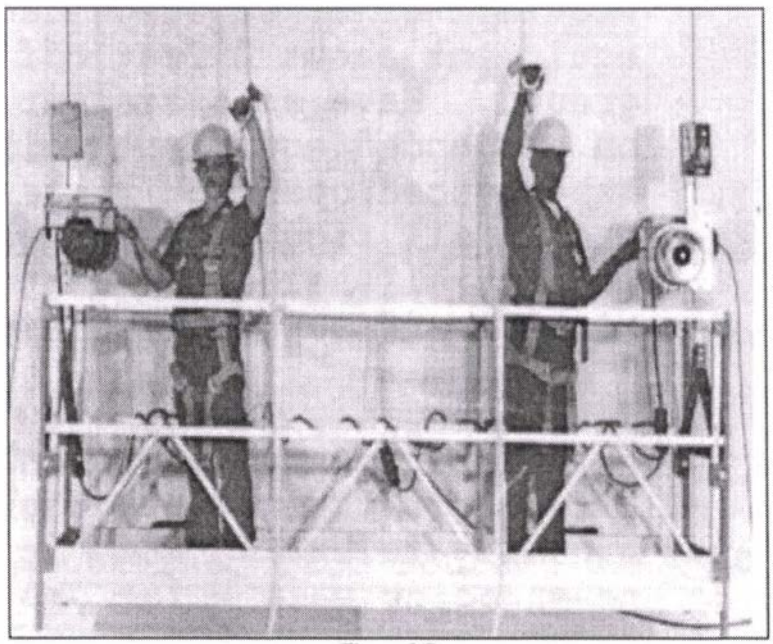


Fig 1 Pictorial Representation of SKYCLIMBER being used for inspection purpose

823. By maintaining these tools in optimal condition, the Petitioner can adhere to maintenance timelines and promptly address any defective tubes identified during inspections. This proactive approach is vital for minimizing downtime,

ensuring boiler reliability and preventing potential operational disruptions due to tube leaks. Therefore, securing the availability and readiness of Sky Climbers is essential for the Petitioner to uphold high standards of safety and operational efficiency during boiler maintenance activities. In this regard, reliance is placed on Report of Safety Audit dated 14th-15th June 2024 conducted by Competent Person notified by Chief Inspector of Factories [***Refer Annexure P/31-B***]

(S) Mechanical Integrity and specific job like working at height and confined space:

Observation	*Recommendation*
XXX	*XXX*
Sky Climber is required for internal inspection& maintenance of boilers and Inflatable Jack facilitates coil inspection coverage of larger area in less time Therefore, their proper functioning is to be maintained at any moment at site but provision is missing	***a) Some equipment like Sky climber need rectification as any operational malfunction may lead to serious injury. MPL team has been advised to properly maintain/replace equipment which are having high safety impact while doing maintenance jobs at site. b) The process of Boiler coil inspection by manual method is not advisable. Inflatable jacks & other safe pulling devices need to be used***

[***Emphasis Supplied***]

824. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above capital spares expenditure of Rs. 300 lakh under Regulation 36(1)(6) of the Tariff Regulations 2024.

xvii. ID Fan and VFD Transformer

825. It is submitted that at Petitioner's each Unit, there are 2 nos. of ID fan motor running in parallel. Both ID fan motors have dual channel winding to which power

is fed via separate LCI channels. The rated input voltage of LCI channels is 2.3 kV which is supplied via a separate service transformer of rating 3250 kVA. The total population of inservice VFD transformer are 8 nos. with no available spare.

826. At present, with 8 nos. VFD service transformers for Units 1 & 2, no spare or standby transformer is available and in the event of any failure of the service transformer, it will instantly lead to a reduction in Generation of a particular Unit as with one LCI channel in service an ID fan motor can be loaded up to 60% only. Hence, spare transformer availability needs to be ensured to reduce Generation Loss period and to ensure the smooth functioning of the plant without any unplanned shutdowns.

827. It is estimated that the Capital expenditure required for procurement and commissioning of this equipment is Rs. 100 lakh through an open tendering process and it will be executed in FY 2024-25 and FY 2025-26. Accordingly, the Petitioner humbly requests the Hon'ble Commission to allow the above additional capital spares expenditure under Regulation 36(1)(6) of the Tariff Regulations2024.

xviii. Replenishment of Capital Spares

828. The expenditure of Rs. 675.61 lakh for FY 2024-25 related to other Capital Spares Replenishment is provided in FORM 17 of the Tariff Formats and the same may kindly be referred for their break up and justifications.

Re. Total O&M Expanses for 2024-29

829. Pursuant to aforesaid Regulations and following the approach of the Hon'ble Commission, the O&M expenses claimed for the tariff for each year of the Tariff Period 2024-29 are as follows:

Table 50: Projected O&M Expenses for the period 2024-29 (Rs. lakh)

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	**O&M expenses under Reg.36(1) (Rs. Lakh/ MW)**	27.17	28.60	30.10	31.68	33.34
1a	Normative	28528.50	30030.00	31605.00	33264.00	35007.00
2	**O&M expenses under Reg.36(6)**					
2a	Water Charges	3339.22	3673.15	4040.46	4456.68	4888.96
2b	Security expenses	1138.15	1245.99	1364.04	1493.28	1634.77
2c	Capital Spares	3565.46	1282.50	1917.67	1039.50	360.00
3	Ash Disposal expenses	5873.93	6254.62	6254.62	6578.62	5477.36
	Total O&M Expenses	**42445.27**	**42486.26**	**45181.79**	**46832.09**	**47368.09**

Re. INTEREST ON WORKING CAPITAL

830. Regulation 34 of Tariff Regulations 2024 provides as under:

> *"34. Interest on Working Capital:*
> *(1) The working capital shall cover:*
> *(a) For Coal-based/lignite-fired thermal generating stations:*
> *(i) Cost of coal or lignite, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity, whichever is lower;*
> *(ii) Limestone towards stock for 15 days corresponding to the normative annual plant availability.*
> *(iii) Advance payment for 30 days towards the cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;*
> *(iv) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
> *(v) Maintenance spares @ 20% of operation and maintenance expenses,*

including water charges and security expenses;

(vi) Receivables equivalent to 45 days of capacity charge and energy charge for the sale of electricity calculated on the normative annual plant availability factor; and

(vii) Operation and maintenance expenses, including water charges and security expenses, for one month.

.....

(2) The cost of fuel in cases covered under sub-clauses (a) and (c) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 59 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the preceding financial year in case of each financial year for which tariff is to be determined:

Provided that in the case of a new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 59 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

(3) Rate of interest on working capital shall be on a normative basis and shall be considered at the Reference Rate of Interest as on 1.4.2024 or as on 1st April of the year during the tariff period 2024- 29 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at Reference Rate of Interest as on 1st April of each of the financial year during the tariff period 2024-29.

(4) Interest on working capital shall be payable on a normative basis, notwithstanding that the generating company or the transmission licensee has not taken a loan for working capital from any outside agency."

831. The Interest on Working Capital for Tariff Period 2024-29 for the purpose of determination is shown in the Table below. It may kindly be noted that the Petitioner has considered the Operational Norms as proposed in Form-3 of the Tariff Forms and Fuel Parameters of FY 2023-24 in terms of Regulation 34(2) of Tariff Regulations 2024 for each year of the Tariff Period 2024-29. However, in terms of Regulation 34(2), the actual weighted average cost of fuel and gross

calorific value of the fuel for the preceding financial year shall be provided at the time of truing-up for these years.

Table 51: Proposed Interest on Working Capital of Generating Station during Tariff Period 2024-29 (Rs. Lakh)

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	Cost of Coal/Lignite	28404.59	28404.59	28404.59	28404.59	28404.59
2	Cost of Main Secondary Fuel Oil	403.61	403.61	403.61	403.61	403.61
3	O & M Expenses for 1 month	2750.49	2912.43	3084.13	3267.83	3460.89
4	Maintenance Spares @20% of O&M	6601.18	6989.83	7401.90	7842.79	8306.15
5	Receivables - 45 days	39303.61	39337.06	39659.50	40032.19	40113.54
6	Total Working Capital	77463.47	78047.51	78953.72	79951.01	80688.78
7	Rate of Interest	11.90%	11.90%	11.90%	11.90%	11.90%
8	**Interest on Working Capital**	**9218.15**	**9287.65**	**9395.49**	**9514.17**	**9601.97**

Re. OPERATIONAL NORMS

832. It is submitted that the Tariff Regulations 2024 stipulate various Operational Norms for Units of different capacities, and the recovery of Capacity Charges & Energy Charges are subject to the successful achievement of these Norms. The Petitioner has projected its Operational Parameters as defined in the Tariff Regulations 2024 and in accordance with its submissions hereunder. The following Sub-Section details the projected Operational Performance of the

Generating Station during the Tariff Period 2024-29.

Re. Plant Availability

833. Regulation 70 (A) of Tariff Regulations 2024 specifies the Normative Plant Availability as:

"Norms of operation for thermal generating station

70. The norms of operation as given hereunder shall apply to thermal generating stations:

(A) Normative Annual Plant Availability Factor (NAPAF)

(a) 85% for all thermal generating stations, except those covered under clauses (b), (c), (d), & (e);"

834. The Petitioner for the purpose of instant Petition has computed Gross Generation for the Tariff Period of 2024-29 at Normative Availability of 85% in line with the norms.

Re. Generation

835. The computation of Gross Generation is based on Availability, i.e., it is assumed that all the Capacity that is available in a particular time block would be dispatched. In short, the Plant Load Factor ("**PLF**") would be equal to the Availability and the computation of Gross Generation is based on such PLF. Based on the projected Normative Annual Plant Availability at 85%.

Re. Auxiliary Power Consumption

836. Norms of operation for thermal generating station

"70. The norms of operation as given hereunder shall apply to thermal generating stations:

...

(E) Auxiliary Energy Consumption:

(a) For Coal-based generating stations except at (b) below:

S. No.	***Generating Station***	***With natural Draft cooling tower or without cooling tower***
(i)	*200-300 MW series*	*8.50%*
(ii)	*500 MW and above*	
	Steam driven boiler feed pumps	*5.25%*
	Electrically driven boiler feed	*8.00%*

S. No.	Generating Station	With natural Draft cooling tower or without cooling tower
	pumps	
(iii)	*600MW and above*	
	Steam driven boiler feed pumps	*5.25%*
	Electrically driven boiler feed pumps	*8.00%*

Provided that for thermal generating stations with induced draft cooling towers and where tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8% respectively"

837. Unit 1 & Unit 2 of the Generating Station fall under the category of 500 MW & above having Steam-driven Boiler Feed Pumps & Induced Draft Cooling Tower. Therefore, both Units qualify for a Normative Auxiliary Power Consumption of 5.75% (5.25% for Units having Steam driven BFP & additional 0.50% for having Induced Draft Cooling Tower).

Re. Gross Station Heat Rate

838. Regulation 70(C)(b) of the Tariff Regulations 2024 provides the station Heat Rate for the thermal generating station having COD on or after 1.4.2009 as under:

"70 (C)...
(b) Thermal Generating Stations achieving COD on or after 1.4.2009
(i) For Coal-based and lignite-fired Thermal Generating Stations:

For 200-300 MW Sets : 1.05 × Design Heat Rate (kCal/kWh)
For 500 MW Sets and above : 1.045 × Design Heat Rate (kCal/kWh)

Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure."

839. The Gross Station Heat Rate of 2363.40 kCal/kWh (1.045x1945/0.86) has been considered for the generating station for the Tariff Period 2024-29. The Petitioner has considered the boiler efficiency of 86% as the quality of coal received remains

suboptimal and with the Turbine Heat Rate of 1945 kCal/kWh in accordance with Regulation 70(C)(b)(i) read with Regulation 102 of the Tariff Regulations 2024.

840. With regard to poor quality of the coal received at the Petitioner's Generating Station, a detailed explanation has been provided in Section dealing with Heat Rate under Operational Norms of Tariff Period 2019-24. The Petitioner humbly requests this Hon'ble Commission to kindly refer to the above section for the detailed justification and the same has not been repeated here for brevity.

841. The Petitioner respectfully submits that in view of the above submissions, it shall be appropriate to allow Station Heat Rate of 2363.40 Kcal/ kWh for the period 2024-29 by considering boiler efficiency as 86% similar to other generators and providing level playing field, as the actual SHR is higher for the reasons beyond the control of the Petitioner under Power To Relax as per Regulation 102 of Tariff Regulation 2024.

Re. Fuel Parameters for the Tariff Period 2024-29

842. This Section explains the components of projected Fuel Parameters to be considered for arriving at the initial Base Values of GCV of Coal, Base Price of Coal and Secondary Fuel as prescribed in Tariff Regulations 2024. Regulation 34(2) of Tariff Regulations 2024 reproduced below specifies the guidelines for arriving at the initial Landed Prices (of Coal & Secondary Fuel) and initial projection of GCV of Coal:

> *"34. Interest on Working Capital:*
> *(2) The cost of fuel in cases covered under sub-clauses (a) and (c) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 59 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the preceding financial year in case of each financial year for which tariff is to be determined: "*



843. Accordingly, the Base Landed Price of Coal has been computed based on the Weighted Average Landed Price of Coal for the period April 2023 to March 2024 applicable for 2024-29. Similarly, the Landed Price of Oil has been computed based on the Weighted Average Landed Price of Oil for April 2023 to March 2024.

844. In view of the above, the Landed Price of Coal & Oil and GCV of Coal & Oil are presented in the following Table:

Table 52: Summary of Fuel Parameters for Tariff Period 2024-29

Particulars	UoM	FY25	FY26	FY27	FY28	FY29
Wtd. Avg. Price of Coal	Rs. /MT	4,446.76	4,446.76	4,446.76	4,446.76	4,446.76
Wtd. Avg. "As Received" GCV of Coal less 85 kCal/kg	kCal/Kg	3,954.99	3,954.99	3,954.99	3,954.99	3,954.99
Wtd. Avg. Price of Oil	Rs. /kL	61948.38	61948.38	61948.38	61948.38	61948.38
Wtd. Avg. GCV of Oil	kCal/L	9,100.00	9,100.00	9,100.00	9,100.00	9,100.00

845. The Petitioner humbly prays that the Hon'ble Commission may kindly approve the projected Fuel Parameters of the Generating Station for the Tariff Period 2024-29 as given in the above Table.

Re. Summary of Operational Parameters

846. The summary of the projected Operational Performance of the Generating Station for the period 2024-29 is as under:

Table 53: Summary of Operational Parameters for Tariff Period 2024-29

Particulars	UoM	FY 25	FY 26	FY 27	FY 28	FY 29
No. of Days in the Year	Days	365.00	365.00	365.00	366.00	365.00
Unit Capacity	MW	1050	1050	1050	1050	1050

NAPAF	%	85%	85%	85%	85%	85%
SHR	Kcal/kWh	2363.40	2363.40	2363.40	2363.40	2363.40
Auxiliary Power Consumption	%	5.75%	5.75%	5.75%	5.75%	5.75%
Sp Secondary Fuel Oil Consumption	ml/kwh	0.5	0.5	0.5	0.5	0.5
Gross Generation at NAPAF	MU	7818.30	7818.30	7818.30	7839.72	7818.30

847. The Petitioner humbly prays that the Hon'ble Commission may kindly approve the projected Opertional Parameters of the Generating Station for the Tariff Period 2024-29 as given in the above Table.

Re. Summary of Annual Fixed Charges

848. Based on the above submissions the Petitioner has computed the Annual Fixed Charges. The Hon'ble Commission is requested to allow the same shown as below:

Table 54: Proposed Annual Fixed Charges for the Period 2024-29 (Rs. Lakh)

Particulars	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Depreciation	16507.85	17189.94	17797.66	18873.71	20066.93
Interest on Loan	8855.54	7916.25	6801.23	5899.73	4841.27
Return of Equity	31993.97	32412.00	32731.28	33235.97	33712.01
Interest on Working Capital	9218.15	9287.65	9395.49	9514.17	9601.97
O&M Expenses	42445.27	42486.26	45181.79	46832.09	47368.09



Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
AFC	109020.79	109292.10	111907.45	114355.67	115590.26

RE. ADDITIONAL CHARGES FOR THE TARIFF PERIOD 2024-29

849. The Annual Fixed Charges for the Tariff Period 2024-29 shall comprise of the components discussed above and also the additional charges as mentioned below:

(a) Tariff Application Fees & Publication Expenses: -

(b) Fees & Charges for Load Dispatch Centre

850. **Tariff Application Fees & Publication Expenses:**

(a) Regulation 3 of CERC (Payment of Fees) Regulations 2012 stipulates the Tariff Application Fees as follows.

> *"3. **Fee for Application for Determination of Tariff...***
> *(1) An application for determination of tariff of a generating station or a unit thereof, shall be accompanied by a fee payable at the rate of Rs 4000/MW/annum and Rs 4400/MW/annum for the years 2012-13 and 2013-14, respectively corresponding to the installed capacity of such generating station or unit thereof:*
> *Provided that the fee specified in this regulation shall be paid for the first year, corresponding to the installed capacity of the generating station or a unit thereof, while making the application for determination of tariff and thereafter annually at the specified rates by 30th April of each year:*
> *Provided further that where the fee for the tariff period 2009-14 in respect of the generating station or unit thereof has already been paid in accordance with the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2008, the generating company shall pay the balance fee as per the rate specified in this regulation."*

851. **Fees & Charges for Regional Load Despatch Centre**

(a) Regulation 94(3) of Tariff Regulations 2024 allows recovery of Fees and Charges of Regional Load Despatch Centre ("**RLDC**") directly from the Beneficiaries as specified above. However, the recovery of the actual Fees and Charges for the period during the Tariff Period 2024-29 shall be based

upon the Annual Charges determined by the Hon'ble Commission for each RLDC. Such Annual Charges are recovered by the concerned RLDC through the System Operation Charges applicable for the Inter-state Transmission Licensees as stipulated in CERC (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2009. Since such Annual Charges of the RLDCs for 2024-29 (including any adjustment for 2019-24)are yet to be finalized by the Hon'ble Commission, the Petitioner is unable to include such charges in the projected Annual Fixed Charges for Tariff Period 2024-29, for the Generating Station and, therefore, proposes to recover the same from the Beneficiaries at actual being billed by the concerned RLDC during the period 2024-29.

B.III. FINAL CLAIMS MADE IN THE PETITION

852. The claims made by the Petitioner pertaining to the Annual Fixed Charges are delineated hereunder in tabulated form.

Re. Annual Fixed Charges claimed for 2019-24 and 2024-29 is as follows:

Table 4: Annual Fixed Charges claimed for the period 2019-24 (Rs. lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	23564.71	23678.33	25256.89	27271.52	27773.39
Interest on Loan	13292.43	11086.83	10855.94	11535.36	10450.13
Return on Equity	27064.28	27175.33	29346.67	31543.12	31689.17
Interest on Working Capital	8964.43	7999.84	7225.41	7831.82	9131.21
O&M Expenses	29224.98	31407.51	32679.97	35496.78	37451.36
AFC	**102110.83**	**101347.86**	**105364.88**	**113678.60**	**116495.25**

MAITHON POWER LIMITED

Table 5: Annual Fixed Charges claimed for the period 2024-29 (Rs. lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Depreciation	16507.85	17189.94	17797.66	18873.71	20066.93
Interest on Loan	8855.54	7916.25	6801.23	5899.73	4841.27
Return of Equity	31993.97	32412.00	32731.28	33235.97	33712.01
Interest on Working Capital	9218.15	9287.65	9395.49	9514.17	9601.97
O&M Expenses	42445.27	42486.26	45181.79	46832.09	47368.09
AFC	**109020.79**	**109292.10**	**111907.45**	**114355.67**	**115590.26**

853. Notably, the duly filled tariff forms as prescribed by the Hon'ble Commission for 2019-24 Tariff Period and 2024-29 Tariff Period have been annexed in the present petition as *ANNEXURE P/2 and ANNEXURE P/3*, respectively.

Further, the audited financial statements for each of the Financial years during 2019-24 Tariff Period are enclosed as *ANNEXURE P/4.*

C. LIMITATION

854. It is humbly submitted that the Petitioner is approaching this Hon'ble Commission at the first instance. Further, the present petition has been filed for the approval of the revised tariff of MPL for the tariff period 2019-24 as per provision of Regulation 13 of Tariff Regulations 2019 and has been filed in accordance with Regulation 9(4) of the Tariff Regulations, 2024.

855. Furthermore, as per Regulation 13 (2) of the Tariff Regulations, 2019 the limitation for filing application for carrying out true-up exercise is up to 31.11.2024. The relevant provision is extracted hereunder:

> *"(2) The generating company or the transmission licensee, as the case may be, shall make an application, as per Annexure-I to these regulations, for carrying out truing up exercise in respect of the generating station or a unit thereof or the transmission system or an element thereof by 30.11.2024."*



856. Subsequently, this Hon'ble Commission in Order dated 28.11.2024 passed in Petition No. 443/MP/2024 has *inter-alia* directed and held that the tariff petitions of the existing assets for the truing-up of the tariff of the 2019-24 tariff period and the determination of tariff for the 2024-29 period may be filed by the Petitioner by 28.02.2025 where final orders for the 2019-24 tariff period have already been issued till 31.03.2024.

857. Thus, in terms of the above, it is evident that the present tariff Petition for true-up of 2019-24 and tariff determination for 2024-29 has been filed well within the limitation period.

858. The Petitioner craves leave of this Hon'ble Commission to file further documents as may be or if and so required in support of its claims or so directed by this Hon'ble Commission.

859. It is submitted that in case any of the matters (pending before various forums like Hon'ble Appellate Tribunal for Electricity or Hon'ble Supreme Court) related to the determination of tariff of the generation assets of Petitioner is decided before the issuance of tariff for the present Petition, this Hon'ble Commission is requested to consider/implement the outcome of the same in the present petition.

860. In the event of order(s) being declared after the pronouncement of the order by the Hon'ble Commission in the present petition, it is submitted that the impact of the same be allowed as soon as possible. This suggested approach as stated above shall be in Petitioner's and in the Purchaser's interest since it will avoid any delays caused in giving timely effect to Judgement(s) of the Hon'ble Commission/superior court and reduction in grant of carrying costs to Petitioner or beneficiaries.



D. PRAYERS

861. In view of the above submission, the Petitioner respectfully prays that the Hon'ble Commission may kindly be pleased to:

(a) Approve the Trued Up Generation Tariff for the Tariff Period 2019-24;

(b) Determine the Generation Tariff for the Tariff Period 2024-29;

(c) Allow recovery of the Petitioner's claim against additional capital expenditure as prayed in the Petition;

(d) Allow relaxation of SHR for the Generating Station, as prayed for, in exercise of 'Power to Relax' under Regulation 76 of the Tariff Regulations 2019 and under Regulation 102 of Tariff Regulations 2024;

(e) Allow the recovery of filing fees paid to the Hon'ble Commission and recovery of publication expenses from the beneficiaries, in accordance with Regulation 70 of the Tariff Regulations 2019 and Regulation 94 of the Tariff Regulations 2024;

(f) Allow recovery of fees and charges for RLDC at actuals being billed by the concerned RLDC during 2024-29;

(g) Grant liberty to the Petitioner to claim the Normative IDC for 2024-29 at the time of truing-up;

(h) Grant liberty to the Petitioner to approach the Hon'ble Commission regarding the claims pertaining to FGD/NOX as and when the same are commissioned by the Petitioner;

(i) Condone any inadvertent omissions, errors, short comings and permit the Petitioner to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date; and

(j) Pass such other and further Orders as deemed fit and proper in the facts and circumstances of the case.



E. TARIFF FILING FORMS

Tariff filing forms along with the checklist of the same is submitted with the present Petition which is in accordance with the applicable regulations i.e., Tariff Regulations, 2024.

F. ANNEXURE

As per Index

G. PROOF OF PAYMENT OF FEES FOR FILING OF THE PETITION

Unique Online Payment Transaction Number Transaction Nos. given in fee form

Dated at New Delhi, on this 26th day of February, 2025.

Counsel for the Petitioner
SKV Law Offices
B-50, Defence Colony,
New Delhi-110024

PETITIONER

DECLARATION

The Petitioner above named hereby solemnly declare(s) that nothing material has been concealed or suppressed and further declare(s) that the enclosures and typed set of material papers relied upon and filed herewith are true copies of original(s)/fair representation of the originals/true translation thereof.

Verified at New Delhi, on the 26th day of February, 2025.

Counsel for the Petitioner
SKV Law Offices
B-50, Defence Colony,
New Delhi-110024

PETITIONER

VERIFICATION

DEPONENT

Verified at New Delhi, on this 26th day of February, 2025 that the contents of my above noted affidavit are true and correct to my knowledge and no part of it is false and nothing material has been concealed therefrom.

DEPONENT

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION,

AT NEW DELHI

PETITION NO. _____ /GT/2025

IN THE MATTER OF: *Petition filed under Sections 62 and 79 of the Electricity Act, 2003, read with Regulation 15(a) of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 seeking:*

1. *Truing up of the generation tariff for the period FY 2019-20 to FY 2023-24 under Regulation 13 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 and Regulation 12 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).*
2. *Determination of the generation tariff for the period FY 2024-25 to FY 2028-29, under Regulation 10 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).*

AND

IN THE MATTER OF:

Maithon Power Limited ...Petitioner

Versus

Tata Power Delhi Distribution Ltd. & Ors. ...Respondents

AFFIDAVIT

I, Angshuman Chakrabarti, S/o. Bimalendu Chakrabarti, aged about 51 years, R/o. F-184, DLF New Town Heights, Sector-91 Gurgaon, Haryana 122505, presently at New Delhi, do hereby solemnly affirm and state on oath as under:

1. That the deponent is the CFO and Authorized Signatory of the Petitioner company and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.

NOTARY PUBLIC ★ LAXMI KANI MOHAPATRA ★ App. By Govt. of India Regd. No. 16971 Area of Jurisdiction NCR Jurisdiction Whole India

2. That the accompanying Petition under section 62 and 79 of the Electricity Act, 2003, has been filed by my nominated counsel under my instructions and the contents of the same are true and correct to the best of my knowledge and belief.

3. That the contents of Paras 1 to 861 of the facts as mentioned in the Petition are true and corrects based on my personal knowledge, belief and records maintained in the office and the contents of Paras 1 to 861 of the Petition are believed to be true on the basis of the legal advice received.

4. That the Annexures annexed to the Petition are correct and true copies of the respective originals.

5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute.

D/6850/2019
IDENTIFIED

MAITHON POWER LIMITED

DEPONENT

26 FEB 2025

VERIFICATION

Verified at New Delhi, on this 26th day of February, 2025 that the contents of my above noted affidavit are true and correct to my knowledge and no part of it is false and nothing material has been concealed therefrom.

MINATI RANI MOHAPATRA
ADVOCATE (NOTARY)
Mob. No.: 8130128457
26 FEB 2025

DEPONENT

MAITHON POWER LIMITED

NOTARY PUBLIC
MINATI RANI MOHAPATRA
App. By Govt. of India
Regd. No. 16971
Area Delhi/NCR
Juris Extd Whole India

MINATI RANI MOHAPATRA
NOTARY DELHI-R-16971
GOVERNMENT OF INDIA
SUPREME COURT OF INDIA
COMPOUND NEW DELHI
REGISTER Pg./Sl. No.

ATTESTED

ATTESTED
MINATI RANI MOHAPATRA
COMPOUND NEW DELHI
REGISTER Pg./Sl. No.

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 408/GT/2020

Coram:

Shri P.K. Pujari, Chairperson
Shri I.S. Jha, Member
Shri Arun Goyal, Member

Date of Order: 8th January, 2022

In the matter of

Petition for truing-up of tariff for the 2014-19 Tariff Period and for determination of tariff for the 2019-24 Tariff Period in respect of Maithon Right Bank Thermal Power Project (1050 MW) of Maithon Power Limited.

And

In the matter of

Maithon Power Limited,
Jeevan Bharti, 10th Floor, Tower-I,
124, Connaught Circus,
New Delhi-110001 **…..Petitioner**

Vs

1. Tata Power Delhi Distribution Limited,
33 kV Sub-station, Kingsway Camp,
Delhi –110 009

2. Damodar Valley Corporation,
DVC Towers, VIP Road,
Kolkata-700 054

3. Kerala State Electricity Board Limited,
Vidyuthi Bhawan, Pattom,
Thiruvananthapuram – 695 004

4. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan (8th Floor), Block-DJ, Sector-II, Salt Lake,
Kolkata-700 091

5. Tata Power Trading Company Limited,
Corporate Centre, 'A' Block,
34, Sant Tukaram Road, Carnac Bunder,
Mumbai 400 006 ….**Respondents**

Parties present:

Shri Venkatesh, Advocate, MPL
Ms. Nishtha Kumar, Advocate, MPL
Shri Pankaj Prakash, MPL

ORDER

The Petitioner, Maithon Power Ltd (in short 'MPL') is a public limited company incorporated on 26.7.2000 under the provisions of the Companies Act, 1956. MPL is a joint venture between Tata Power Trading Company Ltd. (TPTCL) with an equity participation of 74% and Damodar Valley Corporation (DVC) with an equity participation of the remaining 26%. Maithon Right Bank Power Project (1050 MW) (hereinafter referred to as 'the generating station') of the Petitioner is situated in the Dhanbad District of the State of Jharkhand and is envisaged as a Mega Power Project in terms of the Ministry of Finance, Govt. of India Notification No. 63/99 dated 13.5.1999 and Notification no.100/99-Customs dated 28.7.1999. The actual date of commercial operation (COD) of Unit-I of the generating station is 1.9.2011 and the COD of Unit-II/generating station is 24.7.2012.

Background

2. Petition No. 274/2010 was filed by the Petitioner for determination of tariff of the generating station from COD of Unit-I (1.9.2011) and Unit-II (24.7.2012) till 31.3.2014 and the Commission vide its order dated 19.11.2014 determined the tariff for the said period, based on the capital cost of Rs.244839 lakh (as on 1.9.2011) and Rs.137002 lakh (as on 24.7.2012). Against this order dated 19.11.2014, the Petitioner filed Appeal No. 48/2015 before the Appellate Tribunal for Electricity (APTEL) and the same was disposed of by judgment dated 10.5.2016. Against this judgment, the Petitioner filed Review Petition (RP No. 16/2016) before APTEL and by order dated 10.10.2017, the APTEL upheld its judgment dated 10.5.2016 in

Appeal No.48/2015. During the pendency of the said appeal, Petition No. 152/GT/2015 was filed by the Petitioner for truing-up of tariff for the 2009-14 tariff period and for determination of tariff of the generating station for the 2014-19 tariff period. Meanwhile, Petition No. 72/MP/2016 was also filed by the Petitioner seeking in-principle approval of the "Abstract Schemes" of capital expenditure in compliance with Environment (Protection) Amendment Rules, 2015 issued by the Ministry of Environment, Forest and Climate Change (in short 'MOEF & CC') dated 7.12.2015 and the Commission vide its order dated 20.3.2017 in Petition No. 72/MP/2016 disposed of the same as under:

> *"10. Since, the 2014 Tariff Regulations do not provide for the grant of in-principle approval for the capital expenditure, the prayer of the petitioner for in-principle approval of the Abstract scheme of capital expenditure by relaxing the provisions of the tariff regulations through invoking Regulation 54 of 2014 Tariff Regulations, is not maintainable. In our view, since, the implementation of new norms in the existing and under construction thermal generating stations would require modification of their existing system and installation of new systems such as Retro-fitting of additional fields in ESP/replacement of ESP, etc. to meet Suspended Particulate Matter norms, installation of FGD system to control SOx and Selective Catalytic Reduction (SCR) systems for DeNox, the petitioner is directed to approach the Central Electricity Authority to decide specific optimum technology, associated cost and major issues to be faced in installation of different system like SCR, etc. The petitioner is also directed to take up the matter with the Ministry of Environment and Forest for phasing of the implementation of the different environmental measures. Accordingly, the petitioner is granted liberty to file appropriate petition at an appropriate stage based on approval of CEA and direction of MoEF which shall be dealt with in accordance with law."*

3. Subsequently, the Commission by order dated 26.12.2017 in Petition No.152/GT/2015, trued up the tariff of the generating station for the 2009-14 tariff period and determined tariff for the 2014-19 tariff period. In the said order, an amount of Rs.160 crore towards Liquidated Damages (LD) was deducted from the capital cost, till such time the Petitioner furnished details of LD settlement. Against this order, the Petitioner filed Review Petition (Petition No.16/RP/2018) on the following issues:

> *"a) Disallowance of 1% of additional interest rate for computing the Interest During Construction and Interest on Loan for the period 2011-14 to recover fully the interest cost with actual weighted average;*

b) *Weighted average depreciation rate for the entire generating station as shown in Form-11 and accordingly, revise the depreciation on the fixed assets for the period 2014 -19 and grant consequential relief;*

c) *Billing as 'on received' basis at unloading point through hydraulic augur or manually;*

d) *Allow ash disposal expenses for the period 2014-19; and*

e) *Non-consideration of reimbursement of refinancing cost and financing charges.*"

4. Thereafter, the Commission vide its order dated 25.4.2019, disposed of the review petition (Petition No.16/RP/2018) rejecting the prayer (a) above, while allowing the other prayers (b) to (e) above. However, while allowing prayers (b) and (d), the Commission in the said order dated 25.4.2019 observed that these issues would be considered at the time of truing-up of tariff for the 2014-19 tariff period. Subsequently, by corrigendum order dated 25.4.2019, certain clerical errors in Commission's order dated 25.4.2019 in Petition No.16/RP/2018 were corrected. Against the Commission's order dated 25.4.2019 in Petition No.16/RP/2018, the Petitioner has filed appeal (Appeal No. 405/2019) before APTEL and the same is pending.

5. The Petitioner had also filed Petition No. 285/MP/2018 for inclusion of LD amount of Rs.160 crore deducted from the capital cost (*in terms of Commission's order dated 26.12.2017 in Petition No. 152/GT/2015*) and for re-computation of tariff for the tariff periods 2009-14 and 2014-19 and the Commission by order dated 17.7.2019 disposed of the same, as under:

> *"22. In view of the above, the total expected LD amount of `160 crore which was deducted from the capital cost vide Commission's order dated 26.12.2017 in Petition No. 152/GT/2015 is allowed to be included in the capital cost of the generating station. Consequently, the impact due to inclusion of the said LD amount in the capital cost shall be worked out and tariff of the generating station for the period 2011-14 and 2014-19 shall be revised by a separate order in Petition No. 152/GT/2015. We decide accordingly"*

6. In terms of the above order, the Commission vide its order dated 1.10.2019 in Petition No.152/GT/2015, revised the annual fixed charges of the generating station for the 2009-14 and 2014-19 tariff periods, as under:

For the 2009-14 tariff period

(Rs. in lakh)

	1.9.2011 to 31.3.2012	**1.4.2012 to 23.7.2012**	**24.7.2012 to 31.3.2013**	**1.4.2013 to 31.3.2014**
Return on Equity	6638.57	3562.77	12522.21	24504.50
Interest on Loan	11406.46	6432.76	22039.39	32976.10
Depreciation	7410.76	3977.19	14071.72	21765.36
Interest on Working Capital	2551.51	1380.28	5848.12	8757.88
O&M Expenses	4439.39	2518.62	11090.76	17052.00
Cost of secondary fuel oil	1213.41	651.21	2641.17	3840.74
Total	**33660.10**	**18522.83**	**68213.37**	**108896.58**

For the 2014-19 tariff period

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Return on Equity	26206.98	27372.03	27641.49	27641.49	27641.49
Interest on Loan	30577.17	29802.87	27474.08	24608.99	21340.09
Depreciation	16024.29	21522.66	23943.11	24142.40	30720.24
Interest on Working Capital	8599.88	8809.52	8879.48	9032.77	9187.93
O&M Expenses	17746.18	18807.18	19930.18	21127.18	22398.18
Total	**99154.50**	**106314.26**	**107868.34**	**106552.83**	**111287.93**

7. Thereafter, the Petitioner, based on the response of CEA and MOEF&CC and in terms of the liberty granted by the order dated 20.3.2017 in Petition No. 72/MP/2016 (*refer paragraph 2 above*), filed Petition No.152/MP/2019, seeking amongst others, a declaration that the MOEF&CC Notification dated 7.12.2015 and its letter dated 11.12.2017 are 'change in law' events and also for the grant of 'in-principle' approval of the expenditure towards installation of FGD system for meeting the revised emission norms of SO_2. By order dated 11.11.2019, the Commission disposed of prayers (a) to (h) in Petition No.152/MP/2019 as extracted below:

> *"16……..Considering the fact that the expenditure shall be incurred during next tariff period commencing from 1.4.2019, prayer of the petitioner is to be dealt under the provisions of 2019, Tariff Regulations pertaining to additional capital expenditure. As per*

Regulation 29 of 2019, Tariff Regulations, the additional capital expenditure to be incurred on account of revised emission standards has been recognized separately. In light of the above explicit Regulation pertaining to the additional capital expenditure on new environment standards, it is not required to invoke the provision of Change in Law as per the 2019, Tariff Regulations. Accordingly, prayer (b) of the petitioner disposed in terms of above

..The petitioner has already informed the beneficiaries about the estimated expenditure which exceeds the limit of Rs.100 crore specified under the Regulation. As such, the proposed expenditure on FGD is squarely covered within the Regulation 11 of the 2019 Tariff Regulations. Accordingly, it is held that proposed expenditure qualifies for the In-principle approval, subject to further scrutiny of the proposed expenditure

29. In view of the above, the Commission accords In-principle approval to the petitioner for following cost:

xxx

The Commission allows the petitioner to claim IDC, IEDC, Taxes and opportunity cost at actuals which may be allowed after prudence check in accordance with the 2019, Tariff Regulations.

30. Accordingly, prayer (c) and (d) of the petitioner are disposed in terms of above

35. The norms for additional O&M expenses would be finalized by CERC. Accordingly, the claim of the petitioner for allowing O&M expenditure is not being considered at this stage. We direct the petitioner to submit the O&M expenses relating to FGD system on actual basis at the time of filling the petition for determination of tariff on commissioning of the FGD system.

38. As regards the exclusion of the shutdown period for calculation of availability for recovery of fixed charges, Commission has already taken a view that the generator in consultation with beneficiaries would plan to synchronize the interconnection of FGD with the annual overhaul so as to minimize the additional downtime required for FGD interconnection. Accordingly, Petitioner is directed to schedule the shutdown period prudently to avoid the impact on availability. However, if shutdown period for FGD integration exceeds the period of annual overhauling, the petitioner has liberty to claim the same at the time of tariff determination. Accordingly, prayer (e) and (f) of the petitioner is disposed in terms of above.

xxx

40. As per Clause (2) of the Regulation 14 of the 2019 Tariff Regulations, the Commission has already specified the regulatory framework for determination of supplementary tariff inter-alia provides supplementary capacity charges and supplementary energy charges. This regulation is effective for 2019-24 tariff period. The Commission will determine this supplementary tariff on submission of application by the petitioner after installation of FGD. As such, state/beneficiaries may decide merit order dispatch while scheduling the plants. Accordingly, prayer (g) of the petitioner is disposed in terms of above.

41……..Further, in Petition no. 92/MP/2015 dated 08.03.2019, the Commission has clarified as under:

"xxxxx

In view of the above, the Petitioner may seek appropriate remedy in case the Petitioner relinquishes LTA due to additional APC. Accordingly, prayer (h) of the petitioner is disposed in terms of above."

8. It is noticed that the opening capital cost of Rs.432039.88 lakh claimed by the Petitioner as on 1.4.2014 is at variance with the capital cost of Rs.432490.69 lakh as allowed vide order dated 1.10.2019 in Petition No. 152/GT/2015. In this regard, the Petitioner has clarified as under:

> *"Capital cost of ₹432490.69 lakh as on 1.4.2014 in order dated 26.12.2017 was approved based on admitted capital cost of 31.3.2014 in true up of tariff for 2009-14 tariff period. However, while reporting de-capitalization of assets during the 2012-13 and 2013-14 in the true-up of tariff for 2009-14, the Petitioner had inadvertently missed to exclude small de-capitalizations towards few minor assets. This omission of de-capitalization is worked out by the Petitioner as ₹450.81 lakh and is corrected in the opening value of 2014-15 i.e. (₹432490.69 lakh – 450.81 lakh) for the purpose of Tariff determination."*

9. Admittedly, the capital cost of Rs.432490.69 lakh as on 31.3.2014 (the same capital cost was considered as opening capital cost as on 1.4.2014 for determination of tariff for the 2014-19 tariff period), approved vide order dated 1.10.2019 in Petition No.152/GT2015, is without considering the de-capitalization of certain amounts for 2012-13 and 2013-14, which the Petitioner had failed to furnish at the time of truing up of tariff for the 2009-14 tariff period. Since the Petitioner, in the present petition, has submitted that there is de-capitalization of Rs.450.81 lakh for 2012-13 and 2013-14, the opening capital cost for the 2014-19 period stands revised to Rs.432039.88 lakh as on 31.3.2014, instead of Rs.432490.69 lakh as approved vide order dated 1.10.2019 in Petition No. 152/GT/2015. Here, we would like to point out that even though tariff for the 2009-14 tariff period has been trued up earlier for the generating station, the downward revision (on account of decapitalization of Rs. 450.81 lakh) in the capital cost is allowed, keeping in view the interest of consumers and tariff is modified accordingly.

Tariff for the 2009-14 tariff period

10. As discussed above, the de-capitalization of Rs.450.81 lakh for 2012-13 and 2013-14 has been allowed and based on the downward revision in capital cost, the

annual fixed charges for the period from 1.9.2011 to 31.3.2014 in order dated 1.10.2019 in Petition No.152/GT/2015 stands modified as under:

(Rs. in lakh)

	1.9.2011 to 31.3.2012	1.4.2012 to 23.7.2012	24.7.2012 to 31.3.2013	2013-14
Total annual fixed charges allowed in order dated 1.10.2019	33660.10	18522.83	68213.37	108896.58
Total annual fixed charges allowed in this order	33660.10	18522.83	68199.83	108896.58

11. The difference between the annual fixed charges recovered by the Petitioner in terms of the order dated 26.12.2017 read with order dated 1.10.2019 in Petition No.152/GT/2015 and the annual fixed charges determined by this order shall be adjusted in terms of Regulation 6(4) of the 2009 Tariff Regulations.

TARIFF FOR THE 2014-19 TARIFF PERIOD (PRESENT PETITION)

12. The present petition has been filed by the Petitioner for truing-up of tariff of the generating station for the 2014-19 tariff period, in terms of Regulation 8 of the 2014 Tariff Regulations and for determination of tariff of the generating station for the 2019-24 tariff period, in accordance with the provisions of the 2019 Tariff Regulations. We proceed to examine the claims of the Petitioner in the present petition as stated in the subsequent paragraphs.

13. The capital cost allowed vide order dated 1.10.2019 in Petition No. 152/GT/2015 for the 2014-19 tariff period is as under:

Capital cost allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	432490.69	458448.69	467564.69	467564.69	467564.69
Addition due to Projected additional capitalization	25958.00	9116.00	0.00	0.00	0.00
Closing Gross Block	458448.69	467564.69	467564.69	467564.69	467564.69

14. The capital cost and the annual fixed charges claimed by the Petitioner for the 2014-19 tariff period are as under:

Capital Cost claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	432039.88	465178.28	480597.95	481368.32	483304.48
Add: Additions during the year/ period	34679.91	14992.72	1029.48	2213.78	4380.74
Less: De-capitalisation during the year/ period	(-) 3214.56	(-) 131.14	(-) 69.61	(-) 132.63	(-) 81.37
Add: Un-discharged liability as on 1st April of each year	4980.50	391.10	71.94	179.30	0.00
Less: Un-discharged liability as on end of each year	391.10	71.94	179.30	0.00	0.00
Cash Capitalization towards land	(-) 5506.76	0.00	0.00	0.00	0.00
Add: Normative IDC on Excess Equity	62.39	199.52	41.00	192.37	429.04
Less: De-capitalisation not performed in books	0.00	96.56	192.54	717.48	350.46
Add: Normative IDC on actual loan	2672.02	485.50	69.39	200.82	230.48
Less: IDC Capitalised in Books excluding Railways	144.00	349.53	0.00	0.00	0.00
Total Capitalisation	33138.39	15419.68	770.36	1936.17	4608.43
Closing Capital Cost	465178.28	480597.95	481368.32	483304.48	487912.91

Annual Fixed Charges claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	22643.97	23503.18	23832.01	24111.09	24114.97
Interest on Loan	32595.27	31716.69	27954.98	25045.86	21526.68
Return on Equity	26392.44	27955.58	28434.13	28514.13	28783.32
Interest on Working Capital	8599.88	8809.52	8879.48	9032.78	9187.93
O&M Expenses	17846.53	18932.63	20092.92	21275.50	22443.24
Other O&M expense (Ash disposal)	6098.44	3791.36	3647.73	3320.87	3340.46
Additional Tax due to Change in law	0.00	0.00	49.06	49.06	49.67
Total	**114176.53**	**114708.95**	**112890.30**	**111349.28**	**109446.27**

15. The Respondent No.3, Kerala State Electricity Board Limited (KSEBL) has filed its reply vide affidavit dated 17.6.2020 and the Petitioner has filed its rejoinder to

the said reply vide affidavit dated 24.7.2020. The matter was heard on 2.6.2020 and the Commission vide Record of the Proceedings (ROP) directed the Petitioner to submit certain additional information and reserved its order. In response, the Petitioner vide affidavit dated 3.7.2020 has filed the additional information and has served copies of the same on the Respondents. Taking into consideration the submissions of the parties and the documents available on record, we examine the claims of the Petitioner for the 2014-19 tariff period, on prudence check, as stated in the subsequent paragraphs.

Capital Cost

16. Regulation 9(3) of the 2014 Tariff Regulations provides as under:

> *"9 (3) The Capital cost of an existing project shall include the following:*
> *(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;*
> *(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and*
> *(c) expenditure on account of renovation and modernization as admitted by this Commission in accordance with Regulation 15."*

17. We have, in paragraph 9 of this order, allowed the revision of the capital cost of the generating station to Rs.432039.88 lakh as on 31.3.2014, after considering the de-capitalization of certain amounts by the Petitioner for 2012-13 and 2013-14. Accordingly, in terms of Regulation 9(3)(a) of the 2014 Tariff Regulations, the closing capital cost of Rs.432039.88 lakh as on 31.3.2014, has been considered as the opening capital cost as on 1.4.2014**.**

Additional Capital Expenditure

18. Regulations 14(1) and 14(3) of the 2014 Tariff Regulations provide as under:

> "*14. Additional capitalization and De-capitalization:*
> *(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

(i) Un-discharged liabilities recognized to be payable at a future date;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and

(v) Change in law or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff

(2) xxxx

(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;

(ii) Change in law or compliance of any existing law;

(iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;

(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;

(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;

(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal/lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

(viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators,

replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and

(x) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to non-materialization of coal supply corresponding to fullcoal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:

Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2014:

Provided further that any capital expenditure other than that of the nature specified above in (i) to (iv) in case of coal/lignite based station shall be met out of compensation allowance:

Provided also that if any expenditure has been claimed under Renovation and Modernization (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation.

(4) In case of de-capitalization of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of de-capitalization shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalization takes place, duly taking into consideration the year in which it was capitalized."

19. The projected additional capital expenditure allowed vide order dated 26.12.2017 in Petition No. 152/GT/2015 is as under:

(Rs.in lakh)

Sl. No	**Package Name**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
1	BTG Package- Station	(-) 416.00	0.00	0.00	0.00	0.00
2	Cost of Land & Site	19505.00	0.00	0.00	0.00	0.00
3	General Civil Works (GCW)	9793.00	0.00	0.00	0.00	0.00
4	Plant Water System (PWS)	214.00	0.00	0.00	0.00	0.00
5	Ash Handling System (AHS)	(-) 413.00	716.00	0.00	0.00	0.00
6	Coal Handling System	(-) 502.00	0.00	0.00	0.00	0.00
7	Reverse Osmosis (RO)System	0.00	8400.00	0.00	0.00	0.00
8	BOP Electrical	45.00	0.00	0.00	0.00	0.00
9	Township & Colony	57.00	0.00	0.00	0.00	0.00
10	Design, Engineering & Project Management	787.00	0.00	0.00	0.00	0.00
11	Pre-Operative Expenses	1836.00	0.00	0.00	0.00	0.00
12	IT System for Software	414.00	0.00	0.00	0.00	0.00
13	Interest During Construction	145.00	-	0.00	0.00	0.00
	Total (on net basis) including de-capitalization	**31465.00**	**9116.00**	**0.00**	**0.00**	**0.00**
14	Cash expenses towards land	(-) 5507.00	0.00	0.00	0.00	0.00
	Total additional capital expenditure (projected)	**25958.00**	**9116.00**	**0.00**	**0.00**	**0.00**

20. The Petitioner was directed by the said order dated 26.12.2017 in Petition No. 152/GT/2015 to furnish the calculation of IDC along with basis of IDC allocation towards additional capital expenditure and the reconciliation of the same with books of accounts.

21. The Petitioner in Form 9Bi and Form-9C of the petition, has furnished the position of additional capitalization and de-capitalization as per books of accounts as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Additional capitalization as per books (a)	34679.91	14992.72	1087.48	2267.78	4390.74
Less: Exclusions (items not allowable / not claimed)	0.00	0.00	58.34	53.53	10.44
Additional capitalization claimed	**34679.91**	**14992.72**	**1029.14**	**2214.25**	**4380.30**
De-capitalization as per books of accounts	3214.56	131.14	69.61	132.63	81.37

2014-15

22. The additional capitalisation of Rs.31465.35 lakh (*after adjustment of the de-capitalisation of Rs.3214.56 lakh*) claimed in 2014-15 *vis-a-vis* the projected additional capitalisation allowed in 2014-15 vide order dated 26.12.2017 in Petition No. 152/GT/2015 are as under:

(Rs in lakh)

Head of Work/Equipment	**Projected additional capitalization allowed vide Commission's order dated 26.12.2017 in Petition No.152/GT/2015**	**Additional capital expenditure claimed in this petition**
Ash Handling System (AHS)	(-) 413.00	48.65
BOP	45.00	18.21
BTG Package – Station	(-) 416.00	730.69
Coal Handling System (CHS)	(-)502.00	1042.53
Cost of Land & Site	19505.00	21142.23
General Civil Works	9793.00	10577.92
IT System for Software	414.00	457.52
Plant Water System	214.00	252.36
Pre-Operative expenses	1836.00	207.87
Design, Engineering & Project Management	787.00	0.00
Township & Colony	57.00	57.12

Interest During Construction (General Civil Works)	145.00	144.82
Total additions (a)	**31465.00**	**34679.91**
De-capitalization **(b)**	(included in the above)	3214.56
Total (c)=(a)-(b)	**31465.00**	**31465.35**

23. The de-capitalization of Rs.3214.56 lakh claimed as aforesaid, includes the de-capitalization of Rs.1147.14 lakh for 'Generator Transformer', de-capitalization of Rs.1550.00 lakh corresponding to adjustment in 'Coal Handling System' and de-capitalization of Rs.462.07 lakh corresponding to adjustment on account of LD adjustment in 'Ash Handling System'.

24. The Petitioner has submitted that the actual additional capital expenditure incurred for 2014-15 is in respect of assets which form part of the original scope of work of the project and is up to the cut-off date of the generating station. COD of the generating station is 24.7.2012 and, accordingly, the cut-off date of the generating station, in terms of the 2009 Tariff Regulations is 31.3.2015. It is observed that the claim of the Petitioner for net additional capital expenditure of Rs.31465.35 lakh in 2014-15 (after adjustment of de-capitalization) is against the net projected additional capital expenditure of Rs.31465.00 lakh allowed vide order dated 26.12.2017 in Petition No. 152/GT/2015. Since the additional capitalisation claimed is in respect of assets which form part of the original scope of work of the project and is up to the cut-off date, the net additional capital expenditure of Rs.31464.35 lakh (Rs.34679.91 lakh-3214.56 lakh) is allowed in 2014-15 in terms of Regulation 14(1)(ii) of the 2014 Tariff Regulations.

2015-19

25. In Petition No.152/GT/2015, the Petitioner had claimed projected additional capital expenditure in respect of certain assets/ works, which form part of the original scope of work of the project, namely, Railway System, Township & Colony, General

Civil Works, Reverse Osmosis plant, Ash Conveying Pipeline, Ash Handling System, Coal Handling System, BOP Electrical, BTG Package, Design Engineering and Project Management, Pre-operative Expenses and Additional Spares during the period 2015-18 with a prayer for extension of cut-off date of the generating station till 31.3.2019, due to the delay in execution of these works. Though the prayer of the Petitioner for extension of cut-off date of the generating station till 31.3.2019 was rejected by order dated 26.12.2017, the Commission had allowed the projected additional capitalization in 2015-16 only towards works namely, RO system and Ash Handling System, subject to the Petitioner furnishing certain additional information at the time of truing-up of tariff of the generating station. However, in respect of other assets/ works like Railway System, Township & Colony, General Civil Works and Ash Conveying Pipeline, the projected additional capitalization for the period 2015-18 was disallowed, but liberty was granted to the Petitioner to approach the Commission for additional capitalization, based on the actual expenditure incurred and in accordance with the provisions of the applicable Tariff Regulations. The relevant portions of the order dated 26.12.2017 is extracted hereunder:

Railway System, Township & Colony, General Civil Works

"91..In view of this submission and considering the fact that capitalization of projected additional expenditure of these assets/ expenditure before 31.3.2019 is uncertain, the consideration of the prayer of the petitioner for extension of cut-off date of the generating station till 31.3.2019 would not serve any useful purpose. In this background, the prayer of the petitioner for projected capitalization of the expenditure is not allowed. However, the petitioner is granted liberty to approach the Commission for additional capitalization based on the actual expenditure incurred for these assets and the same will be considered after due diligence and prudence as per the regulation in vogue at that time. In view of this, the projected additional capitalization claimed in respect of Railways System (`31100.00 lakh in 2016-17 and `9400.00 lakh in 2017-18), Township & Colony (`2000.00 lakh in 2015-16, `3000.00 lakh in 2016-17 and `1442.00 lakh in 2017-18) and General Civil Works for`6255.00 lakh in 2015-16 has not been allowed at this stage."

Ash Conveying Pipeline

"95…In view of this Submission and considering the fact that the capitalization of projected additional expenditure of the asset/ expenditure before 31.3.2019 is uncertain, the consideration of the prayer of the petitioner for extension of cut-off date of the generating station till 31.3.2019 would not serve any useful purpose. In this background, the prayer of the petitioner for projected capitalization of the expenditure is not allowed. However, the

petitioner is granted liberty to approach the Commission for additional capitalization based on the actual expenditure incurred for the asset and the same will be considered in accordance with the provisions of the Tariff Regulations applicable. Based on this, the projected additional capitalization claimed of `11200.00 lakh in 2017-18 in respect of Ash Conveying Pipeline has not been allowed."

Reverse Osmosis system

100……Considering the fact that the expenditure incurred during 2015-16 is in compliance with the directions of JSPCB mandating the installation of the RO system, we allow the claim of the petitioner under Regulation 14(2)(ii) of the 2014 Tariff Regulations. This is however subject to the petitioner filing certain additional information on affidavit namely the (i) audited actual expenditure incurred for the asset (ii) LD amount, if any, recovered from the contractor (iii) reasons for delay including IDC, if any; (iv) Cost-benefit analysis and (v) technical capacity assessment at the time of truing-up of tariff of the generating station in terms of Regulation 8 of the 2014 Tariff Regulations"

Ash Handling System

102……..It is however noticed that the work of „Ash handling system" is continuous in nature and the said work which is included in the original scope of work of the project is being carried out in phases, during the life time of the project. In this background, we are inclined to allow the claim of the petitioner under this head in terms of Regulation 14(3)(iv) of the 2014 Tariff Regulations. This is however subject to the petitioner submitting relevant details regarding the work executed, at the time of truing-up of tariff, in terms of Regulation 8 of the 2014 Tariff Regulations"

26. Also, the Petitioner, in the Petition No.152/GT/2015, had claimed projected additional capital expenditure during 2014-19 in respect of 'Other assets/works' which were not part of the original scope of work of project, namely, Building and Civil Engineering works, Transformer and Sub-station equipment, Plant & Machinery, Other Assets-Unclassified and IT Equipment. The Commission, while disallowing such claims in its order dated 26.12.2017, granted liberty to the Petitioner to approach the Commission at the time of truing-up of tariff with detailed justification, including the provisions of the relevant regulations under which the said expenditure was claimed. The Commission held as under:

"110. It is observed that petitioner has not filed any details regarding the break-up of the "Plant and Machinery" Building & Civil works" and "Other un-classified assets" along with justification and the relevant provisions of the regulations under which each asset/work has been claimed for 2014-19. In this background, we are not inclined to allow the projected additional capital expenditure in respect of items/assets which are not in the original scope of work as shown in the above table. However, the petitioner is granted liberty to approach the Commission at the time of truing-up of tariff along with the detailed justification and the provisions of relevant regulations under which the expenditure has been claimed".

27. In this background, the additional capital expenditure claimed by the Petitioner in the present petition, for the period 2015-19, are summarized below:

(Rs. in lakh)

Assets/Works	2015-16	2016-17	2017-18	2018-19
Reverse Osmosis (RO) System	7798.20	(-) 28.04	57.38	-
IDC- RO system	349.53	-	-	-
Ash Handling System (AHS)	26.23	-	-	-
Balance of Plant (BOP)	445.57	5.82	-	-
BTG	837.40	1.78	-	-
Spare GT	846.76	35.73	-	-
Coal Handling System (spares)	367.53	-	-	-
Cost of Land and Site	69.98	0.40	-	2112.86
General Civil Works	791.99	184.39	154.47	147.49
Railway System	2412.62	-	-	-
IDC- Railway System	448.94	-	-	-
Town Ship & Colony	43.38	-	-	-
New Schemes	554.59	829.06	2002.40	2119.96
Total additional capital expenditure claimed	**14992.72**	**1029.14**	**2214.25**	**4380.30**
De-capitalization	131.14	69.61	132.63	81.37
Net additional capital expenditure claimed	**14861.58**	**959.53**	**2081.62**	**4298.93**

28. The Petitioner has submitted that the capitalization of these packages that form part of the original scope of work of the project could not be completed till the cut-off date (31.3.2015) on account of various factors which were beyond the control of the Petitioner and due to 'Force Majeure' reasons. The Petitioner has also submitted that after the cut-off date, most of the project packages were completed in 2015-16, except for Railway System, General Civil Works (GCW) and Land & Site, which are expected to be completed by end of 2020-21 i.e. by 31.3.2021. However, some assets in these packages have been put to use during the 2014-19 tariff period and, accordingly, part capitalization of these packages falls in the said period and the balance within the 2019-24 tariff period. The Petitioner has added that in majority of cases where additional capitalization within the original scope of work of the project has been delayed beyond the cut-off date (31.3.2015), the same has been on account of reasons beyond the control of the Petitioner. The Petitioner has, therefore, submitted that in respect of the additional capitalization during the period

2015-19, the Commission may exercise its power under Regulation 3(25) read with Regulation 8(3) and Regulation 54 of the 2014 Tariff Regulations (Power to relax) to consider the delays faced by the Petitioner due to 'Force Majeure' events and to approve the additional capitalization, within the original scope of work. In addition to this, the Petitioner has submitted that as the generating company is not entitled to Compensation Allowance as per Regulation 17 of the 2014 Tariff Regulations, funds for minor capital assets for construction or procurement under the said allowance was not available to the Petitioner. Therefore, for such expenditure on capital assets, the Petitioner has sought invocation of Regulation 54 of the 2014 Tariff Regulations (Power to relax) for consideration of such additional capital expenditure in terms of Regulation 8(3) and Regulation 14(3) read with the principles laid down under Section 61 of the Electricity Act, 2003.

29. The Respondent, KSEBL has submitted that Regulation 14 of the 2014 Tariff Regulations allows additional capitalization limited to works within the original scope of work of the project. It has also stated that the additional capital expenditure claimed in respect of assets/ works beyond the original scope of work, such as Fire tender with shed & fixed foam system, NABL accredited lab, Yard sprinkling and fire detection system in CHP, Re-heater modification & MTM installation, Coal pit run-off mechanised drainage system & segregation of storm water, Power supply redundancy and re-arrangement at BOP area, Gate house near junction tower & E-security system, Replacement of IT Equipment, Labour Colony, Augmentation of store area and MAX DCS Version up-gradation, do not fall within the scope of 'Change in law' and these claims ought to be carried out from the O&M expenses allowed to the generating station in terms of the 2014 Tariff Regulations. Based on the submissions of the parties.

30. We examine the additional capital expenditure claimed for the period 2015-19 in the following paragraphs.

Reverse Osmosis (RO) Plant

31. The Commission vide order dated 26.12.2017 in Petition No.152/GT/2015 had allowed the projected additional capital expenditure of Rs.8400 lakh for Reverse Osmosis Plant in 2015-16, subject to the Petitioner furnishing certain additional information, namely the (i) audited actual expenditure incurred for the asset; (ii) LD amount, if any, recovered from the contractor; (iii) reasons for the delay including IDC, if any; (iv) Cost-Benefit analysis; and (v) Technical capacity assessment at the time of truing-up of tariff of the generating station in terms of Regulation 8 of the 2014 Tariff Regulations. In compliance with this direction, the Petitioner has claimed the actual additional capital expenditure of Rs.8147.73 lakh [Rs 7798.20 +349.53 lakh (IDC)] in 2015-16, (-) Rs.28.04 lakh in 2016-17 and Rs.57.38 lakh in 2017-18 towards RO System, duly supported by Auditor's certificate. The Petitioner has also submitted that there was no occasion for recovery of Liquidated Damages (LD) from the contractor and since the RO plant was not delayed, there was no impact on increase in IDC. As regards Cost-benefit analysis, the Petitioner has submitted the following:

> (a) The specific energy requirement of RO technology is 70% less than other desalination methods. The water recovery ratio of RO desalination system is relatively higher than other methods. The reverse osmosis desalination process is able to eliminate both organic and inorganic pollutants from water. RO technology has the advantages of convenient operation, equipment compactness, working environment safety and outlet water quality can satisfy different requirements. In power plant, the economic benefit is not the main factor that affects the recycled water promotion which is mandated by Environmental laws;
>
> (b) Due to particularity and water quality of the boiler water supply, the cost and optimization of desalination cannot be directly applied in the RO treatment process in power plant. RO technology is known as the most

reliable, cost effective technology, with high rate of energy efficiency in producing fresh potable water in comparison to other desalination technologies. The Petitioner carried out extensive study involving Tata Power Engineering Department and Tata Consulting Engineers (TCE) to study the water balance system and acted on their advice on corrective action to be taken to ensure such Zero Liquid Discharge (ZLD) condition as imposed upon by Jharkhand State Pollution Control Board (JSPCB). Among various technologies considered during the detailed study, RO based Water Treatment System was found most suitable due to high reliability and effectiveness;

(c) With regard to technical capacity assessment, initial Performance Guarantee (PG) tests were carried out for the RO plant in November, 2016 after construction of the RO plant. However, due to various reasons, these tests were not successful. Subsequently, a month long ZLD PG test was conducted at the generating station from 31.5.2018 to 30.6.2018. The test was conducted in accordance with the approved PG test procedure and as per the modalities finalized between the Petitioner and ASA (M/s Aquatech) in the meeting held at site on 30.5.2018. ZLD operated at full load during this period of 30 days. Most of the parameters were within the guaranteed limit. Such additional cost has been borne by the Petitioner to meet the statutory compliance of JSPCB through installation of RO Plant to ensure 'zero water discharge' from the generating station; and

(d) The JSPCB provides the requisite 'Consent to Operate' (CTO) to Petitioner for operation of the project in view of fulfilment of certain requirements as per the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981. JSPCB in the CTO letter dated 11.5.2012, had directed the Petitioner to ensure zero leakage discharge from the generating station. As per norms prescribed by JSPCB, the process water cannot be discharged to Maithon Dam Reservoir, due to its adverse impact on the aquatic life and ecology.

32. It is observed from the above that the Petitioner, in order to ensure compliance with the directions of JSPCB (Jharkhand State Pollution Control Board) and in order to reduce the make-up water consumption, had taken up the installation of RO system and had obtained Board's approval for the expenditure in 2013, but capitalized the expenditure in 2015-16. In view of the clarification and considering the fact that the additional capital expenditure incurred is within the approved limit of Rs.8400 lakh allowed vide order dated 26.12.2017 in Petition No. 152/GT/2015, the

claim of the Petitioner for Rs.8147.73 lakh [Rs.7798.20 +349.53 lakh (IDC)] in 2015-16 and Rs.57.38 lakh in 2017-18 is allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations. Also, the negative adjustment of (-) Rs 28.04 lakh for RO system in 2016-17, which is in respect of the expenditure claimed for this asset in 2015-16, is also considered and allowed for the purpose of tariff.

Ash Handling System

33. The Commission, in its order dated 26.12.2017 in Petition No.152/GT/2015 had allowed the projected additional capital expenditure of Rs.716.00 lakh in 2015-16 for 'Ash Handling System' under Regulation 14(3)(iv) of the 2014 Tariff Regulations, subject to the Petitioner submitting relevant details regarding the work executed, at the time of truing-up of tariff in terms of Regulation 8 of the 2014 Tariff Regulations. The Petitioner, in this petition, has claimed actual additional capital expenditure of Rs.26.23 lakh in 2015-16 for this asset and has submitted that most of the works have been completed by the cut-off date. It has, however, submitted that initial spares amounting to Rs.26.23 lakh, for which procurement was initiated before the cut-off date, was delivered and capitalised in 2015-16. Therefore, the Petitioner has submitted that the Commission may permit capitalization of Rs.26.23 lakh in terms of Regulation 14(3)(iv) of the 2014 Tariff Regulations. Since the work of 'Ash Handling System' is continuous in nature and is carried out in phases, during the lifetime of the project and is within the original scope of work of the project, we allow the actual additional capital expenditure of Rs.26.23 lakh in 2015-16 under Regulations 14(3)(iv) of the 2014 Tariff Regulations.

Railway Infrastructure Package

34. The Petitioner, in Petition No.152/GT/2015, had claimed projected additional capital expenditure of Rs.31100.00 lakh in 2016-17 and Rs.9400.00 lakh in 2017-18

for 'Railway System Package' and the same was disallowed by order dated 26.12.2017, with liberty to approach the Commission for additional capitalization based on the actual expenditure incurred for the said asset/ work, for consideration of the Commission in accordance with the regulations in vogue. The Petitioner, in this petition, has claimed actual additional capital expenditure of Rs.2861.56 lakh [2412.62+448.94 (IDC)] in 2015-16 towards 'Railway System' which form part of the original scope of work of the project, but after the cut-off date. In justification of the said claim, the Petitioner has submitted the following:

> a) Though the overall Railway Infrastructure Package is yet to be completed and operationalized by the Petitioner, owing to severe land acquisition related disputes as explained in this petition and detailed submissions in Petition No. 152/GT/2015, the Petitioner has completed the construction of number of roads, over-bridges and under-passes for smooth movement of public transport by road, which were falling in the way of Railway corridor. Pending completion of Railway corridor for the purpose of coal transportation to the plant, these Civil works viz., roads, over-bridges, under-passes were opened for public use and, therefore, the amount of Rs. 24.13 crore along with the corresponding IDC of Rs.4.49 crore has been capitalised in the books of accounts of the Petitioner. Accordingly, the same has been submitted for capitalisation for the purpose of tariff;
>
> b) In case, capitalisation of these civil assets is not allowed till the completion of Railway Infrastructure Package as Railway Infrastructure has not been put to use, capitalisation (along with corresponding additional IDC) of the same may be allowed along with remaining Railway Package and to allow such capitalisation along with corresponding additional IDC or in the alternative, the Petitioner may be allowed to amend its proposal to this effect. The decision of the Commission in its order dated 4.12.2014 in Petition No. 17/GT/2013 and order dated 9.10.2018 in Petition No. 38/MP/2018 is applicable in this case.

35. It is pertinent to mention that the Petitioner, in Petition No.152/GT/2015 had sought extension of cut-off date of the generating station till 31.3.2019 stating that some of the works of 'Railway System' may not even be completed before 31.3.2019, with liberty to approach the Commission after completion of the said works. From the submissions of the Petitioner, in this petition, it is evident that the

'Railway Infrastructure Package System' work has not yet been completed and the asset has not been put to use. Only some civil work like roads, over-bridges and under-passes for smooth movement of public transport have been constructed and the expenditure incurred on these works, is sought to be capitalised by the Petitioner, under this head. In other words, the additional capitalisation claimed by the Petitioner, is not in respect of the completion of the Railway System, but only for few civil works which have been completed. Without the completion of the Railway System, the construction of these civil assets for public transport has no nexus with the generation of power from the plant. In our view, the additional capitalisation of these civil assets cannot be permitted, unless the Railway System is completed and put to use for generation and supply of power. The Petitioner's reference to order dated 9.10.2018 in Petition No. 38/MP/2018 in justification of the prayer for relaxation has no relevance in the present case and is, therefore, not considered. In view of this, the prayer of the Petitioner for additional capitalisation of Rs.2861.56 lakh in 2015-16 is not allowed. The Petitioner may approach the Commission after completion of the work related to Railway System is over.

Township and Colony

36. The Petitioner, in Petition No. 152/GT/2015 had claimed projected additional capital expenditure of Rs. 2000.00 lakh in 2015-16, Rs.3000.00 lakh in 2016-17 and Rs.1442.00 lakh in 2017-18 for 'Township & Colony' and the same was disallowed by order dated 26.12.2017, with liberty to approach the Commission for additional capitalization based on the actual expenditure incurred for the said asset/ work and for consideration as per regulations in vogue. The Petitioner, in this petition, has claimed actual additional capital expenditure of Rs. 43.38 lakh in 2015-16 for 'Township & Colony' which form part of the original scope of work, but after the cut-off date. The Petitioner has submitted that while the expenditure of Rs.57.00 lakh

capitalised in 2014-15 was within the approved total capitalisation of Rs.34680 lakh, an expenditure of Rs.43.38 lakh was capitalised in 2015-16 for this work, which form part of the original scope, but was deferred. The additional capitalisation claimed for 'Township & Colony' work in 2015-16 is on account of the same being deferred from 2014-15. The works pertaining to the township and colony, which are within the original scope of work, are spilled over works which had started prior to the cut-off date and, hence, the Petitioner was granted liberty vide order dated 26.12.2017 in Petition No 154/GT/2015 to approach the Commission after completion of the works. In the above background, we allow the additional capitalisation of Rs.43.38 lakh in 2015-16 as claimed by the Petitioner.

Cost of Land & Site and General Civil Works

37. The Petitioner, in Petition No.152/GT/2015, had not claimed any projected additional capital expenditure towards 'Cost of Land & Site' during the period 2015-19. However, the Petitioner, in the said petition, had also claimed projected additional capital expenditure of Rs.6255 lakh in 2015-16 for 'General Civil Works' with a prayer for extension of the cut-off date till 31.3.2019 and the same was disallowed vide order dated 26.12.2017. However, liberty was granted to the Petitioner to approach the Commission for additional capitalization of 'General Civil Works', based on the actual expenditure incurred and to be considered in accordance with the regulations in vogue. The Petitioner has submitted justifications for claim towards Cost of Land & Site and General Civil Works as stated below.

A. Cost of Land & Site

38. The Petitioner, in this petition, has claimed the actual additional capital expenditure of Rs.69.98 lakh in 2015-16, Rs. 0.40 lakh in 2016-17 and Rs.2112.86 lakh in 2018-19 towards **'**Cost of Land & Site**'** which form part of the original scope of

work, under Regulation 14(1)(ii) read with Regulation 54 (Power to Relax) of the 2014 Tariff Regulations. As regards 'land acquisition' issues and consequent time and cost overrun, the Petitioner has mainly submitted the following:

(a) Acquisition of land for setting up of land-intensive projects like that for a thermal power plant is a humongous and time-consuming task. The task involved becomes even more complicated when the Project Proponent/ Developer has to deal with vast and multiple land parcels, in an area that has the environment of socio-cultural disturbances with a history of fragile industrial relations in and around that area;

(a) MPL has made earnest efforts in coordinating with various stakeholders involved, such as its equity partner – DVC (which is a statutory entity of the Central Government), the land owners, the State Government, various Government departments and other multitude of associated entities, for timely completion of the thermal power project, which today benefits Distribution Licensees in New Delhi, West Bengal, Jharkhand and Kerala;

(b) Despite serious planning and prudence, various extraneous factors that are out of bound of the project developer's control have delayed the project completion timelines. The said delay is due to 'Force Majeure' conditions and, therefore, such reasons cannot in any manner be attributable to MPL.

(c) While the zero date of the Project was 25.10.2007, possession of land and, hence, construction activity could not be started until R&R Policy was approved by Government of Jharkhand and a settlement reached with Project Affected People ("PAP") only on 31.03.2008. There is incremental cost associated with time delay/ time overrun which has ultimately led to increase in Project Cost;

(d) This following summary of events highlights some of the key facts w.r.t. land acquisition for the Project of the relevant period in the past and several associated issues in a chronological manner:

(i) The land earmarked for the project comprises land of various natures viz. Rayati (Private), Gair Majruah (GM) or State Government owned and Forest land;

(ii) The land earmarked for the project was acquired (Rayati) by DVC or leased (GM and Forest land) to DVC between the period from 2002 to 2009, but in phases, and was not transferred to MPL, either on paper or physically till 31.3.2008. Some part of project land is yet to be transferred in favour of MPL, although its possession has been given to MPL;

(iii) In the absence of R&R policy in the State, MPL had to take initiatives in the R&R activities associated with the Project;

(iv) The possession of major portion of land to MPL was available after significant delay i.e. after 31.3.2008, when R&R Policy was framed by Government of Jharkhand ('GoJ');

(v) Once major portion of the land was under possession of MPL, Project related activities were initiated and expedited to catch up with the scheduled timelines.

(vi) However, MPL faced massive resistance from the landowners not only during construction phase of the Project but also thereafter, leading to cases being filed, some of which are still pending. Therefore, MPL was compelled to litigate at multiple occasions to settle land acquisition related disputes. Some of the Writ Petitions were resolved by the Hon'ble High Court of Jharkhand and some of them are still pending before the Land Acquisition Court.

(vii) Securitization of the project land to lenders could not be done as MPL could not obtain title/ sub-lease of land in spite of repeated follow ups with relevant authorities.

(viii) GM and Forest land earmarked for the Project, though transferred to DVC by the Government of Jharkhand, was not granted the requisite permission by Government to enable DVC for further transfer/ sub-lease to MPL.

(ix) There was change in the policy clarity on whether land could be sub-leased for long period in the name of private entities like MPL.

(x) Therefore, even though DVC was a 26% equity partner for the Project, the land transferred to DVC by the Government of Jharkhand was finally permitted to be transferred and made available to MPL in 2018 i.e. after delay of almost 10 years.

(xi) MPL made relevant payments with respect to the acquisition/ sub-lease of land within reasonable timelines against the original/ amended fees/ lease to the respective department.

(xii) GoJ, which permitted MPL physical possession of GM land and its transfer under sub-lease in 2010, had later gone back on their permission, citing provisions of the (new) amendments in the land policy of 2011/14 in the State, which made the process carried out till then redundant, thereby leading to additional associated cost and loss of time. The Change in Policy of GoJ fall within the scope of 'Change in law'.

(xiii) GoJ was fully aware of the shareholding pattern of MPL at the time of granting permission and despite the same, revoked the permission for sub-leasing of the land granted to it on the grounds that MPL is not a Government entity.

(xiv) On the grounds of new/ amended policy, provisions and restrictions on sub-lease to only Government entities, GoJ had asked DVC to surrender its sub-lease permission and the leased land, back to the Government.

(xv) MPL initiated its efforts for direct lease of land (GM land and un-notified Forest land) from GoJ under the land Policy of 2017. In response thereto, MPL received fresh 'Demand note' for the difference in current and previously paid rates with regard to un-notified land from Government which it has paid in 2018-19. The Demand note for GM land is expected to be received by MPL in the near future.

The Petitioner has furnished in detail, the justification for time and cost overrun in Annexure-P/4 and P/5 of the petition.

B. Cost Over-run for land

39. The Petitioner has submitted that in order dated 26.12.2017 in Petition No.152/GT/2015, a total of Rs.19505 lakh was approved towards Cost of Land & Site expenses in 2014-15. It has stated that the actual capitalisation under Land & Site head had increased to Rs.21142 lakh as compared to initially approved amount of Rs.19505 lakh. This, according to the Petitioner is due to internal adjustment of Rs.1628 lakh between two heads viz. "Cost of Land & Site" and "Pre-Operative expenses". The Petitioner has also submitted that the capitalization approved by the Commission under Pre-operative expenses was Rs.1836 lakh in 2014-15. However, the actual additional capitalization towards Pre-operative expenses was Rs. 208 lakh in 2014-15 and the remaining amount of Rs.1628 lakh initially approved under Pre-operative expenses was capitalised under "Cost of Land & Site" owing to the nature of expense as the statutory auditor changed the category of lease hold land due to which the amount of Rs.1628 lakh was shifted from pre-operative expenses to cost of land and is, thus, claimed as part of capitalisation under the head 'Cost of Land & Site in 2014-15'. The Petitioner has further submitted that there has been inter-se adjustment between these two heads of capitalisation, owing to re-categorization of

expenses heads in audited accounts way back on 11.5.2015 by statutory auditor and there is no increase in the overall actual capitalisation under these heads put together in 2014-15. In addition to the above, the Petitioner has submitted that it had incurred an expenditure of Rs.70 lakh in 2015-16, Rs.40 lakh in 2016-17 and Rs.2113 lakh in 2018-19 for purchase/ leasing of following land parcels:

(i) Purchase of private land in Mugma Village for Railway Corridor (Rs.0.70 crore in 2015-16, Rs.0.004 crore in 2016-17 and Rs.1.72 crore in 2018-19);

(ii) Payment of fresh demand for un-notified Forest land admeasuring 191.67 acre (Rs.11.61 crore in 2018-19);

(iii) Payment of demand for GM land acquired for Railway Corridor and Payment of License fee for Railway land acquired for Railway Corridor (Rs.6.47 crore in 2018-19);

(iv) Payment of fresh demand of GM Land (114.95 acre) for the Project (2019-24);

40. The details of additional capitalization towards Land & Site for 2015-19, as tabulated by the Petitioner, are as under:

(Rs. in crore)

Category		**2015-16**	**2016-17**	**2017-18**	**2018-19**
Main Plant Land					
Raiyati	Freehold land-Main Plant	-	-	-	-
Forest Land	Forest Land- Main project	-	-	-	11.61
GM land	GM land	-	-	-	-
Railway Land					
Raiyati	Freehold Land- Railway	0.7	0	-	-
	Freehold Land- Railway-Mugma	-	-	-	1.72
GM Land	GM land Railway-I	-	-	-	-
	GM Land- Railway-II	-	-	-	6.47
	Eastern Railway Land-II	-	-	-	1.04
	Eastern Railway Land-I	-	-	-	0.3
	Krishi Farm and tribal land	-	-	-	-
	Contingency	-	-	-	-
	Total	**0.7**	**0**	**-**	**21.13**

41. Accordingly, the Petitioner has submitted that due to changes in policies and the stand of 'GoJ' on transfer of land, the land transfer to the Petitioner for the Project had been delayed. The Petitioner had been asked to pay additional amount

on account of transfer of land from DVC to the Petitioner and also additional payments to the landowners were mandated by the State Government, thereby increasing the project cost.

C. General Civil Works

42. The Petitioner has claimed actual additional capital expenditure of Rs.791.99 lakh in 2015-16, Rs.184.39 lakh in 2016-17, Rs.154.47 lakh in 2017-18 and Rs.147.49 lakh in 2018-19 towards **'**General Civil Works' which form part of the original scope of work, under Regulation 3(25) and Regulation 8(3) read with Regulation 54 of the 2014 Tariff Regulations. The Petitioner has submitted that delay in execution of 'General Civil Works' package capitalised during the period 2015-19 is on account of the various 'Force Majeure' reasons which were beyond the control of the Petitioner. As regards General Civil Works (GCW), the Petitioner has submitted that in terms of the liberty granted vide order dated 26.12.2017, the Petitioner has claimed actual capital expenditure of Rs.10578 lakh in 2014-15 for General Civil Works against the approved cost of Rs.9793 lakh. It has also submitted that an amount of Rs.787 lakh allowed in 2014-15 towards Design, Engineering and Project Management has been capitalized under 'General Civil Works' in 2014-15 as 'Engineering and Project Management' were provided for 'General Civil Works' package. Thus, a total amount of Rs.10578 lakh in 2014-15 has been claimed under this head, taking both the heads together. According to the Petitioner, there has been inter-se adjustment between these two heads of capitalization owing to re-categorization of expenses, but there is no increase in the overall actual capitalization under these heads put together. The details of the expenditure and the reasons for the delay as furnished by the Petitioner are as under:

> **(i) Boundary Wall and Peripheral Road inside Plant along Boundary Wall**: Boundary wall work was delayed due to various land related disputes and other problems which were beyond the control of the Petitioner. The contract for boundary

wall was awarded to M/s Premier Traders in 2012-13. However, due to various land disputes and other problems, the contractors could not complete the work on time citing problems created by local villagers as is evident from letters dated 23.6.2013, 7.7.2014, 23.9.2014, 19.1.2015 and 3.3.2016. Due to non-completion of the boundary wall, the Jharkhand Pollution Control Board (JPCB) in its Consent to Operate letter dated 23.5.2014 directed that the occupier shall construct pucca minimum 10 feet high boundary wall. The boundary wall was, therefore, required to be expedited covering the entire area around ash pond by wall of 7 km (approx.) length to securitise most of the key and sensitive areas. Various police complaints dated 3.2.2016, 5.5.2017, 13.9.2017, 6.4.2018 were also lodged by the security supervisor regarding agitation initiated by villages. At present, 226 acres (out of 1116 acres) of plot of land is not covered by boundary wall because this 226 acre land parcel is partly inhabited by tribal and non-tribal people and, hence, this area had to be cordoned off internally with grid pillars. As most of the key and sensitive areas have been covered and securitised with proper boundary wall, it is proposed that entire remaining land asset including grid pillars is covered, securitised or demarcated by boundary wall (balance 6.45 km out of total 27.75 km). The completion status of the boundary wall is as under:

Sl. No.	Description	Completion status (in km)
1	Boundary wall completed by 31st March 2014	13.75
2	Boundary wall completed by 31st March 2016	4
3	Boundary wall completed by 31st March 2019	3.55
4	Boundary wall to be constructed	6.45
		27.75

The phasing of boundary wall capitalization is Rs 4.71 crore in 2015-16, Rs 1.43 crore in 2016-17, Rs 1.54 crore in 2017-18 and Rs 1.47 crore in 2018-19 and Rs 1.60 crore in 2019-20.

(b) Field Hostel (part of work got delayed): The Commission in its order dated 19.11.2014 (in Petition No.274/2010) had acknowledged that there is a need of field hostel within the boundaries of the plant for smooth, intervention free operation of the plant, considering the difficult remote location of the plant, accessibility at odd hours and frequent blockages and agitation by local villagers backed by factional politicians. The contract for construction of field hostel was awarded to M/s Kanwar Enterprises (P) Ltd in 2014. However, while carrying out the construction work, the contractor faced several hindrances from the local people. Therefore, M/s Kanwar addressed letter dated 13.5.2015 to the Petitioner, citing the reason for delay of field hostel and requested for time extension for the work. When the contractor started the work by making burgees for the layout and by installation of borewell, the locals damaged the burgees and borewell claiming to be owners of the land. This problem took around 2 months to be sorted out. Again, after starting the work, it was stopped by the locals demanding that work should be executed through them only. The contractor was ready, but the rates were very high and it took almost one month to convince them and make them ready to work at genuine rates. But the villagers could not deliver the required number of labour and the work was stopped. After resuming the work with available labour, it was again stopped by local vendors for about 45 days due to land dispute. Work was also stopped for 15

days by Samity people and the locals. There were also cases of hindrances by local vendors for around 30 days citing rate revision and various other reasons. In view of above reasons, which were totally out of control of the Petitioner and its contractor, the contractor asked for extension of contract thereby delaying some part of the project. Due to above issues, some part of the project got delayed by almost 3 months and 20 days and was finally completed in 2015-16. An amount of Rs.321 lakh and Rs.42 lakh was capitalized in 2015-16 and 2016−17 against Field Hostel and minor pending works of Gate House, Township etc.

43. We have examined the claims and justifications given by the Petitioner. According to the Petitioner, the cost of land had increased on account of changes in the policies of the Government of Jharkhand. Also, the works of Boundary wall and the peripheral road inside Plant along Boundary Wall and Field Hostel got delayed due to various force majeure events. Based on this, the Petitioner has prayed for relaxation of the provisions of 2014 Tariff Regulations to allow the additional capitalisation incurred due to reasons not attributable to the Petitioner. Regulations 3(25) and 54 of the 2014 Tariff Regulations are extracted hereunder:

> ***Regulation 54: Power to Relax.*** *The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person."*
>
> ***Regulation 3(25). 'Force Majeure'*** *for the purpose of these regulations means the event or circumstance or combination of events or circumstances including those stated below which partly or fully prevents the generating company or transmission licensee to complete the project within the time specified in the Investment Approval, and only if such events or circumstances are not within the control the generating company or transmission licensee and could not have been avoided, had the generating company or transmission licensee taken reasonable care or complied with prudent utility practices: a) Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or (b) Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or (c) Industry wide strikes and labour disturbances having a nationwide impact in India;*

44. It is observed from submissions of the Petitioner that the land payments are mainly due to (i) payment of fresh demand for un-notified Forest land, payment of demand for GM land acquired for Railway Corridor and (ii) payment of license fee for Railway land acquired for Railway Corridor etc. The payment delays were mainly

related with Railway Corridor disputes and Land site development. The purchase of private land in Mugma Village for Railway Corridor (for Rs.70 lakh in 2015-16, Rs.40 lakh in 2016-17 and Rs.172 lakh in 2018-19) and the Payment of fresh demand for un-notified Forest land measuring 191.67 acre (for Rs.1161 lakh in 2018-19) pertains to Railway corridor and the delay is attributable to the dispute which had arisen due to wrongful disbursement of land compensation amongst the beneficiaries. This resulted in Writ Petition No. 5084 of 2016 being filed by the Petitioner before the High Court of Jharkhand, wherein, directions were issued by the High Court on 6.9.2016 to the Deputy Commissioner, Dhanbad to expedite the resolution of land issues. As the matter could not be fully resolved, the Petitioner again filed Writ Petition No. 5242 of 2017 before the High Court of Jharkhand and the High Court in its judgement dated 22.2.2018, directed the State Government (GoJ) to cancel the earlier awards passed in favour of wrongful persons/ awardees and to further prepare fresh awards in favour of genuine persons within four months. The High Court's order dated 22.2.2018 has been enclosed as Annexure P6/H to the petition. In respect of (i) Payment of demand for GM land acquired for Railway Corridor and payment of license fee for Railway land acquired for Railway Corridor (for Rs.647 lakh in 2018-19) and (ii) Payment of fresh demand of GM Land (114.95 acre) for the project in 2019-24, it is noticed that additional payments were required to be made due to change in the policy of State Government (GoJ) for leasing the land. The sequence of events in regard to the leasing of land is enumerated below:

(i) On 5.1.2010: The Government of Jharkhand accorded in-principal approval to DVC for sub-leasing 114.95 acres (already leased to DVC) of land to MPL. Reference placed at annexure P/5-C of the petition.

(ii) On 22.1.2011: The Government of Jharkhand amended the leasing policy of land and held that on leased out land, third party right cannot be created and thereby sub-leasing already accorded to MPL vide letter dated 5.1.2010 became ineffective. Reference placed at annexure P/5-E of the petition.

(iii) On 30.9.2014: The Government of Jharkhand directed DVC to surrender 114.95 acres (already leased to DVC) of land stating that the DVC share being less than 51% in MPL, it does not fall under the category of government company as per Company Act. Thus, sub-leasing to MPL by DVC was withdrawn. Reference placed at annexure P/5-H of the petition.

(iv) On 4.1.2017: The Government of Jharkhand revised the rates for leasing of the land and thereby creating additional liability to MPL for the same land which was sub-leased to the Petitioner by DVC. Reference placed at annexure P/5-K of the petition.

(v) On 20.10.2017: DVC intimated to Govt. of Jharkhand that DVC Board had approved the surrender of 114.95 acres of land for subsequent grant of the same land to the Petitioner. Reference placed at annexure P/5-L of the petition.

(vi) On 08.11.2017: Petitioner requested the Govt. of Jharkhand that to initiate the leasing process directly in favour of the Petitioner and the same land is already in use for power plant. Reference placed at annexure P/5- of the petition.

(vii) On 24.11.2018: The Govt. of Jharkhand directed the Petitioner for further payment of Rs.43.69 lakh for leasing land to the Petitioner. Reference placed at annexure P/5-T of the petition.

45. On perusal of the sequence of events and documents furnished by the Petitioner, it is observed that the delay in payment towards land and site was due to change in policy of the State Government of Jharkhand. Scrutiny of the documents furnished indicates that 'land issues' had prolonged till 24.11.2018, i.e. even after the cut-off date. Though the said work form part of the original scope of work of the project, the Petitioner had to continue the execution of these works even after the cut-off date on account of the delay in the availability of land and site. Similarly, the delay in the development of Railway Corridor was cleared when Hon'ble High Court of Jharkhand vide its judgment dated 22.2.2018 had directed the State Government of Jharkhand to cancel the earlier awards passed in favour of wrongful awardees and to prepare fresh awards in favour of genuine persons and to proceed in accordance with law. The Petitioner had made all payments mandated due to change in policy of the State Government of Jharkhand and as a consequence of cancellation of wrongful disbursement of land compensation award. Therefore, the

expenditure so incurred has been claimed in this petition on actual and audited basis. Similarly, in the case of General Civil Works (Boundary wall and Field hostel), the delay in execution of these works is consequent upon the delay in the availability of land and are for reasons not attributable to the Petitioner. As regards the prayer of the Petitioner for extension of cut-off date till 31.3.2019, the Commission in its order dated 26.12.2017 in Petition No.152/GT/2015 had decided as under:

> *"In view of this submission and considering the fact that capitalization of projected additional expenditure of these assets/ expenditure before 31.3.2019 is uncertain, the consideration of the prayer of the petitioner for extension of cut-off date of the generating station till 31.3.2019 would not serve any useful purpose. In this background, the prayer of the petitioner for projected capitalization of the expenditure is not allowed. However, the petitioner is granted liberty to approach the Commission for additional capitalization based on the actual expenditure incurred for these assets and the same will be considered after due diligence and prudence as per the regulation in vogue at that time…"*

46. As already observed, the delay in the availability of land & site was due to changes in the policy of the Govt. of Jharkhand, cancellation of wrongful disbursement of land compensation award and clearance for the development of Railway Corridor after payment of compensation. Also, the delay due to non-availability of land had caused the delay in execution of the General Civil Works by the Petitioner and the same cannot be attributable to the Petitioner. From the documents enclosed by the Petitioner, it is noticed that the Petitioner has been coordinating with the local administration for speedy resolution of the land issues and has been taking steps to mitigate the delay. Accordingly, actual additional capitalisation of Rs.69.98 lakh in 2015-16, Rs 0.40 lakh in 2016-17 and Rs.2112.86 lakh in 2018-19 towards Land & Site is allowed under Regulation 14(3(i) of the 2014 Tariff Regulations. Consequently, as the General Civil Works were also delayed due to delay in the possession of land, for which reasons and justifications have been furnished in previous paragraphs, the actual additional capitalisation of Rs.791.99 lakh in 2015-16, Rs.184.39 lakh in 2016-17, Rs.154.47 lakh in 2017-18 and

Rs.147.49 lakh in 2018-19 towards General Civil Works is also allowed under Regulation 14(3(i) of the 2014 Tariff Regulations.

Coal Handling System

47. The Petitioner, in Petition No.152/GT/2015 had claimed projected additional capital expenditure of Rs.959.00 lakh in 2015-16 and Rs.2142.00 lakh in 2016-17 towards 'Coal Handling System' under Regulation 14(3) of the 2014 Tariff Regulations. By order dated 26.12.2017, the said claim was rejected as under:

> *"In response to the Commission's directions vide ROP of hearing dated 12.1.2016, the petitioner has not furnished any details of the works to be executed, the reasons/justification for the delay in the execution of 'Coal Handling System' beyond the cut-off date of the project. In this background, the projected additional capital expenditure for Coal Handling System claimed by the petitioner after the cut-off date is not allowed"*

48. The Petitioner, in the present petition, has claimed actual additional capital expenditure of Rs.367.53 lakh (including spares for Rs.282.72 lakh) in 2015-16 towards 'Coal Handling System' (which form part of the original scope of work of the project, but after the cut-off date) under Regulation 3(25) read with Regulation 8(3) and Regulation 54 of the 2014 Tariff Regulations. The balance amount of Rs.84.81 lakh (Rs.367.53 lakh - Rs.282.72 lakh) is towards Stone Picking shed (for Rs.42.79 lakh), Fire Detection system (for Rs.21.04 lakh) and 'Others' (Rs.20.98 lakh). In justification of the same, the Petitioner has submitted that the actual additional expenditure incurred under 'Coal Handling System' package is Rs.1040 lakh in 2014-15 and Rs. 367.53 lakh in 2015-16. It has submitted that Rs.367.53 lakh capitalised in 2015-16 mostly relates to the procurement of initial mandatory spares, which was initiated and procured prior to the cut-off date (31.3.2015), while the procurement of balance spares was concluded in 2015-16. Regulation 14(1)(3) of 2014 Tariff Regulations permits the capitalization of spares up to cut-off date, in accordance with the provisions of Regulation 13 of the 2014 Tariff Regulations (4%

of Plant & Machinery cost as on the cut-off date). It is noticed that the claim of Rs.282.72 lakh towards initial spares pertains to initial spares which form part of the original scope of the Plant and Machinery. It is evident from the submissions of the Petitioner, that the procurement of spares was initiated even before the cut-off date (31.3.2015), but spares were received only during 2015-16. Since the claim of the Petitioner for additional capitalisation of Rs.282.72 lakh in 2015-16 is towards initial spares for 'Coal Handling System' after the cut-off date, the same is allowed in relaxation of Regulation 14(1)(3) of 2014 Tariff Regulations. However, the balance amount of Rs.84.81 lakh (Rs.42.79 lakh for Stone Picking shed, Rs.21.04 lakh for Fire Detection system and Rs.20.98 lakh towards 'Others') have not been allowed as the items do not form part of initial spares and no justification has also been furnished by the Petitioner for capitalization after the cut-off date.

BTG & Spare GT

49. The Petitioner, in Petition No. 152/GT/2015, had claimed projected additional capital expenditure of Rs.1616 lakh in 2015-16 towards BTG Package and the same was not allowed by the Commission in its order dated 26.12.2017. The Petitioner, in the present petition, has claimed actual additional capital expenditure of Rs.837.40 lakh for BTG package (including spares for Rs.777.30 lakh) and Rs.846.76 lakh for Spare GT in 2015-16, Rs.1.78 lakh for BTG and Rs.35.73 lakh for Spare GT in 2016-17, which are within the original scope of work of the project, but after the cut-off date. The balance amount of Rs.60.10 lakh (₹837.40 - ₹777.30) under BTG package apart from Spares is towards 'Workshop equipment' (Rs.23.83 lakh), 'Mill hoist' (Rs.15.23 lakh) and 'Others' (Rs.21.05 lakh). The Petitioner, in justification of the said claim has submitted that the expenditure mainly relates to mandatory 'Initial capital spares', which were required to be procured before the cut-off date (31.3.2015). It has, however, submitted that due to their non-critical requirement for

purpose of COD, the procurement of most of these items was initiated prior to the cut-off date from M/s BHEL, but their procurement was concluded in 2015-16. Accordingly, the Petitioner has submitted that the additional capital expenditure falls within the scope and ambit of Regulation 54 read with Regulation 8(3) and Regulation 14(3) of the 2014 Tariff Regulations.

50. The Respondent, KSEBL has submitted that the Petitioner has not furnished any details and justification for the claim and the same is not in line with Regulation 14(3) of the 2014 Tariff Regulations. It has further submitted that the BTG package was capitalized after the cut-off date and is not allowable in terms of the regulations, as the Petitioner has not furnished any valid reason for extension of procurement of the same beyond the cut-off date. Accordingly, KSEBL has submitted that the claim of the Petitioner may be disallowed. In response, the Petitioner has submitted that the cut-off date of the generating station is 31.3.2015, which is within the first year (2014-15) of the 2014-19 tariff period. The Petitioner has stated that the claim under Regulation 14(3) is inadvertent and the same may be read as Regulation 14(2) of the 2014 Tariff Regulations. Accordingly, it has submitted that the claim is within the original scope of work of the project. The Petitioner has further submitted that the contractual liability was created in 2014-15, but was reflected in 2015-16 only after supply of material was received, as in supply contracts liability is created immediately upon execution of contract and recognition in books of accounts, only after material is received along with bills. The Petitioner has also furnished the details in Annexure P/12 of the petition. The Petitioner has contended that due to force majeure condition, arising on account of multiple failures, the Petitioner had to procure the assets, the process for which had started in 2014-15. It has also added that initial spare GTs under contingency budget for deferred initial spares was procured to sustain the unit operation during any future eventuality. Therefore, the

Petitioner has stated that the additional capital expenditure claimed falls within the scope of Regulations 14(3)(iii) and 14(3)(v) read with Regulation 54 of the 2014 Tariff Regulations.

51. In addition, the Petitioner has submitted that for key initial spares, such as BCW pump, journal shaft, workshop, IA compressor spare, High energy drain valve, HP plunger pump, Mill hoist for Unit-2, Instrumentation capital spares and Spare GT, the procurement of these spares were initiated prior to the cut-off date, but the OEM could deliver these items only after the cut-off date. It has been stated that these items are urgently required for the operation of the generating station and by procurement of these spares after the cut-off date, no extra cost had occurred to the beneficiaries. The Petitioner has further stated that in terms of Regulation 13 of the 2014 Tariff Regulations, the capitalisation of initial spares is limited to 4.0% of Plant & Machinery cost up to cut-off date for coal-based/ lignite-fired thermal generating stations. It has submitted that the total Plant & Machinery cost up to cut-off date is Rs.2821.82 crore and in terms of Regulation 13 of the 2014 Tariff Regulations, the amount of Initial spares to be capitalised is limited to Rs.112.87 crore i.e. (4% of Rs.2821.82 crore). The Petitioner has pointed out that initial spares of Rs.71.64 crore, capitalised till 2013-14, were approved in the order dated 26.12.2017 in Petition No. 152/GT/2015 and further, initial spares of Rs.14.83 crore and Rs.21.53 crore have been procured and capitalized under various packages during the years 2014-15 and 2015-16 respectively. The summary of initial capital spares, as furnished by the Petitioner is as under:

(Rs. in crore)

Initial Spares	**Amount**
Initial Spares supplied till 31.3.2014 (A)	71.64
Initial Spares supplied during 2014-15 (B)	14.83
Initial Spares supplied during 2015-16/ 2016-17 (C)	*21.53
Total (A+B+C)	**108.00**
4% of P&M cost	**112.87**

*including BTG spare of Rs.777.30 lakh and Spare GT of Rs.846.76 lakh

52. Thus, the total value of Initial spares procured till 2015-16 is Rs.108 crore which is within the ceiling of Rs.112.87 crore i.e. (4% of Rs.2821.82 crore), specified under Regulation 13 of the 2014 Tariff Regulations. The Petitioner has submitted that it has procured initial spares as and when it was required and some spares were procured in 2015-16, after cut-off date. Regulation 14(1)(3) of the 2014 Tariff Regulations permits the capitalization of capital spares up to the cut-off date in accordance with Regulation 13 of the 2014 Tariff Regulations (i.e. 4% of Plant & Machinery cost as on the cut-off date). It is evident from the submissions of the Petitioner that the initial spares form part of the original initial cost of the plant and machinery. The procurement of spares was initiated before the cut-off date (31.3.2015) but the OEM had delayed the delivery of the same. Since the Petitioner is entitled for initial spares up to 4% of Plant and Machinery cost, we allow Rs.777.30 lakh towards initial spares of BTG package in exercise of the power to relax under Regulation 54 of the 2014 Tariff Regulations. However, the amount of Rs.60.10 lakh (Rs.837.40 - Rs.777.30) towards BTG package which include Workshop equipment (Rs.23.83 lakh), Mill hoist (Rs.15.23 lakh) and for Others (Rs.21.05 lakh) during 2015-16 and Rs.1.78 lakh in 2016-17 have not been allowed as the capitalization has occurred after the cut-off date and reasons furnished by the Petitioner do not justify the capitalization of these assets after the cut-off date.

53. As regards claim of the Petitioner for additional capitalisation of Rs.846.76 lakh in 2015-16 and Rs 35.73 lakh in 2016-17 towards Spare GT, the Petitioner has submitted that the same may be allowed as ‘replacement’ as the original Generator Transformer (GT) procured prior to COD had failed and has been de-capitalized at its gross value of Rs.1147.14 lakh in 2014-15. This submission of the Petitioner has been verified from the list of assets de-capitalized in 2014-15 and it is noticed that

GT has been de-capitalized at the aforesaid gross value, which is more than the cost of new GT (i.e. Rs.846.76 lakh). Accordingly, the additional expenditure of Rs.846.76 lakh in 2015-16 and Rs.35.73 lakh in 2016-17 towards Spare GT is allowed for the purpose of tariff as 'replacement' since the gross value of the old asset has been de-capitalized in terms of the provisions of Regulation 14(4) of the 2014 Tariff Regulations.

Balance of Plant (BOP)

54. The Petitioner has claimed actual additional capital expenditure of Rs.445.57 lakh in 2015-16 and Rs.5.82 lakh in 2016-17 towards 'BOP' which form part of the original scope of work of the project, but after the cut-off date. The claim of the Petitioner for Rs.5.82 lakh in 2016-17 is under the head 'Others'. In justification of the said claim, the Petitioner has categorised the capitalization of this package in 2015-16, as under:

(Rs. in lakh)

Asset Description	**2015-16**
Condition Monitoring Instruments	207.20
Initial mandatory spares	185.10
Electrical System for Plant facilities	53.27
Total	**445.57**

55. The Respondent, KSEBL has submitted that the additional capitalization claimed after the cut-off date may not be allowed. In response, the Petitioner has submitted that the capitalization claimed under BOP package, beyond the cut-off date, is mainly towards the procurement of condition monitoring equipment/ testing instruments and initial spares. It has submitted that the procurement process was initiated within the cut-off date and order was placed in March 2015/ early April 2015, but the supply got concluded in 2015-16. The Petitioner has stated that the delay was on account of multiple failure of the units during the years 2013-14 and 2014-15, thereby delaying the initial stabilization of the units. It has added that on account of

this 'force majeure' condition, the additional capitalization falls under the purview of Regulation 14(3)(v) read with Regulation 54 of the 2014 Tariff Regulations (Power to relax). The Petitioner has further submitted that the additional capitalization for assets which form part of the original scope of the project, but also have life of more than one accounting period and is an integral part of the existing assets. Hence, such expenditure incurred are capital in nature and are not charged to O&M expenses in the books of accounts of the Petitioner.

56. We examine the claims of the Petitioner in following paragraphs.

(a) Condition Monitoring Instruments

57. The Petitioner has submitted that Regulation 46 of the Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010 specifies standards for Condition Monitoring of Electrical equipment. It has submitted that the procurement process of testing instruments was initiated on 13.8.2014 (within the cut-off date) after finalizing the specifications and the bidding process was initiated and Purchase order was issued to qualified supplier on 6.4.2015. The equipment was procured in batches in order to lessen the burden of cost in one year. The Petitioner has also submitted that major procurement was done in 2015-16 for Rs.207.20 lakh and the remaining equipment were purchased in 2016-17. The Petitioner has submitted that since the said expenditure has been incurred in furtherance to the Regulations specified by CEA, the expenditure incurred squarely falls within the scope of Regulation 14(3)(ii) of the 2014 Tariff Regulations.

58. We have considered the submissions of the Petitioner. Since the additional capital expenditure for Rs.207.20 lakh for Condition Monitoring of Electrical equipment has been incurred in compliance with the CEA (Technical Standards for

Construction of Electrical Plants and Electric Lines) Regulations, 2010, the same is allowed to be capitalised under Regulation 14(3)(ii) of the 2014 Tariff Regulations.

(b) Initial mandatory spares

59. The Petitioner has claimed initial mandatory spares for Rs.185.10 lakh and has stated that these mandatory spares were procured as and when they were required and some spares were procured in 2015-16 i.e. after cut-off date. The Petitioner has stated that the same is within the ceiling of initial spares as per the provisions of the 2014 Tariff Regulations.

60. We have considered the submissions. The claim of the Petitioner for Rs.185.10 lakh towards mandatory spares pertain to initial spares which form part of the original scope of the Plant and Machinery. It is evident from the submissions of the Petitioner that the procurement of the spares was initiated before the cut-off date (31.3.2015), but were received only during 2015-16. Accordingly, the claim of the Petitioner for additional capitalisation of Rs.185.10 lakh in 2015-16 towards initial spares for 'BOP spares' after the cut-off date is allowed under Regulation 14(1)(3) of 2014 Tariff Regulations, in exercise of the power to relax.

(c) Electrical system for Plant facilities

61. The Petitioner has submitted that facilities like field hostel, gate house and canteen were delayed due to land issues and local agitation as explained under "General Civil Works" package. Hence, the capitalization of electrical system was carried out in 2015-16 when these facilities where commissioned and an amount of Rs.53.27 lakh was capitalized in 2015-16. The Petitioner has submitted that these assets are within the original scope of work, but due to various force majeure conditions faced by the Petitioner, the commissioning of such assets were delayed and was finally completed beyond the cut-off date.

62. It is observed that the electrical system for facilities i.e. field hostel, gate house and canteen, is consequential to 'General Civil Works' which were delayed due to land non-availability and the same are for reasons beyond the control of the Petitioner as discussed in paragraph 46 above. In this background, the additional capitalization of Rs.53.27 lakh in 2015-16 pertaining to Electrical system for plant facilities is allowed under Regulation 14(3)(i) of the 2014 Tariff Regulations. In support of the claim for Rs.5.82 lakh during 2016-17, the Petitioner has submitted that the amount corresponds to "Others" but has not mentioned the nature of items capitalized and the necessity of such capitalization. In view of the above, capitalization of Rs.5.82 lakh during 2016-17 is not allowed.

New Schemes in 2015-19

63. The Petitioner has also claimed additional capital expenditure for 'New Schemes' in 2015-19, as follows, which do not form part of the original scope of work of the project and which were taken up after the cut-off date:

(Rs in lakh)

Assets/Works	2015-16	2016-17	2017-18	2018-19
Fire Tender with shed	61.53	0.60	14.47	1.30
Fixed Foam system for LDO & HFO	60.74	-	-	-
NABL Accredited Lab	70.52	112.96	5.62	55.18
Online Effluent Monitoring System	13.95	-	-	-
IT & Others	10.97	61.01	125.62	134.55
Augmentation of Track Hopper shed	268.36	-	-	
MAX DCS version up-gradation (XP) Unit-1	67.52	-	438.86	
Construction of road in Ash area	-	80.29	18.15	-
Installation of CAAQMS	-	67.58	-	-
Power supply redundancy and Re-arrangement at BOP area	-	401.59	-	-
Gate house near JNT/security infra/e-security	-	45.07	98.58	257.66
Ash Bagging	-	27.21	-	
Augmentation of Store area	-	31.74	7.58	171.16
Safety related expenditure	-	-	67.09	103.67
Augmentation of Fire detection system	-	-	80.41	-
Drinking Water System	-	-	10.07	13.16
Augmentation of Ash handling system	-	-	700.13	848.07
Fabrication of expansion bellow	-	-	49.69	23.34

Labour colony	-	-	192.79	16.08
Refurbishment of DM Plant Piping and Tank	-	-	31.98	-
Re-heater modification & MTM installation	-	-	160.29	78.23
Up-gradation of protection system	-	-	1.45	47.30
Yard sprinkling and Fire detection system in CHP	-	-	-	18.91
Coal pit run-off mechanized drainage system	-	-	-	321.88
Wind barrier in Ash Pond	-	-	-	29.90
Total additional capitalization	**553.59**	**828.05**	**2002.78**	**2120.39**
Total additional capitalization claimed as per Form 9A	**554.59**	**829.06**	**2002.40**	**2119.96**

(a) Fire Tender with shed

64. The Petitioner has claimed additional capitalization of Rs.61.53 lakh in 2015-16, Rs.0.60 lakh in 2016-17, Rs.14.47 lakh in 2017-18 and Rs.1.30 lakh in 2018-19 for Fire tender with shed under Regulation 14(3)(ii) of the 2014 Tariff Regulations. In justification for the same, the Petitioner has submitted that a fire station has been commissioned near the DM plant with intent to cover the entire plant premises in the eventuality of fire and, hence, the expenditure may be approved.

65. The Respondent, KSEBL has submitted that IS 3034 Standards were to be followed by the Petitioner at the time of design of the generating station and should have formed part of the original scope of work. The Respondent has stated that the expenditure does not fall under 'change in law' and, therefore, should not be allowed to be capitalized. In response, the Petitioner has submitted that after overcoming stabilization issues of the units, which was of utmost priority, the Petitioner had initially conducted audit/ review/ mock drills of the existing firefighting systems and their compliance with IS standards/ CEA Regulations, 2010. After review of the firefighting systems, it was observed that with the existing location of Fire Tender, it was not possible to meet the response time of 5 minutes in case of fire at the Coal Handling Plant area. The Petitioner has pointed out that the claim of NTPC towards firefighting system was allowed by the Commission in its order dated 29.7.2016 in

Petition No. 293/GT/2014 (tariff of Talcher STPS, Stage-II for the 2014-19 tariff period) subject to the report of CEA. Accordingly, the Petitioner has submitted that the additional capital expenditure claimed may be allowed.

66. IS:3034 standard which deals with fire stations in Super Thermal Power generating stations having installed capacity exceeding 1000 MW, stipulate the following:

> *"(a) As per clause no 10.3.5 "Considering the large area of Super Thermal Power Stations (Super Thermal/Power Stations Having Installed Capacity Exceeding 1 000 MW), facilitate quick turn out it may be necessary to deploy the operational manpower at two Fire Stations — a Main Fire Station and a Sub Fire Station, both having up-to-date communication facilities to help easy mobilization in case of emergency."*
>
> *(b) As per clause no 10.4.1 "Power Stations authorized for full time Fire Brigades with major firefighting appliances shall have well designed Fire Stations for housing appliances and firefighting staff. They shall be so located that the response times for fire appliances are kept to a minimum not to exceed 5 minutes*."

67. Thus, as per IS:3034 standard, the response time for reaching a fire prone area should be limited to less than 5 minutes and, if necessary, an additional sub-fire station is required to be made operational. The Petitioner has submitted that during various mock drills conducted (as per the Factories Act, 1948), it took more than five minutes to reach the premises of Coal Handling Plant (CHP) of the Petitioner, which is a critical area to be protected from fire, as it is situated far away from the DM Plant area. Hence, the need was felt by the Petitioner to set up another sub-fire station near CHP area to be compliant with IS:3034 standard in order to avoid any eventuality. Keeping in view that the expenditure incurred was in compliance with the IS:3034 standard (which deals with "Fire Stations in Industrial Buildings') and as the same is required for the safety and security of the plant, the additional capital expenditure incurred is allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations.

(b) NABL accredited lab, Online Effluent Monitoring system, Installation of CAAQMS, Yard sprinkling and Fire detection system, Wind barrier in Ash pond and Construction of road in Ash area

68. The Petitioner has claimed additional capitalization of Rs.70.52 lakh in 2015-16, Rs.112.96 lakh in 2016-17, Rs.5.62 lakh in 2017-18 and Rs.55.18 lakh in 2018-19 for NABL accredited lab. It has also claimed additional capitalization of Rs.13.95 lakh for 'Online Effluent monitoring system' in 2015-16. The Petitioner has claimed additional capitalization of Rs.80.29 lakh in 2016-17 and Rs.18.19 lakh in 2017-18 for Construction of road in Ash area and Rs.67.58 lakh for 'Installation of CAAQMS' in 2016-17. Also, additional capital expenditure of Rs.29.90 lakh for 'Wind barrier in Ash pond' and Rs.18.91 lakh for 'Yard sprinkling and Fire detection system' in CHP in 2018-19 has been claimed by the Petitioner. The Petitioner has submitted that these expenditures have been incurred for various schemes which were to be complied by the Petitioner based on the directions of the Jharkhand State Pollution Control Board (JSPCB) and is, therefore, covered under Regulation 14(3)(ii) of the 2014 Tariff Regulations. It has stated that the sitting arrangement of the lab technicians/ department was initially arranged in the adjoining space which was not in compliance with ISO-17025 (NABL) and, accordingly, a separate sitting arrangement was made to comply with the requirements of ISO-17025 for the lab and to comply with the mandate of Jharkhand State Pollution Control Board (JSPCB) and it being a governmental instrumentality, directions issued by it fall within the scope and meaning of Regulation 14(3)(ii) of the 2014 Tariff Regulations i.e. change in law or compliance of existing law. The Respondent, KSEBL has submitted that the expenditure incurred for establishing additional vertical extension of DM plant lack justification on perusal of the 'Consent to Operate' order and the same is not in line with the aforesaid regulation.

69. The matter has been examined. The Petitioner in support of its claim for additional capitalization of the schemes has furnished the correspondences made with JSPCB with regard to the said schemes. The schemes executed by the Petitioner are mainly to comply with the Pollution control norms and for maintaining the environment standards as per directions of JSPCB. As the Petitioner has incurred the aforesaid additional expenditure in respect of these assets/ works for compliance with the directions of JSPCB, the same are allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations.

(c) IT & Others

70. The Petitioner has claimed additional capitalization of Rs.10.97 lakh in 2015-16, Rs. 61.01 lakh in 2016-17, Rs.125.62 lakh in 2017-18 and Rs.134.55 lakh in 2018-19 for IT & others. The Petitioner, in justification of the same, has submitted that it has incurred the expenditure for replacement of IT equipment, namely laptops, computers, servers, printers, etc. and some other 'minor assets' which have been fully depreciated in the books of accounts. The Petitioner has stated that in case the generating station would have completed more than 10 years, the expenses on such items would have been managed from the Compensation Allowance eligible in terms of the 2014 Tariff Regulations. It has stated that the life of IT equipment is much less than 10 years and needs to be replaced within the said period. Therefore, there is no other means available with the Petitioner for meeting expenditure on these assets. The Petitioner has sought additional capitalization of these assets by invoking Regulation 54 of the 2014 Tariff Regulations and has submitted that the expenditure needs to be allowed on the principles enshrined under Section 61 of the Electricity Act, 2003. The Respondent, KSEBL has submitted that the additional capital expenditure falls under R&M expenses and, therefore, the same may be disallowed.

71. The matter has been examined. Admittedly, the additional capital expenditure claimed by the Petitioner is beyond the original scope of work of the project and is after the cut-off date. In this regard, the proviso to Regulation 14(3) of the 2014 Tariff Regulations provides the following:

> *"Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2014."*

72. In our considered view, the expenditure pertaining to IT equipment is in the nature of 'minor assets' which has been incurred after the cut-off date. Hence, in terms of the proviso to Regulation 14(3) of the 2014 Tariff Regulations, the additional capitalization of the expenditure claimed is not allowed.

(d) Fixed foam system for LDO & HFO

73. The Petitioner has claimed additional capitalization of Rs.60.74 lakh in 2015-16 for 'Fixed foam system for LDO and HFO' under Regulation 14(3)(ii) of the 2014 Tariff Regulations. The Petitioner has submitted that Foam flooding system at HFO and LDO Tank is required as per clause no 5.3.5.2 of IS 3034 standards, which stipulate as follows:

> *"5.3.5.2 The oil storage tanks should also have fixed foam fire extinguishing system in conformity with IS 12835 (Part 1): 1989."*

74. The Petitioner has referred to IS 3034:1993 and IS 12835 (Part 1): 1989 and has submitted that the additional expenditure incurred is for compliance with the provisions of the said IS standards. Though these IS standards were in place at the time of conceptualization of the generating station, since the additional capitalization is for compliance with the existing law, we allow the additional capitalization of Rs. 60.74 lakh for 'Fixed Foam system for LDO and HFO' in 2015-16 under Regulation 14(3)(ii) of the 2014 Tariff Regulations.

(e) Augmentation of Track Hopper shed

75. The Petitioner has claimed additional capitalization of Rs.268.36 lakh in 2015-16 towards 'Augmentation of track hopper shed'. In justification of the same, the Petitioner has submitted that originally, Track hopper was designed for direct unloading of coal from BOBR (Bogie Open Bottom Rapid discharge Railway Wagon) into track hopper. It has submitted that the track hopper shed was erected in 2012 with dimensions as per BOBR unloading requirements, but in the absence of rail connectivity, coal is transported through road by Hyva (a vehicle by Tata Motors) and is unloaded at coal bed/ ramp area or track hopper as per need and, thereafter, excavators/ bulldozers push the coal into track hopper. The Petitioner has stated that continuous movement of heavy vehicles for feeding coal into track hopper, coupled with impact of large size stones in coal had considerably damaged the structure of the Track hopper, which endangered the safety of personnel working there. It has submitted that additional capital expenditure under this scheme was required to be incurred due to unforeseen circumstances beyond the control of the Petitioner and could not have been anticipated or avoided, through prudent utility practices. Accordingly, the Petitioner has prayed that the Commission may allow the additional capital expenditure under this scheme, in exercise of the power under Regulation 54 (Power to relax) read with Regulation 3(25) and Regulation 8(3) of the 2014 Tariff Regulations. Alternatively, the Petitioner has submitted that the said expenditure is covered under Regulation 14(3)(iii) of the 2014 Tariff Regulations.

76. The matter has been examined. Admittedly, the additional capital expenditure claimed by the Petitioner is beyond the original scope of work of the project and is after the cut-off date. The Petitioner's submission that the additional capitalization incurred is on account of 'Force Majeure' events and the same may be allowed in

exercise of the power to relax is not acceptable, as the submissions made by the Petitioner do not demonstrate the existence of any 'force majeure' events. Alternatively, the prayer of the Petitioner to allow the said claim under Regulation 14(3)(iii) of the 2014 Tariff Regulations is also not acceptable, as the Petitioner has not furnished any documentary evidence indicating that the expenditure has been incurred for higher security or safety of plant as advised or based on directions of the Appropriate Governmental agencies or Statutory authorities responsible for national/ internal security. In view of this, the additional capitalization claimed by the Petitioner under this head is not allowed.

(f) MAX DCS Version up-gradation (XP) Unit-1 (New schemes required on account of obsolescence)

77. The Petitioner has claimed additional capitalization of Rs.67.52 lakh in 2015-16 and Rs.438.86 lakh in 2017-18 for 'MAX DCS version Up-gradation (XP) Unit-1' in exercise of the power to relax under Regulation 54 of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted the following:

> (a) Digital Control System (DCS) is the automated intelligence of any thermal power generating station. Windows XP operating system was the most popular and reliable Windows platform provided by all leading industrial automation companies for their control system. However, from 8.4.2014, Microsoft has completely withdrawn the support for Windows XP Operating System. With end of support by Microsoft on Windows XP operating system, it stopped developing Security Patches for Windows XP, non-security hot fixes, online technical content updates and telephone support. Hence, system was more vulnerable for malware attack and had become out-dated.
>
> (b) The Petitioner managed the system with existing inventories and support from BHEL till mid of 2016. However, after mid of 2016, M/s BHEL expressed its inability to provide further support and recommended for complete up-gradation of existing DCS to higher version of Windows Operating System with upgraded version of MAX DNA DCS for Maithon Units to ensure services and necessary spares. Accordingly, MAX DCS up-gradation for Unit-1 was taken up in 2017-18.

78. The Respondent, KSEBL has submitted that the additional capital expenditure incurred is in the nature of R&M expenses and, hence, may not be allowed. In response, the Petitioner has submitted that the expenditure has been incurred on

account of obsolescence and force majeure conditions which was not within the control of the Petitioner. It has stated that though Microsoft had withdrawn its support for Windows XP Operating System on 8.4.2014, the Petitioner with all its efforts and existing inventory managed to maintain the system till 2016-17, but had to undertake such replacements when M/s BHEL stopped extending its support after mid of 2016 and strongly recommended to upgrade to higher versions. The Petitioner has stated that the same could not have been avoided and due to such uncontrollable factors, it had to incur a one-time expenditure towards such up-gradation, and is in no way a recurring expenditure that can be booked under R&M expenses.

79. The matter has been examined. The Petitioner has submitted that the Digital Control System (DCS) has become obsolete as Microsoft had completely withdrawn its support for Windows XP Operating System. Max DNA version 6.x.x on Windows 7 was envisaged to replace the earlier version i.e. Max DNA version 4.x.x on Windows XP. The Petitioner has furnished the recommendations of OEM (M/s BHEL) confirming that further sustenance of the system was not possible. Considering the submissions of the Petitioner and the documents furnished and keeping in view that the additional expenditure was incurred by the Petitioner under circumstances which were beyond its control (on account of obsolescence of Windows XP for DCS), the additional capital expenditure claimed is allowed, in relaxation of Regulation 14(3)(vii) of the 2014 Tariff Regulations.

(g) Gate House Near JNT/ Security infra/ E-security

80. The Petitioner has claimed additional capital expenditure of Rs.45.07 lakh in 2016-17, Rs.98.58 lakh in 2017-18 and Rs.257.66 lakh in 2018-19 under Regulation 54 (Power to relax) read with Regulation 14(3)(iii) of the 2014 Tariff Regulations for construction of gate house near JNT equipped with turnstile gate and strengthening

of e-Security system for main gate, labour gate and the plant premises. In justification of the said claim, the Petitioner has submitted that these works were necessitated on account of increasing security incidents due to local agitations, strikes, dharna and increasing instances of theft etc.. The Petitioner has also submitted that the turnstile gates have dual authentication with access card as the first and biometric as the other. It has further stated that Boom barriers, one for entry road and one for exit road have been constructed and also RFID system has been installed for automated gate operation.

81. The Respondent, KSEBL has submitted that expenditure claimed is covered under the security expenses allowed to the Petitioner, over and above the normative O&M expenses. In response, the Petitioner has submitted that the plant is spread over 1116 acres of land and is situated in a region having less employment and is a stronghold of Maoists, which poses a high security threat to the installations and workforce of the plant. It has further submitted that since inception, it is continuously facing a lot of law and order problems like agitation, gate jams, trespassing, thefts by displaced persons, supported by political outfits and such facts had been observed by the Intelligence Bureau, GOI in its report dated 10.1.2019. The Petitioner has added that due to delay in the commissioning of Railway project, owing to Force Majeure conditions, coal is transported through trucks (about 1200-1600 per day) and the security staff had to oversee all these along with patrolling and monitoring which was difficult for them and was prone to human error, due to fatigue.

82. The matter has been considered. Admittedly, the additional capital expenditures claimed by the Petitioner is beyond the original scope of work of the project and is after the cut-off date. The Petitioner's submission that the additional capitalization has been incurred is on account of Force Majeure events and the

same may be allowed in exercise of the power to relax is not acceptable, as the submissions made by the Petitioner do not demonstrate the existence of any force majeure events. Alternatively, the prayer of the Petitioner to allow the said claim under Regulation 14(3)(iii) of the 2014 Tariff Regulations is also not acceptable, as the Petitioner has not furnished any documentary evidence indicating that the expenditure incurred is for higher security or safety of plant as advised or is based on the directions of the Appropriate Governmental agencies or Statutory authorities responsible for national/ internal security. In view of this, the additional capitalization claimed by the Petitioner under this head is not allowed.

(h) Power Supply redundancy and re-arrangement at BOP area and Augmentation of Store area

83. The Petitioner has claimed additional capital expenditure of Rs.401.59 lakh in 2016-17 for 'Power Supply redundancy and re-arrangement at BOP area' and Rs.31.74 lakh in 2016-17, Rs.7.58 lakh in 2017-18 and Rs.171.16 lakh in 2018-19 towards 'Augmentation of Store area' under Regulation 3(25) read with Regulation 54 of the 2014 Tariff Regulations. In justification of the same, the petitioner has submitted the following:

(i) Power Supply Redundancy and Re-arrangement at BOP area: Frequent tripping of 11 kV CPS overhead line due to breaking of insulators and other overhead line components due to storm and lightning were leading to shutdown of essential load. Further, underground Cable fault of the single source was leading to shutdown of supply of the vital load along approach road for a longer time as it requires considerable time locating and repairing the fault. Moreover, frequent disruption of lighting load and supply of Gate house was becoming major concern of safety and security of the persons and the plant. It was, therefore, decided to form a 6.6 kV Ring Mains Unit by sourcing of 2 numbers of 6.6 kV outgoing feeders from existing 6.6 kV ER #1 switchboard to form a 6.6 kV network with low cost Compact Sub Stations at different load centres to feed such critical loads.

(ii) Augmentation of Store area: In view of the increased Inventory levels in volume and high value spares and to avoid damage of the equipment due to bad weather/ temperature, the need for a sufficient and proper storage facility,

both open and covered, equipped with additional racking/ handling infrastructure was felt. Accordingly, the Petitioner has undertaken augmentation of the store area which broadly includes (i) Concreting and securitization of additional space admeasuring 200 m x 100 m for the purpose of storage of material along with road and pathways, (ii) Development of shed of specification 50 m x 100 m in the open yard of the existing store and (iii) Installation of heavy duty racks and procurement of material handling machines like forklift, crane etc.

84. The Respondent, KSEBL has submitted that expenditure incurred is as a result of poor planning which is attributable to the Petitioner and, therefore, may not be allowed and cannot also be classified as a force majeure event. In response, the Petitioner has submitted that existing overhead line of 11 kV installed for the purpose of construction supply was being utilized for supplying power to some of the essential load like gate house complex, field hostel, site office, etc. It has stated that with passage of time, tripping of these overhead lines had increased because of failures of insulators, breaking of the conductor, damage on account of the movement of coal trucks, which was initially not envisaged and was beyond the control of the Petitioner. Accordingly, the Petitioner has submitted that the expenditure may be allowed in exercise of the power under Regulation 54 or, alternatively, under Regulation 14(3)(iii) of the 2014 Tariff Regulations.

85. The submissions have been considered. The Petitioner's submission that the additional capitalization incurred is on account of 'Force Majeure' events and, hence, the same may be allowed in exercise of the power to relax is not acceptable, as the submissions made by the Petitioner do not indicate the existence of any force majeure events. In our view, the works executed by the Petitioner are only an extension/ rearrangement of the existing system in the generating station. Alternatively, the prayer of the Petitioner to allow the said claim under Regulation 14(3)(iii) of the 2014 Tariff Regulations is also not acceptable, as the Petitioner has

not furnished any documentary evidence indicating that the expenditure incurred is for higher security or safety of plant as advised or is based on the directions of the Appropriate Governmental agencies or Statutory authorities responsible for national/ internal security. In view of this, the additional capitalization claimed by the Petitioner under this head is not allowed.

(i) Ash Bagging system

86. The Petitioner has claimed additional capital expenditure of Rs.27.21 lakh in 2016-17 for 'Ash Bagging system' under Regulation 3(25) read with Regulation 8(3) and Regulation 54 of the 2014 Tariff Regulations. The Petitioner has submitted that 'Ash bagging system' has been installed to facilitate dry fly ash to be packed in the bags directly from silo discharge points and, thereafter, dry fly ash filled in bags are transported through rail/ trucks, for onward transportation and utilization. It has submitted that additional capital expenditure of Rs.27.21 lakh has been incurred in 2016-17 for installation of 'Ash bagging system' to optimally utilize the fly ash and was in compliance of with the directions of JSPCB vide notice dated 17.5.2013. Accordingly, it has submitted that the additional capitalization may be allowed under Regulations 14(3)(ii) and 14(3)(iii) read with Regulation 54 of the 2014 Tariff Regulations.

87. The matter has been considered. The notice dated 17.5.2013 of JSPCB indicates that the Petitioner is required to comply with the direction of the Board regarding usage of 100% fly ash. As the additional expenditure incurred was in compliance with the directions of JSPCB, which is a statutory authority, we allow the additional capitalization claimed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.

(j) Up-gradation of RTU/Protection system

88. The Petitioner has claimed additional capitalization of Rs.1.45 lakh in 2017-18 and Rs.47.30 lakh in 2018-19 towards 'Up-gradation of RTU/protection system' under Regulation 14(3)(ii) of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted the following:

> *"(a) That the matter for Upgradation/replacement of old Remote Terminal Unit (RTU) in Eastern Region for reporting of old RTU/Substation Automation System (SAS) to back up control center over IEC 60870-5-104 has been discussed in a special Project review meeting held on 14.2.2017 at Eastern Reginal Power Committee (ERPC), 35th TCC/ERPC meeting held on 24th / 25th February 2017 and also in 19th SCADA O&M meeting held on 7.4.2017. As advised by ERPC in 35th TCC/ERPC meeting, detailed report has been finalized and approved in 36th TCC/ERPC board meeting held on 13th/ 14th September 2017 at Bhubaneshwar. In view of above direction of ERLDC/ERPC, the Petitioner was mandated to upgrade the RTU system and seek additional license from OEM for enabling existing RTUs for reporting over IEC 104 protocol to Main as well as back-up Control Centre of ERLDC. Therefore, the Petitioner prays to the Commission to consider the circumstances as under compliance of existing law and allow capitalization under this head. The expenditure incurred therefore squarely falls within the scope of Regulation 14 (3)(ii) of 2014 Tariff Regulations."*

89. Since the total additional capitalization of Rs.48.75 lakh (Rs.1.45 lakh and Rs.47.30 lakh) for up-gradation of RTU or protection system has been based on discussions in various ERPC meetings and has been incurred by the Petitioner in compliance with the mandate of ERLDC/ERPC towards safety features of protection system, we allow the same under Regulation 14 (3)(ii) of 2014 Tariff Regulations.

(k) Safety related expenditure

90. The Petitioner has claimed additional capitalization of Rs.67.09 lakh in 2017-18 and Rs.103.67 lakh in 2018-19 for 'Safety related expenditure' (i.e. scaffolding for Boiler, Insulated sky lift, construction of high-rise maintenance platform) under Regulations 14(3)(iii) of 2014 Tariff Regulations. Regulation 14(3)(iii) of the 2014 Regulations provides for admissibility of expenditure for higher security and safety, based on the advice of the Appropriate Government agency or statutory authorities responsible for national/ internal security. As the Petitioner has not demonstrated that the additional expenditure claimed is based on advice or direction of any

Governmental agency or statutory authorities, the additional capitalization of the same is not allowed.

(I) Coal Pit Run-off mechanised Drainage system

91. The Petitioner has claimed additional capitalisation of Rs.321.88 lakh in 2018-19 towards Coal Pit Run-off mechanised Drainage system, under Regulation 3(25) read with Regulation 54 of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted the following:

> *(i) The three runoff pits near Stacker Reclaimer, track hopper and crusher house are provided to store internal drainage. Any spill over from these pits are stored in another runoff pit located near main entrance gate on the western side of the Plant. Topography of the northern area outside and near the plant is such that runoff of this area enters the plant campus, travels around 200 m inside plant and thereupon goes outside the plant through western side of the Plant. During heavy rainy seasons, such storm water enters the plant coal handling area carrying coal dust with it and gets mixed with the runoff pit near gate. In an event of spill over due to flooding of pit, the outflow of this pit crosses the Nirsa-Jamtara road through a culvert and finds its way to Rani Talab due to natural slope of the area. The accumulation of the runoff water was also causing failure of the wall. Many villagers started agitation on the belief that the Petitioner is discharging contaminated process water from the plant to the outside environment. Letter from village community leader to the Petitioner complaining regarding discharge of contaminated water (which actually is rainwater) is annexed;*
>
> *(ii) Based on the experience of flooding of the storm water drain with the coal handling area runoff water during the monsoon season, the Petitioner reviewed the existing drains to arrive at a long-term solution to avoid flooding under all rainfall conditions. It was, therefore, decided that the storm water drains from outside plant boundary be diverted along the northern boundary preventing mixing with the internal drainage water or flooding the pit located near main entrance gate and ultimately to be discharged into the culvert on Nirsa-Jamtara road beyond the boundary wall. This way the excess water from outside the plant boundary will not flood the run-off pit 2 near main gate and only clean water would be diverted outside the plant, which shall address the concern raised by villagers as stated above. Accordingly, the scheme was conceptualized and proper drainage system was constructed for its natural flow without any contamination outside the plant. However, the construction work beyond the Petitioner's boundary was forcefully stopped by the local community and their leaders as they were still of the belief that diverted water would be/may be contaminated, through an agitation on 18.6.2018 disrupting plant operation and supply of coal. A True Copy of newspaper cutting in this regard is annexed;*
>
> *(iii) Though all the efforts have been made by the Petitioner to explain the local community leaders, but the Petitioner was not permitted to carry out the work of extending the drainage system into the culvert on Nirsa-Jamtara Road. Accordingly, the Petitioner vide its Letter dated 17.8.2018 apprised Sub-Divisional Officer (SDO) Dhanbad about the Scheme undertaken for addressing the concern raised by neighbouring community, however, due to agitation by the community leaders on 18.6.2018 the same was stopped. In view of above developments, it was, therefore, further decided to have alternative disposal methodology for the coal area runoff water during the monsoon season. Under this Project, it has been decided to divert the*

excess water into Ash Pond through pumping and piping arrangement and containing the coal dust mixed run-off water within Coal Storage area;

(iv) Pursuant to the above, the Petitioner had to mandatorily undertake following works addressing the concerns of villagers for the reasons beyond the control of itself as under:

(a) Construction of the drainage system for natural flow of storm water entering through northern area near the plant and preventing it from mixing with the contaminated water;

(b) To divert Coal run off disposal into Ash pond (during monsoon season) through a pumping and piping arrangement;

(c) To contain the coal dust mixed run off water within coal storage area.

92. The Petitioner has submitted that the additional capital expenditure claimed was incurred due to circumstances, which were unforeseen and beyond the control of the Petitioner and the same was neither anticipated nor could have been avoided through any prudent utility practice. Accordingly, the Petitioner has prayed that the Commission may allow the additional capital expenditure under this scheme in exercise of the power under Regulation 54 of the 2014 Tariff Regulations. The Petitioner has also submitted that in addition to the additional expenditure incurred for 2018-19 as above, an expenditure of Rs.400 lakh for balance work is envisaged to be taken up during 2019-20.

93. The Respondent, KSEBL has submitted that the expenditure incurred by the Petitioner is due to poor planning and is, therefore, attributable to the Petitioner. It has also stated that claim is not in line with provisions of the 2014 Tariff Regulations and is not on account of any force majeure event. The Petitioner in its rejoinder has submitted that the storm water used to mix with coal dust and run-off pit near the gate and in event of flooding of the pit, the outflow of this used to flow in the Rani Talab due to natural slope of the area leading to widespread resistance from the villagers along with their political leaders. Accordingly, the Petitioner has submitted

that due to unforeseen circumstances, the expenditure incurred may be allowed in terms of Regulation 54 of the 2014 Tariff Regulations.

94. The matter has been examined. It is observed from the submissions and the documents enclosed that the Petitioner was required to undertake the construction of the drainage system, in order to address the concerns of the neighbouring community as the contaminated storm water from the plant area during monsoon season was overflowing to the natural reservoir (Rani Talab) located in a nearby village. The correspondence made with the community representatives, Sub-Divisional Officer ("SDO") Dhanbad and newspapers cuttings furnished by the Petitioner indicate that the expenditure incurred was necessary due to unforeseen conditions, which could not be apprehended during the construction stage of the plant. We note that Regulation 3(25) of the 2014 Tariff Regulations defines 'Force Majeure' conditions which prevent the timely completion of the project and as such, the expenditure is not covered under Regulation 3(25) as the plant is in operational stage. However, considering the fact that the said expenditure was necessitated to due to unforeseen circumstances, we allow the additional capitalisation of Rs 321.88 lakh under Regulation 14(3)(ii) of the 2014 Tariff Regulations.

(m) Augmentation of Ash handling system

95. The Petitioner has claimed additional capitalisation of Rs.700.13 lakh in 2017-18 and Rs.848.07 lakh in 2018-19 towards 'Augmentation of Ash handling system' under Regulation 3(25) read with Regulation 54 of the 2014 Tariff Regulations. The Petitioner has also submitted that the additional expenditure claimed is covered within the scope of Regulation 14(3)(ii) of the 2014 Tariff Regulations. The Petitioner has submitted that the additional capitalization claimed is beyond the original scope of work of the project and has been incurred due to "force majeure" events which

were beyond the control of the Petitioner. In justification of the same, the Petitioner has submitted the following:

a) The Petitioner has been facing acute operational and maintenance issues in its 'Ash handling system', primarily on account of combined effect of (i) significantly higher volume of ash generated than design capacity (ii) higher ash particle size and bulk density compared to design and (iii) Lower GCV leading to higher quantity of coal consumption and in turn increasing the effect of (i) and (ii) above.

b) The problems are mainly attributable to the poor quality of the coal received from various sources of Central Coalfield Limited and its subsidiaries. The coal received at the plant contains much higher ash than anticipated since its inception.

c) High quantity and coarser quality of ash posed pressure on the existing ash disposal system in proper handling of both fly ash and bottom ash leading to frequent leakages in ash conveying pipelines, thereby causing higher dust in environment and faster filling of limited capacity ash pond. In fact, there were specific directions from JSPCB for reduction of fugitive dust around ash pond and fly ash silo area in their letter dated 5.07.2016.

96. In view of the above submissions and since the additional capital expenditure incurred is based on the directions of JSPCB vide its letter dated 5.7.2016, the additional capital expenditure claimed is allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations.

(n) Drinking Water Facility

97. The Petitioner has claimed additional capitalization of Rs.10.07 lakh in 2017-18 and Rs.13.16 lakh in 2018-19 towards 'Drinking water facility' under Regulation 14(3)(ii) of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that Chapter III Section 41(d) of the Bihar Factories Rules, 1950 read with the Factories Act, 1948, as adopted by the State of Jharkhand, requires that 'the number of water centres to be provided shall be one 'centre' for every 150 persons employed at any one time in the factory'. According to this Rule, the number of drinking water centre should be one, for every 150 persons employed at any given time in the factory. The Petitioner has submitted that since many of the worker's

areas are widespread in the generating station, the number of workers in high concentration areas were more than '150 per centre' unless the workers travel to farther water centres. Therefore, the Petitioner has submitted that in order to reduce the overall travel time and in order to comply with the said Rule, it was decided to add drinking water facilities in three additional locations of the plant area viz., CHP area, Ash pond area and Coal weighbridge, which was concentrated with maximum number of workers. According to the Petitioner, since the additional expenditure incurred was in compliance of an existing law, the additional expenditure may be allowed to be capitalized in terms of Regulation 14(3)(ii) of the 2014 Tariff Regulations.

98. In consideration of the submissions of the Petitioner and keeping in view that the said additional expenditure incurred is for compliance with the provisions of the existing law i.e. the Bihar Factory Rules, 1950, we allow the additional capitalization claimed under Regulation 14(3)(ii) of the 2014 Tariff Regulations.

(o) Other Schemes

99. The Petitioner has also claimed additional capitalization of Rs.49.69 lakh in 2017-18 and Rs.23.34 lakh in 2018-19 for Fabrication of expansion bellow, Rs.192.79 lakh in 2017-18 and Rs.16.08 lakh in 2018-19 for Labour Colony, Rs.160.29 lakh in 2017-18 and Rs.78.23 lakh in 2018-19 for Re-heater Modification & MTM installation, Rs.80.41 lakh in 2017-18 for 'Augmentation of Fire detection system' and Rs.31.98 lakh in 2017-18 for 'Refurbishment of DM Plant Piping and Tank'. The Petitioner has claimed additional capitalization of the expenditure incurred on the ground of force majeure events and has accordingly prayed that the claim may be allowed under Regulation 3(25) read with Regulation 54 of the 2014 Tariff Regulations.

100. The matter has been examined. Admittedly, the claim of the Petitioner for additional capital expenditure is in respect of the assets/ works which do not form part of the original scope of work of the project and is after the cut-off date. It is observed that the works executed by the Petitioner are related to extension/ re-arrangement/ replacement of the existing systems in the generating station. The Petitioner has also not justified the nature of the 'force majeure' events which necessitated the additional expenditure being incurred on these assets/ works. In view of this, we find no reason to exercise the power to relax the provisions of the 2014 Tariff Regulations. Accordingly, the additional capital expenditure claimed under this head is not allowed.

Additional Capital Expenditure allowed

101. In view of the above discussions, the actual additional capital expenditure allowed for the 2014-19 tariff period is as under:

(Rs. in lakh)

Sl. No.	Package Name	2014-15	2015-16	2016-17	2017-18	2018-19
1	BTG	730.69	777.30	0.00	0.00	0.00
2	Cost of Land and Site	21142.23	69.98	0.40	0.00	2112.86
3	General Civil Works	10577.92	791.99	184.39	154.47	147.49
4	Plant Water System	252.36	0.00	0.00	0.00	0.00
5	Ash Handling System	48.65	26.23	0.00	0.00	0.00
6	Coal Handling System	1042.53	282.72	0.00	0.00	0.00
7	Balance of Plant	18.21	445.57	0.00	0.00	0.00
8	Township & Colony	57.12	43.38	0.00	0.00	0.00
9	Pre-Operative expenses	207.87	0.00	0.00	0.00	0.00
10	IT system for Software & Hardware	457.52	0.00	0.00	0.00	0.00
11	RO system	0.00	7798.20	(-) 28.04	57.38	0.00
12	Fire Tender with shed	0.00	61.53	0.60	14.47	1.30
13	Fixed Foam System for LDO & HFO	0.00	60.74	0.00	0.00	0.00
14	Construction of Road in Ash area	0.00	0.00	80.29	18.15	0.00
15	NABL Accredited Lab	0.00	70.52	112.96	5.62	55.18
16	Yard Sprinkling & Fire detection system in CHP	0.00	0.00	0.00	0.00	18.91
17	Up-gradation of Protection System	0.00	0.00	0.00	1.45	47.30

Sl. No.	Package Name	2014-15	2015-16	2016-17	2017-18	2018-19
18	Wind barrier in Ash Pond	0.00	0.00	0.00	0.00	29.90
19	Installation of CAAQMS	0.00	0.00	67.58	0.00	0.00
20	Online effluent monitoring system	0.00	13.95	0.00	0.00	0.00
21	Augmentation of ash handling system	0.00	0.00	0.00	700.13	848.07
22	Ash bagging system	0.00	0.00	27.21	0.00	0.00
23	MAX DCS Version up-gradation (XP) Unit 1	0.00	67.52	0.00	438.86	0.00
24	Drinking water facility	0.00	0.00	0.00	10.07	13.16
25	Spare GT	0.00	846.76	35.73	0.00	0.00
26	Coal Pit run-off drainage system	0.00	0.00	0.00	0.00	321.88
27	IDC in the above	144.82	349.53	0.00	0.00	0.00
A	**Total additional capitalization allowed**	**34679.91**	**11705.92**	**481.12**	**1400.60**	**3596.05**

102. The Petitioner has included IDC capitalized in books, excluding Railways, in the additional capitalization as per Form 9A. However, the same has been deducted by the Petitioner in Form 1(I) while claiming capital cost for tariff.

103. Accordingly, the net additional capitalization allowed after considering the de-capitalization/ deduction and before adjustment of liabilities and IDC as per books, is as under:

(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
A	**Total additions allowed**	**34679.91**	**11705.92**	**481.12**	**1400.60**	**3596.05**
B	Less: De-capitalization allowed	3214.56	131.14	69.61	132.63	81.37
C	Less: De- capitalization not performed in books.	0.00	96.56	192.54	717.48	350.46
D	Less: Cash capitalization towards land	5506.76	0.00	0.00	0.00	0.00
E	**Total Deductions**	**8721.32**	**227.70**	**262.15**	**850.11**	**431.83**
F	**Net additional capitalization allowed before adjustment of liabilities and IDC as per books (A-E)**	**25958.59**	**11478.22**	**218.97**	**550.49**	**3164.22**

104. The net additional capital expenditure allowed after adjustment of un-discharged liabilities is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Net additional capitalization allowed	25958.59	11478.22	218.97	550.49	3164.22
Less: Un-discharged liabilities *(pertaining to additional capitalization allowed)*	391.10	71.03	163.06	0.00	0.00
Net additional capitalization allowed on cash basis	**25567.49**	**11407.19**	**55.91**	**550.49**	**3164.22**

Normative IDC on excess equity and on actual loan

105. The Petitioner, vide Form-1 of the petition, has claimed the following amounts of normative Interest during Construction (IDC) on excess equity and on actual loan in respect of additional capital expenditure for the 2014-19 tariff period:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Normative IDC on excess equity	62.39	199.52	41.00	192.37	429.04	**924.32**
Normative IDC on actual loan	2672.02	485.50	69.39	200.82	230.48	**3658.21**

106. As regards allowance of IDC, Regulation 11 of the 2014 Tariff Regulations provide as below:

> "*11. Interest during construction (IDC), Incidental Expenditure during Construction (IEDC)*
>
> *(A) Interest during Construction (IDC):*
> *(1) Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds up to SCOD.*
>
> *(2) In case of additional costs on account of IDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds:*
>
> *Provided that if the delay is not attributable to the generating company or the transmission licensee as the case may be, and is due to uncontrollable factors as specified in Regulation 12 of these regulations, IDC may be allowed after due prudence check:*
>
> *Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of generating company or the transmission licensee, as the case may be, after due prudence and taking into account prudent phasing of funds."*

Normative IDC on Additional Capitalization

107. The Petitioner has submitted that normative IDC may be allowed in terms of the judgment of APTEL dated 3.10.2019 in Appeal No. 231/2017 (Power links Transmission Limited V CERC & ors). The Petitioner has submitted that the entire expenditure on additional capitalization has been incurred from internal resources/ equity and no actual loan was/is proposed to be taken for such expenditure. Since 70% of such internal funds, which are in excess of 30% normative equity, are treated as normative loan for the purpose of tariff determination under the 2014 and 2019 Tariff Regulations, interest on excess over 30% out of total internal funds before capitalisation needs to be treated as normative IDC and added to cash to arrive at the additional capitalisation for purpose of tariff.

108. It is observed that the Commission in its order dated 20.4.2017 in Petition No. 514/TT/2014 (Powerlinks Transmission Ltd v PGCIL & ors) had disallowed normative IDC on additional capitalisation done through internal resources. Aggrieved by the disallowance of normative IDC, Powerlinks Transmission Ltd. had filed Appeal No. 231 of 2017 before the Appellate Tribunal for Electricity (in short 'APTEL') with the prayer to allow normative IDC on normative loan, considered for funding the additional capitalization for the 2014-19 tariff period. APTEL vide its judgment dated 3.10.2019 held as follows:

> *"8 (ix) The Central Commission should have taken into consideration the aspect that whatever be the types of funds it is never free of cost. There is always a cost of funding. The argument that no actual loan for additional capital expenditure was taken and therefore it is not admissible for any normative IDC is wrong. It is the commercial decision of the Appellant whether to borrow the money from the market for the purpose of additional capitalisation or use its internal accruals. In either case, the capitalisation deserves to be given the Interest During Construction. For the simple reasons that if the internal accruals were not to be used as additional capital than it would have been invested in the market in any interest earning instrument. Additional capitalisation is therefore entitled to be compensated in terms of normative IDC. The Central Commission should have considered this aspect that no funds are free funds."*

109. The Petitioner, in the present petition, based on the aforesaid decision of APTEL in Powerlinks case, has computed the normative IDC on 70% of the average funds deployed during the year for the additional capitalization claimed. The Petitioner has furnished the computation of normative IDC as follows:

a) Computation of Capital Works in Progress (CWIP) Schedule during the year:

i. The Petitioner has first computed the opening and closing amounts of Capital Works In Progress (CWIP) actually incurred in cash (cash CWIP) by subtracting Un-discharged liabilities from CWIP amounts on corresponding dates. Similarly, cash additional capitalization has been simply referred to as additional capitalization for this purpose.

ii. Since the closing amount of CWIP during a financial year is obtained after subtracting additional capitalisation during the year, CWIP schedule during the year is considered as the sum of CWIP schedule obtained by opening and closing amounts of CWIP and that for additional capitalisation;

iii. While CWIP schedule obtained by opening and closing amounts of CWIP is assumed to increase or decrease linearly from opening to closing amounts, the CWIP schedule for additional capitalisation is assumed to increase linearly from zero in the beginning to the amount of additional capitalisation in the mid of the year;

iv. The said assumption is based on the fact that the Commission considers average of opening and closing GFA i.e. additional capitalisation at the mid of the year, for the purposes of computing equity, loan and depreciation. Hence, for capitalisation to take place in mid of the year, entire CWIP for that capitalisation must have been incurred up to mid of the year.

b) Computation of normative IDC on normative loan used in CWIP schedule:

i. Average CWIP has been obtained as sum of (a) average of opening and closing CWIP for entire year (opening CWIP + closing CWIP)/2 and (b)

average of additional capitalisation up to mid-year (0+additional capitalisation)/4.

ii. The Petitioner has then considered excess equity of CWIP in a financial year as the normative loan during that year and normative IDC has been computed on average normative loan at Weighted Average Rate of Interest on long term loan for that year;

iii. Therefore, total normative IDC has been computed as sum of IDC on excess equity of average additional capitalisation and IDC on excess equity of average of opening and closing amounts of CWIP.

c) Computation of IDC Capitalized

i. Since CWIP is assumed to be capitalised in the mid of the year, a part of normative IDC up to mid of the year has been capitalised depending upon the amount of additional capitalisation out of total CWIP in the mid of the year and balance normative IDC during the year is carried forward to the next year:

ii. For the purpose of capitalisation of IDC, it is assumed that CWIP incurred first would be capitalised first. Hence, once the opening CWIP increases to the value of additional capitalisation during the year, IDC related to this CWIP up to half year is capitalised and balance is carried forward:

iii. In case, the opening CWIP is more than additional capitalisation during the year, additional capitalisation is done from the opening CWIP and normative IDC to be capitalised for half year would be 70% x additional capitalisation x 0.5:

110. The Petitioner has prayed for approval of the above methodology for computation of normative IDC and to include the same in the additional capitalization of various assets capitalized during the 2014-19 period and projected to be capitalized during the 2019-24 period. The Petitioner has also submitted the normative IDC computation and the management certificate on the amounts of CWIP.

111. We have considered the submissions of the Petitioner. It is noticed that the Petitioner has neither submitted the normative IDC, duly certified by Auditors, nor the date of infusion of funds, the corresponding dates of capitalisation, the applicable interest rates etc. and their supporting documents, if any. Hence, in the absence of the aforesaid information, we have worked out the normative IDC based on assumptions as follows:

a. Infusion of funds has been assumed to be at the beginning of the year of additional capital expenditure incurred;

b. Date of capitalisation has been assumed to be at the mid of the year; and

c. Weighted Average Rate of Interest (WAROI) on actual loan of respective years have been applied for calculation of normative IDC of respective years

112. The normative IDC on additional capital expenditure has been worked out by applying WAROI on actual loan of the particular year on the average normative loan for the respective year, applied for half of the year of the time span. Accordingly, the normative IDC on additional capital expenditure is as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
760.89	221.46	9.60	24.59	55.34

Discharge of liabilities

113. The Petitioner has claimed discharge of liabilities for the 2014-19 tariff period in Form 18, as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
4589.39	319.17	(-) 107.27	179.21	0.00

114. In compliance to the directions of the Commission vide ROP of the hearing dated 2.6.2020, the Petitioner vide affidavit dated 20.6.2020, has furnished the statement of reconciliation, with regard to un-discharged liabilities for each year and the balance sheet of the respective years duly certified by Auditor.

115. The Petitioner, in Form 1(I) has mentioned the additional capitalization on accrual basis, instead of cash basis. In Form 18 (Liability flow statement) also, the Petitioner has indicated the discharge of liabilities, as net of additions. However, since the additional capitalization is allowed on cash basis, the liabilities included in the additional capital expenditure as per Form 9A, has been deducted from the amounts, on accrual basis. Similarly, the discharge of liabilities (without additions in liabilities) have been worked out on the basis of the information furnished in Form 9A and Form 18 and allowed as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening un-discharged liabilities as per Form 1(I) and Form 18	4980.50	391.10	71.03	162.07	0.00
Add: Additions as per Form-9A	391.10	71.03	163.06	0.00	0.00
Less: Closing un-discharged liabilities as per Form 1(I) and Form 18	391.10	71.03	162.07	0.00	0.00
Discharge of liabilities allowed	**4980.50**	**391.10**	**72.03**	**162.07**	**0.00**

Capital cost for the 2014-19 tariff period

116. Based on the above, the capital cost allowed for the 2014-19 tariff period is summarized as under.

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening capital cost	432039.88	463204.76	474874.98	475012.53	475749.68
Add: Net additional capitalisation allowed on cash basis	25567.49	11407.19	55.91	550.49	3164.22
Add: Discharges allowed	4980.50	391.10	72.03	162.07	0.00
Normative IDC allowed	760.89	221.46	9.60	24.59	55.34
Less: IDC Capitalised in Books excluding Railways	144.00	349.53	0.00	0.00	0.00
Closing capital cost	**463204.76**	**474874.98**	**475012.53**	**475749.68**	**478969.24**

Debt-Equity Ratio

117. Regulation 19 of the 2014 Tariff Regulations provides as under:

"(1) For a project declared under commercial operation on or after 1.4.2014 the debt equity ratio would be considered as 70:30 as on COD. If the equity actually deployed

is more than 30% of the capital cost equity in excess of 30% shall be treated as normative loan:
Provided that:
(i) where equity actually deployed is less than 30% of the capital cost actual equity shall be considered for determination of tariff:

(ii) the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

(iii) any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio.

Explanation - *The premium if any raised by the generating company or the transmission licensee as the case may be while issuing share capital and investment of internal resources created out of its free reserve for the funding of the project shall be reckoned as paid up capital for the purpose of computing return on equity only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.*

(2) The generating Company or the transmission licensee shall submit the resolution of the Board of the company or approval from Cabinet Committee on Economic Affairs (CCEA) regarding infusion of fund from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014 debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.

(4) In case of generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014 but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2014 the Commission shall approve the debt: equity ratio based on actual information provided by the generating company or the transmission licensee as the case may be.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."

118. Accordingly, the debt-equity ratio of 70:30 has been considered for the purpose of tariff, in terms of Regulation 19 of the 2014 Tariff Regulations.

Additional Tax on Income due to adoption of Indian Accounting Standards (Ind AS)

119. The Petitioner has also claimed additional tax arisen on account of amendments in the Finance Act, 2017 to be recovered separately over and above the annual fixed charges as per the 'Change in law' provisions. In this regard, the Petitioner has stated the following:

"…… in addition to existing provisions for computation of book profit, for Ind AS compliant companies on which MAT is applicable, including the Petitioner, the book profit was required to be further increased or decreased in following manner:

(i) By an amount credited or debited to other comprehensive income ("OCI") in the statement of profit and loss under the head "items that will not be re-classified to profit or loss; and

(ii) By one-fifth of the transition amount for year of convergence i.e. FY 2016-17 and the subsequent four years i.e. FY 2017-21. Transition amount has been defined as the amount or the aggregate of the amounts adjusted in the other equity (excluding capital reserve and securities premium reserve) on the convergence date.

The above enactments/ amendments in the Income Tax Act squarely fall under the ambit of Change in Law as per Regulation 3 (9)(a) and (b) and are required to be factored in the True-up of Annual Fixed Charges for the tariff period FY 2014-19 as per Regulation 8(5)(ii) of CERC Tariff Regulations 2014 being a totally uncontrollable factor and beyond the control of the Petitioner. Similar provisions also exist in CERC Tariff Regulations 2019 and, hence, same relief is available to the Petitioner during the tariff period 2019-24. In case of the Petitioner, MAT has been applicable during FY 2014-19 and is also expected to be applicable during FY 2019-24 and the book profit and tax liability thereon has increased due to the said Change in Law. Thus, the Petitioner is entitled to recovery of Additional Tax payable due to this Change in Law for the applicable FYs 2016-17, 2017-18, 2018-19 in the tariff period FY 2014-19 and for FYs 2019-20 and 2020-21 in the tariff period FY 2019-24. Accordingly, it is humbly submitted to the Hon'ble Commission to kindly consider the following enactments/amendments as Change in Law under the CERC Tariff Regulations 2014:

a. the notification of Companies (Indian Accounting Standards) Rules, 2015 and
b. amendment of Section 115JB of the Income tax Act, 1961 under Finance Act, 2017 in order to incorporate provisions w.r.t Ind AS compliant companies

Further, as the basic principle of Change in Law is the principle of restitution i.e. to bring back the Petitioner to same economic position as it would have been had Change in Law not taken place, the Petitioner proposes to recover this additional tax separately over and above the Annual Fixed Charges as per the provisions of the regulations other than Change in Law provisions and not as part of Annual Fixed Charges. This will also avoid unwarranted increase in Interest on Working Capital that are linked to Annual Fixed Charges. However, since this additional tax recovery adds to book profit and attracts further tax on it, the net recovery would not fully compensate the Petitioner for increased tax. Therefore, in order to place the Petitioner back to the same economic position, this additional tax recovery needs to be grossed up by the applicable MAT rate for the relevant year and allowed to be recovered separately from the beneficiaries."

120. We have examined the matter. As regards the recovery of additional tax liability due to implementation of Ind-AS, it is observed that the 2014 Tariff Regulations provide for tax recovery by way of grossing up of Return on Equity with the effective tax rate or Minimum Alternate Tax (MAT) in case of a generating company or a transmission licensee, as the case may be, paying MAT of the respective financial year. Further, no income, other than generation/ transmission

activities is considered for the purpose of tax recovery. In the present case, ROE is being allowed for grossing up with the MAT rate, as envisaged under the provisions of the 2014 Tariff Regulations. It is further observed that the implementation of Ind-AS has an accounting treatment implication and does not result in income from generation business activity. Accordingly, the prayer of the Petitioner to allow the recovery of additional tax liability on the increased income, due to implementation of Ind-AS is not permitted.

Return on Equity

121. Regulations 24 and 25 of the 2014 Tariff Regulations provide as under:

"24. Return on Equity:

(1) Return on equity shall be computed in rupee terms on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations transmission system including communication system and run of river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage: Provided that:

(i) in case of projects commissioned on or after 1st April 2014 an additional return of 0.50% shall be allowed if such projects are completed within the timeline specified in Appendix-I:
(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:
(iii) additional ROE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee / National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:
(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission if the generating station or transmission system is found to be declared under commercial operation without commissioning any of the Restricted Governor Mode Operation (RGMO) / Free Governor Mode Operation (FGMO) data telemetry communication system up to load dispatch centre or protection system:
(v) as and when any of the above requirement are found lacking in a generating station based on the report submitted by the respective RLDC ROE shall be reduced by 1% for the period for which the deficiency continues: (vi) additional ROE shall not be admissible for transmission line having length of less than 50 kilometres."

25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee as the case

may be. The actual tax income on other income stream (i.e. income of non-generation or non-transmission business as the case may be) shall not be considered for the calculation of "effective tax rate".

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t) Where "t" is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business as the case may be and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT) "t" shall be considered as MAT rate including surcharge and cess.

Illustration.

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 20.96% including surcharge and cess: Rate of return on equity = 15.50/(1-0.2096) = 19.610%

(ii) In case of generating company or the transmission licensee paying normal corporate tax including surcharge and cess:

(a)Estimated Gross Income from generation or transmission business for FY 2014-15 is Rs 1000 crore.
(b)Estimated Advance Tax for the year on above is Rs 240 crore.
(c) Effective Tax Rate for the year 2014-15 = Rs 240 Crore/Rs 1000 Crore = 24%
(d)Rate of return on equity = 15.50/ (1-0.24) = 20.395%

(3) The generating company or the transmission licensee as the case may be shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. However, penalty if any arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under-recovery or over recovery of grossed up rate on return on equity after truing up shall be recovered or refunded to beneficiaries or the long-term transmission customers/DICs as the case may be on year to year basis."

122. The Commission in its order dated 1.10.2019 in Petition No.152/GT/2015 had allowed the normative equity of Rs.129747.21 lakh as on 31.3.2014. However, as only the capital cost of Rs.432039.88 lakh as on 1.4.2014 has been allowed as against the capital cost of Rs.432490.69 lakh allowed vide Commission's order dated 1.10.2019 in Petition No.152/GT/2015, the opening equity has also been adjusted to Rs.129611.96 lakh for the 2014-19 tariff period. The Petitioner has claimed MAT

rates for the respective financial years for grossing up of ROE and the same has been considered for the purpose of tariff. Accordingly, ROE has been worked out and allowed as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross Notional Equity	129611.96	138961.43	142462.50	142503.76	142724.90
Addition due to Additional Capitalization	9349.47	3501.07	41.26	221.15	965.87
Closing Equity	138961.43	142462.50	142503.76	142724.90	143690.77
Average Equity	134286.70	140711.96	142483.13	142614.33	143207.84
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax rate for the year	20.9605%	21.3416%	21.3416%	21.3416%	21.5488%
Rate of Return on Equity (Pre Tax)	19.610%	19.705%	19.705%	19.705%	19.758%
Return on Equity	**26333.62**	**27727.29**	**28076.30**	**28102.15**	**28295.00**

Interest on loan

123. Regulation 26 of the 2014 Tariff Regulations provides as under:

> ***"****26. Interest on loan capital:*
>
> *(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.*
>
> *(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*
>
> *(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalization of such asset.*
>
> *(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*
>
> *(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:*
>
> *Provided that if there is no actual loan for a particular year but normative loan is still outstanding the last available weighted average rate of interest shall be considered:*
>
> *Provided further that if the generating station or the transmission system as the case may be does not have actual loan then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.*
>
> *(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*
>
> *(7) The generating company or the transmission licensee as the case may be shall make every effort to re-finance the loan as long as it results in net savings on interest*

and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee as the case may be in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 as amended from time to time including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiaries or the long term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.

124. The Petitioner has re-financed the long-term loan to reduce the interest burden on the beneficiaries. For the purpose of calculation of interest on normative loan, the Petitioner has considered interest rate of original loan, and not the new rate after refinancing. The Petitioner has submitted that in case of refinancing, the application of Regulation 26(5) of the 2014 Tariff Regulations would require the computation of 'weighted average rate of interest' using the actual loan portfolio/ schedule, along with interest rate that would have been applicable for original loan term. In our view, Regulation 26(5) of the 2014 Tariff Regulations provides that the weighted average rate should be calculated on the basis of actual loan portfolio, which implies the consideration of the 'existing loan' portfolio. As such, the applicable rate is the rate after such refinancing of loan. This was decided by the Commission while working out the interest on normative loan in order dated 26.12.2017 in Petition No.152/GT/2015 and subsequently in Commission's order dated 25.4.2019 in Petition No.16/RP/2018 filed by the Petitioner. Accordingly, the weighted average rate of interest (based on the rates as applicable before re-financing) as claimed by the Petitioner, is not allowed. The Petitioner, in compliance with the directions of the Commission vide ROP dated 2.6.2020, has, vide affidavit dated 20.6.2020, submitted revised Form-13, furnishing calculation of weighted average rate of

interest on actual loans at refinanced rates and the same has been considered for computation of interest on normative loan. Accordingly, Interest on loan has been worked out as mentioned below:

i) Since the capital cost of Rs.432039.88 lakh as on 1.4.2014 is allowed as against the capital cost of Rs.432490.69 lakh allowed vide Commission's order dated 1.10.2019 in Petition No. 152/GT/2015, the adjusted gross normative loan amounting to Rs.302427.92 lakh has been considered as on 1.4.2014.

ii) The adjusted cumulative repayment of Rs.47164.35 lakh as on 31.3.2014 as has been considered as on 1.4.2014.

iii) Accordingly, the net normative opening loan as on 1.4.2014 works out to Rs. 255263.57 lakh;

iv) Addition to the normative loan on account of additional capital expenditure approved above has also been considered;

v) The depreciation allowed has been considered as repayment of normative loan during the respective year of the 2014-19 period. Further, the repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff;

125. Necessary calculations for interest on loan are as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross Notional loan	302427.92	324243.34	332412.49	332508.77	333024.77
Cumulative Repayment of Loan up to previous year	47164.35	69464.84	93120.51	117005.07	140722.28
Net Opening loan	255263.57	254778.50	239291.98	215503.70	192302.49
Addition due to additional capitalisation	21815.42	8169.15	96.28	516.01	2253.69
Repayment of loan during the period	**22785.93**	**23700.34**	**23949.17**	**23969.12**	**24160.20**
Less: Repayment adjustment on account of de-capitalization	485.44	44.67	64.61	251.90	148.66
Net Repayment	22300.49	23655.67	23884.56	23717.21	24011.55
Net Closing loan	254778.50	239291.98	215503.70	192302.49	170544.64
Average loan	255021.03	247035.24	227397.84	203903.10	181423.57
Weighted Average Rate of Interest on loan	10.96%	10.46%	9.92%	8.99%	8.79%
Interest on loan	**27957.86**	**25842.46**	**22561.92**	**18331.74**	**15953.23**

126. The Petitioner has refinanced the loan which has resulted in substantial benefits to the respondents on account of lower interest rates. The costs associated

with such re-financing shall be borne by the beneficiaries and the benefits of refinancing shall be calculated and shared between the beneficiaries and petitioner in the ratio of 2:1 in terms of Regulations 26(7), 26(8) and 26(9) of the 2014 Tariff Regulations.

Depreciation

127. Regulation 27 of the 2014 Tariff Regulations provides as under:

> *"27. Depreciation:*
>
> *(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.*
>
> *Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system for which single tariff needs to be determined.*
>
> *(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year depreciation shall be charged on pro rata basis.*
> *(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:*
>
> *Provided that in case of hydro generating station the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:*
>
> *Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:*
>
> *Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be shall not be allowed to be recovered at a later stage during the useful life and the extended life.*
>
> *(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-II to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2014 from the gross depreciable value of the assets.

(7) The generating company or the transmission license as the case may be shall submit the details of proposed capital expenditure during the fag end of the project (five years before the useful life) along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."

128. As regards the weighted average rate of depreciation used for the computation of the depreciation claimed, the Petitioner has submitted that the same has been considered based on the actual depreciation provided in books of accounts. The Petitioner has further submitted that as per accounting policy of the Petitioner, depreciation on fixed assets is provided on *pro rata* basis from the month in which the asset is available for use, on straight line method, at the rate and methodology notified in the 2014 Tariff Regulations, except in case of following assets, based on estimated useful life of the asset:

Asset Class	**Rate as notified by Commission**	**Rate in Books (%)**
Land under lease	3.34%	4%
Computer and accessories	15%	16.21%
Motor vehicles	9.50%	19%
Software	15%	Over the useful life or five years, whichever is lower
Assets costing Rs.5000 or less individually and mobile hand sets	5.28%	Fully depreciated in the year of acquisition

129. The Petitioner has submitted that in pursuance of Ind-AS 17 (which is applicable to Petitioner from 2016-17 with comparative period of one year viz. 2015-16), the leasehold land, which was earlier considered as part of the gross block and

thereby depreciated/ amortized, would now be treated as part of 'current assets' and amortized over the license period. In this context, adjustment to this extent is made in the books of accounts. The Petitioner has submitted that though the 2014 Tariff Regulations provide for specific depreciation rate for lease-hold land, consequent upon adoption of Ind-AS by the Petitioner, the treatment of leasehold land has changed in the books of accounts. Therefore, the Petitioner, in the present petition, has claimed depreciation against leasehold land, based on the actual amortization charged in the books of accounts.

130. The matter has been examined. It is observed that the Petitioner has claimed depreciation based on the weighted average rate of depreciation, as per the books of accounts. In terms of Regulation 27(5) of the 2014 Tariff Regulations, the rates specified in Appendix-II to the said regulations, in respect of the assets of the generating station are required to be used for arriving at the weighted average rate of depreciation. Accordingly, the weighted average rate of depreciation as claimed by the Petitioner has not been considered and the rates specified in Appendix-II of the 2014 Tariff Regulations have been considered for the computation of depreciation. Thus, the weighted average rate of depreciation claimed by the Petitioner *vis-à-vis* allowed in terms of said regulations is tabulated below:

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Weighted Average Rate of Depreciation claimed	5.11%	5.13%	5.11%	5.08%	5.11%
Weighted Average Rate of Depreciation allowed	5.09%	5.05%	5.04%	5.04%	5.06%

131. Accordingly, depreciation allowed for the 2014-19 tariff period is as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening Gross Block (A)	432039.88	463204.76	474874.98	475012.53	475749.68
Addition due to Additional Capitalisation (B)	31164.88	11670.22	137.54	737.15	3219.56

Closing Gross Block (C)	463204.76	474874.98	475012.53	475749.68	478969.24
Average Gross Block D=(A+C)/2	447622.32	469039.87	474943.76	475381.10	477359.46
Value of Freehold Land included in gross block (E)	8635.47	17305.94	17340.93	17341.13	17427.23
Depreciation value F= (D-E) x 90%	395088.16	406560.54	411842.55	412235.98	413939.00
Remaining depreciable value (G=F-Cumulative Depreciation (as shown under 'M') at the end of previous year)	347923.82	337095.70	318722.04	295230.91	273216.72
No. of completed years at the beginning of the year (H)	2.58	3.58	4.58	5.58	6.58
Balance Useful life at the beginning of the Year (I)	22.42	21.42	20.42	19.42	18.42
Rate of Depreciation (J) as per Annexure-I to this order	5.09%	5.05%	5.04%	5.04%	5.06%
Depreciation (K)	**22785.93**	**23700.34**	**23949.17**	**23969.12**	**24160.20**
Cumulative depreciation (at the end of the period) (L= K + Cumulative depreciation at the end of previous year*)	69950.28	93165.18	117069.68	140974.19	164882.48
Less: Depreciation adjustment on account of de-capitalization (M)	485.44	44.67	64.61	251.90	148.66
Cumulative depreciation after adjustment due to de-capitalization (at the end of the period) (N=L-M)*	69464.84	93120.51	117005.07	140722.28	164733.83

** Note: The Cumulative Depreciation at the end of 2013-14 is Rs. 47164.35 lakh.*

Unrecovered Depreciation on De-capitalisation

132. The Petitioner has submitted that in the events where de-capitalization of assets have to be carried out in the initial years of useful life of assets, there would be significant loan outstanding on account of such assets which will necessarily have to be serviced till end of loan tenure. It has stated that post de-capitalization, since neither depreciation nor interest is available on such assets, the actual loan outstanding for such assets will have to be serviced from revenue allowed for

meeting other expenses. This, according to the Petitioner, leads to financial hardship and under-recovery, as it falls short of the revenue required for meeting expenses which are already approved by the Commission. The Petitioner has also submitted that the circumstances which lead to such shortfall are entirely beyond the control of the Petitioner and for force majeure conditions. The Petitioner has further submitted that as per Ind AS 16, along with de-recognition/ de-capitalization of replaced assets, the Petitioner is required to book the gain or loss arising out of de-recognition in its accounts. The Petitioner has added that while the 2014 Tariff Regulations and the 2019 Tariff Regulations provide for de-capitalization of replaced assets, there is no corresponding regulation for considering the gain or loss due to such replacement for not recovering the normative depreciation @90%. In view of the above, the Petitioner has requested that the Commission may allow the recovery of unrecovered depreciation i.e. allowed depreciation (90% of the Asset value-Depreciation recovered till date of de-capitalization) to compensate for the losses which it may incur in books of accounts, in exercise of the 'Power to Relax' and 'Power to Remove Difficulty' under the 2014 Tariff Regulations. The Petitioner has also proposed to separately recover the losses towards unrecovered depreciation as additional depreciation, over and above the specified norms under the 2014 Tariff Regulations. The claim of the Petitioner for unrecovered depreciation during the 2014-19 tariff period is as under:

(Rs. in lakh)

2015	2016	2017	2018	2019	Total
160.00	137.00	158.00	482.00	213.00	**1150.00**

133. We have examined the matter. It is observed that the 2014 Tariff Regulations provides for servicing of the funds infused in the admitted capitalised expenditure, by way of allowing ROE and Interest on loan capital as components of the annual fixed charges for the assets put in use. The equity and loan component for this purpose

are determined in accordance with Regulation 19 of the 2014 Tariff Regulations. Thus, the said regulation provides for servicing the debt capital in the form of 'Interest on loan' on the amount of loan arrived at, by applying the debt-equity ratio on the capital cost allowed and not on the 'actual loan' being serviced through tariff. The capital cost has been allowed after necessary adjustment for the decapitalisation of the asset. Apart from deduction in the cumulative depreciation, corresponding cumulative repayment of loan is also brought down. Hence, in case of repayment of loan, instead of the 'actual loan repayment', the depreciation allowed for the corresponding year/ period is considered as repayment of loan and the same is in line with Regulation 26(3) of the 2014 Tariff Regulations, which is extracted below:

> *"26(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/ period."*

134. Accordingly, the prayer of the Petitioner to allow the recovery of unrecovered depreciation (*in respect of assets not in use*) is not allowed as the same is not in conformity with the provisions of the 2014 Tariff Regulations.

O & M Expenses

135. The total O&M expenses claimed by the Petitioner for the 2014-19 tariff period is as under:

(Rs. in lakh)

Items / Heads	2014-15	2015-16	2016-17	2017-18	2018-19
Normative O&M expenses as per Regulation 29(1)(a) of the 2014 Tariff Regulations	16800.00	17860.50	18984.00	20181.00	21451.50
Water charges as per Regulation 29(2) of the 2014 Tariff Regulations	946.18	996.05	993.31	965.52	930.54
Capital spares as per Regulation 29(2)	0.00	0.00	58.34	53.52	10.45
Rental &Conveyance expenses in lieu of 2nd township	100.35	76.08	57.61	74.98	51.19
Total O&M Expenses	**17846.53**	**18932.63**	**20093.26**	**21275.02**	**22443.68**

136. The normative O&M expenses claimed by the Petitioner under Regulation 29(1)(a) of the 2014 Tariff Regulations are the same as allowed vide order dated 26.12.2017 in Petition No.152/GT/2015. Accordingly, the normative O&M expenses claimed by the Petitioner in terms of Regulation 29(1)(a) of the 2014 Tariff Regulations is allowed.

Water Charges

137. Regulation 29(2) of the 2014 Tariff Regulations provides as under:

> *"29(2) Operation and Maintenance Expenses*
>
> *(2) The Water Charges and capital spares for thermal generating stations shall be allowed separately:*
>
> *Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition:*
>
> *Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization."*

138. The Commission, in order dated 26.12.2017 in Petition No. 152/GT/2015, had allowed Water charges under Regulation 29(2) of the 2014 Tariff Regulations, based on the audited actual water charges incurred for 2014-15 as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
946.18	946.18	946.18	946.18	946.18

139. The Petitioner, in this petition, has claimed water charges based on the audited actual water charges for the 2014-19 tariff period, in terms of Regulation 29(1)(b) of the 2014 Tariff Regulations. The Petitioner has furnished the details of actual water consumption, water charge rates and water cess for each year. The water charges claimed are as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
946.18	996.05	993.31	965.52	930.54

140. As stated, the Water charges allowed vide order dated 26.12.2017 in Petition No.152/GT/2015 were based on the water charges incurred for 2014-15 and the same was subject to revision, at the time of truing up of tariff, based on the actual water charges paid by the Petitioner for the 2014-19 tariff period. The Petitioner has claimed water charges, duly audited, based on actual water consumption. Accordingly, on prudence check, the water charges claimed is allowed.

Capital Spares

141. As regards the claim of the Petitioner for 'capital spares' in terms of Regulation 29(2) of the 2014 Tariff Regulations, the Commission, in order dated 26.12.2017 in Petition No.152/GT/2015 had observed that the claim of the Petitioner, if any, would be considered on merits, on prudence check, at the time of truing-up of tariff. The Petitioner, in the present petition, has claimed the following capital spares, based on audited actual capital spares consumed during the 2014-19 tariff period:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Spare Circuit Breaker for MV & LV Switchgear (BTG & main)	0.00	0.00	18.96	0.00	7.18
Spare Motors for (BTG, RWP & AHP)	0.00	0.00	39.38	16.36	0.90
TDBFP Recirculation valve	0.00	0.00	0.00	27.61	2.37
Boiler Tubes	0.00	0.00	0.00	9.55	0.00
Total	0.00	0.00	**58.34**	**53.52**	**10.45**

142. In support of the said claim, the Petitioner has submitted the following:

(a) ***Spare Circuit Breaker for MV & LV Switch gear (BTG & main)***

Spare Circuit Breaker for MV & LV switch gear was needed to be procured for running the plant without any generation loss or to minimize the duration of generation loss in case of any breakdown. Since these circuit breakers have a lead time of delivery, the same is needed to be procured and maintained as capital spares. While procurement of these spares, it was found that GE has stopped manufacturing these circuit breakers, hence, different make compatible circuit breaker was procured as spare. The capital expenditure for Spare Circuit Breaker for

MV & LV Switch gear (BTG & main) may be approved by the Commission, as capital spare in terms of the2014 Tariff Regulations.

(b) ***Spare Motors (comprising of 500 KW Motor for Raw Water Pump, 500 KW Motor for Conveying Air Compressor for Ash Handling Plant, 350 KW Motor for Auxiliary Cooling Water pump):***

As per existing configuration, 3 number of raw water pump motors, 6 number of conveying air compressor motors for ash evacuation and 4 No of auxiliary cooling water pump motors are in service. These are critical 6.6 KV motors and were not having initial spares. Hence, new spare motors were procured and are used on rotation basis to overhaul present motors in case of any breakdown. For overhauling, these motors are required to be sent to vendor facilities as overhauling within the Plant was not so effective. In view of foregoing, procurement of above motors was carried out. The capital expenditure for these Spare Motors, therefore, may kindly be approved by the Commission as Capital Spare in terms of the 2014 Tariff Regulations.

(c) ***TDBFP Re-circulation valve***

Recirculation Valve (RCV) is an integral part of the Boiler Feed Pump. This is an ON/OFF type Valve and it operates depending on the suction flow of the Boiler Feed Pump. Opening of RCV is very much critical during initial start-up for maintaining minimum flow requirement of BFP and during emergencies to avoid churning and damage of pump internals. After few years, it was observed that the RCVs are passing feed water during shut-off condition (i.e. during normal operation). The rate of passing gradually increased and reached up to 300 TPH in a Unit. Initially, the passing could be controlled by repairing the Valve internals which could sustain only 4-6 months. Repeated damage of Valve Seat, Plug & Stack caused frequent outage of BFP. Meanwhile, matter was also taken up with M/s Dresser India (OEM) for analysis and recommendation. According to manufacturer's analysis, the damage is due to high throttling pressure at the tip of the Valve Seat & Plug for which the existing Diaphragm-type Actuator is not able to shut-off 100% during normal operation of the Units and is thereby causing passing of feed water. M/s Dresser, therefore, suggested for changing the single acting Diaphragm-type Actuator to double acting Piston Actuator. Recommendation of M/s Dresser is annexed. Pursuant to above in FY 18, two RCVs were procured as Capital Spare which were subsequently consumed in Unit 1. Depending on the performance, balance valves including their spares are phased to be procured in FY 20. In view of above constraint, it is humbly prayed Commission to approve the Spare TDBFP Recirculation Valve in terms of the 2014 Tariff Regulations.

(d) ***Boiler Tubes***

It is humbly submitted that some specific portion of pressure parts like bends and joints are exposed to high ash content coal, which had damaged such pressure parts. Such damaged parts require replacement for safety and reliability of the Plant. Accordingly, some spare boilers tubes/pressure parts were procured in 2018 to refurbish the damaged pressure parts of boiler like economiser, super-heater, re-heater etc. It is, therefore, prayed to approve the Spare Boiler Tubes/pressure parts under Regulation 29(2) of the 2014 Tariff Regulations."

143. In terms of Regulation 29(2) of the 2014 Tariff Regulations, the actual expenses incurred by the Petitioner towards capital spares consumed are admissible as additional O&M expenses. The Petitioner has certified that the capital spares

claimed have not been funded through Compensatory Allowance or Special Allowance in terms of the 2014 Tariff Regulations or has been claimed as part of additional capital expenditure or by consumption of stores and spares for R&M. Moreover, the cost of the capital spares claimed by the Petitioner has been excluded from the 'gross capital cost' under the head 'exclusion' in the additional capitalization of spares. It is pertinent to mention that the term 'capital spares' has not been defined in the 2014 Tariff Regulations. The term capital spares, in our view, is a piece of equipment, or a spare part, of significant cost that is maintained in inventory for use in the event that a similar piece of critical equipment fails or must be rebuilt. Keeping in view the principle of materiality and to ensure standardised practices in respect of earmarking and treatment of capital spares, the value of capital spares exceeding Rs.1 (one) lakh, on prudence check of the details furnished by the Petitioner in Form-17 of the petition, has been considered for the purpose of tariff. Further, we are of the view that spares do have a salvage value. Accordingly, in line with the practice of considering the salvage value, presumed to be recovered by the Petitioner on sale of other capital assets, on becoming unserviceable, the salvage value of 10% has been deducted from the cost of capital spares considered above, for the 2014-19 tariff period. Therefore, on prudence check of the information furnished by the Petitioner in Form-17 and on applying the said ceiling limit along with deduction of the salvage value @10%, the net capital spares allowed in terms of Regulation 29(2) of 2014 Tariff Regulations is as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Spare Circuit Breaker for MV & LV Switchgear (BTG & main)	0.00	0.00	18.96	0.00	7.18
Spare Motors for (BTG, RWP & AHP)	0.00	0.00	39.38	16.36	0.00
TDBFP Recirculation valve	0.00	0.00	0.00	27.61	2.37
Boiler Tubes*	0.00	0.00	0.00	0.00	0.00
Total before salvage value	0.00	0.00	58.34	43.97	9.55
Less: Salvage value @10%	0.00	0.00	5.83	4.40	0.96
Total capital spares allowed	0.00	0.00	**52.51**	**39.57**	**8.59**

Expenditure against Boiler tubes has not been considered as the details of boiler tubes including numbers consumed has not been provided. Further, such expenditure is deemed to be covered under normative O&M expenses

144. Accordingly, the total O&M expenses allowed in terms of the 2014 Tariff Regulations are as under:

(Rs in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Normative O&M Expenses as per Regulation 29(1)(a) of the 2014 Tariff Regulations	16800.00	17860.50	18984.00	20181.00	21451.50
Water Charges as per Regulation 29(2) of the 2014 Tariff Regulations	946.18	996.05	993.31	965.52	930.54
Capital Spares as per Regulation 29(2) of the 2014 Tariff Regulations	0.00	0.00	52.51	39.57	8.59
Total O&M expenses allowed as per Regulation 29 of the 2014 Tariff Regulations	**17746.18**	**18856.55**	**20029.82**	**21186.09**	**22390.63**

Additional O&M expenses

A. In lieu of 2nd Township

145. The Petitioner has claimed the following additional O&M expenses in lieu of 2nd Township:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Rental Charges (a)	123.40	90.88	54.27	74.15	67.52
HRA deduction from employee (b)	78.19	67.34	62.58	65.80	75.11
Conveyance Charges (c)	55.15	52.55	65.92	66.63	58.79
Total - (a-b+c)	**100.35**	**76.08**	**57.61**	**74.98**	**51.19**

146. In support of the aforesaid claims, the Petitioner has submitted the following:

(a) MPL had planned to construct the second phase of the Township to accommodate the balance employees after phase I. Due to unavailability of land in the adjoining area of the existing township, the Petitioner made efforts to locate suitable Land in nearby location to facilitate the above purpose. Through letter dated 25.11.2011, it had approached DVC for additional allocation of 30000 m^2 of land in the plot adjacent to the phase-I of the Township. However, further transfer of land from DVC was restricted by the Circular No. 93/2011-CDN dated 6.4.2011 of the Ministry of Urban Development, GOI, wherein Government undertakings like DVC have been directed to seek prior approval of the Cabinet for any transfer/alienation of Land belonging to the Government. The Petitioner approached the district administration to acquire land of approximately 30 acres. However, the land identified by the district administration for the construction of Phase II of the township is owned by the tribal community and GOJ. Accordingly, it again persuaded the district

administration for obtaining the necessary clearance for acquisition of land from the tribal community and GOJ. For past 8 years the Petitioner is struggling to find suitable land for phase-II of township in and around generating station. Therefore, in view of the non-availability of contiguous litigation free land and recommendation of the Petitioner's Management, the Board of Directors of it, in its 92nd Meeting of held on, 16.3.2019 has approved dropping of the additional capital expenditure in respect of 'Colony and Township" of ₹60.00 crore;

(b) Presently, the employees of the Petitioner are accommodated in Dhanbad and Asansol (approximately 40-50 km from the generating station) in rented accommodation and bus service is provided to employee for conveyance for both normal and shift duties. This has resulted into additional O&M cost which is not part of Normative O&M Expenses. Total cost incurred by the Petitioner in absence of phase II of "Township & Colony" is presented in table below;

(c) Had the Petitioner been able to come-up with the Phase-II of the Township and Colony at the projected capital expenditure of ₹60 crores by 31.3.2014, the total Annual Fixed Charges (AFC) recovery towards Phase-II of the Township in the remaining years of the useful life of the Station would have been ₹223 crore whereas if it pursues the current arrangement for employees as stated above it would require additional O&M expenses towards rent and conveyance of about ₹23.15 crore over the same period resulting into a net savings of ₹199.38 crore for the beneficiaries which shall ultimately rests with them. Therefore, the Petitioner is seeking these Rental and Conveyance Expenses over and above Normative O&M Expenses. Going with existing arrangement and seeking additional O&M expenses in lieu of Phase-II of the township and utilizing savings for other cost overrun is in no way causing harm to the beneficiaries and shall be a fair approach to compensate the costs incurred/to be incurred by the Petitioner. For arriving at savings, AFC has been computed as per 2014 Tariff Regulations and assuming that the additional capital expenditure was capitalized on 31.3.2014. Rent, HRA deduction and conveyance charges have been considered at actual for 2014-15 to 2018-19 and thereafter projected based on average of the previous five years with an annual escalation of 5% thereon until useful life of the generating station. Detailed workings of AFC and additional O&M expenses and net savings on account of this annexed for kind perusal of the Commission;

(d) In view of foregoing, Commission is, therefore, most humbly requested to allow the expenses incurred by the Petitioner towards the Rental expenses adjusted with HRA and conveyance charges at actuals for the period 2014-15 to 2018-19 separately as additional O&M Expenses over and above the Normative O&M expenses and thereafter for the ensuing years on the projected basis subject to truing up of tariff, based on actuals.

147. The Respondent, KSEBL has submitted that since the normative O&M expenses is allowed for the project, the claim for additional O&M expenses in lieu of 2nd Township is not in line with the 2014 Tariff Regulations and may be rejected. In response, the Petitioner has submitted that it had to drop the plan for 2nd township due to 'force majeure' conditions and was constrained to accommodate its employees in nearby cities and arrange transport facilities to office. It has also

submitted that since such expenditure is not required to be incurred with staff being accommodated in Township/ Colony as in other projects, this expenditure is not covered under the normative O&M expenses. Accordingly, the Petitioner has claimed such expenses over and above the normative O&M expenses allowed to the generating station. The Petitioner has also contended that the 2014 Tariff Regulations do not prohibit such claim of the Petitioner, arising due to force majeure conditions/ uncontrollable factors in terms of Regulation 3(25) read with Regulation 8(3) and Regulation 54 of the 2014 Tariff Regulations.

148. It is noticed that the Petitioner has claimed additional O&M expenses due to additional arrangement made for accommodation of its employees and their conveyance, in lieu of the difficulty in constructing the township due to non-availability of land. According to the Petitioner, this has resulted in savings in capital expenditure and increase in the O&M expenses, as there will be no additional burden on the consumer, as the claim of additional O&M expenses is against the savings of tariff due to non-capitalization of additional township. The Petitioner has stated that due to non-availability of the land, the idea of Township colony was dropped and thereby the projected capital expenditure of Rs.60 crore was not incurred. As per submissions of the Petitioner, the total annual fixed charges recovery towards the 2nd Township, in the remaining years of the useful life of the generating station, would have been Rs.223 crore, whereas, in terms of the existing arrangement for the employees, it would require additional O&M expenses towards Rent and Conveyance of about Rs.23.15 crore over the same period, resulting into a net savings of Rs.199.38 crore for the beneficiaries.

149. The admissibility of the claim of the Petitioner is examined in the light of the provisions of the 2014 Tariff Regulations. The O&M expense norms for the 2014

tariff period has been duly notified taking into consideration the actual O&M expenses incurred by the generating stations for the period 2008-2013 and after extensive stakeholder consultations. As the said O&M expense norms adequately captures all components as stated by the Petitioner, the prayer of the Petitioner for additional O&M expenses, if allowed, under this head, would, in our view, result in re-opening of the O&M expense norms at this stage. For these reasons, the prayer of the Petitioner for additional O&M expenses in lieu of 2nd Township is not allowed.

B. Ash Disposal expenses

150. The Commission in its order dated 25.4.2019 in Review Petition No. 16/RP/2018 (in Petition No. 152/GT/2015) had allowed the projected 'Ash disposal' expenses for the 2014-19 tariff period as under:

(Rs. in crore)

2014-15	2015-16	2016-17	2017-18	2018-19	Total
60.98	62.70	66.50	70.72	0.00	260.90

151. The Petitioner, in the present petition, has claimed audited actual 'Ash disposal' expenses for the 2014-19 tariff period as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19	Total
6098.44	3791.36	3647.73	3320.87	3340.46	20198.86

152. The Respondent, KSEBL has submitted that the claim towards ash disposal expenses over and above the normative O&M expenses is not in line with the 2014 Tariff Regulations and, therefore, the claim may be disallowed. The Petitioner in its rejoinder has submitted that issue is no more *res integra* as the Ash disposal expenses over and above the normative O&M expenses had already been approved by the Commission vide its order dated 26.12.2017 in Petition No. 152/GT/2015 and by order dated 25.4.2019 in Petition No. 16/RP/2018 read with corrigendum order dated 25.5.2019 subject to truing-up. The Petitioner has also stated that Ash

disposal expenses are statutory in nature and needs to be incurred on a regular basis due to the limited capacity of ash pond and in compliance with the MOEF&CC Notification which mandate 100% ash utilization.

153. The submissions have been considered. The Commission in its order dated 25.4.2019 in Review Petition No.16/RP/2018 (in Petition No.152/GT/2015) had allowed the 'Ash disposal' expenses, based on actuals of the year 2014-15 and projected expenses for the period 2015-19, subject to revision, based on the actual Ash disposal expenses incurred by the Petitioner, at the time of truing up of tariff. The Petitioner has claimed actual expenses towards ash disposal, after adjustment of the revenue earned and has submitted the break-up details, duly certified by Auditor. Accordingly, the audited net ash disposal expenses, after adjustment of the revenue earned, as claimed by the Petitioner is allowed as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19	Total
6098.44	3791.36	3647.73	3320.87	3340.46	20198.86

154. Considering the fact that reimbursement of the ash disposal expenses is being allowed based on special circumstances (limited ash pond storage) for the generating station, these expenses are not made part of the total O&M expenses allowed and the consequent annual fixed charges determined in this order.

Interest on Working Capital

155. Clauses (1) and (2) of Regulation 28 of the 2014 Tariff Regulations provide as under:

> *"28. Interest on Working Capital:*
>
> *(1) The working capital shall cover:*
>
> *(a) Coal-based/lignite-fired thermal generating stations:*
>
> *(i) Cost of coal or lignite and limestone towards stock if applicable for 15 days for pithead generating stations and 30 days for non-pit-head generating stations for*

generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;

(ii) Cost of coal or lignite and limestone for 30 days for generation corresponding to the normative annual plant availability factor;

(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor and in case of use of more than one secondary fuel oil cost of fuel oil stock for the main secondary fuel oil;

(iv) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 29;

(v) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and

(vi) Operation and maintenance expenses for one month.

(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this regulation shall be based on the landed cost incurred (taking into account normative transit and handling losses) by the generating company and gross calorific value of the fuel as per actual for the three months preceding the first month for which tariff is to be determined and no fuel price escalation shall be provided during the tariff period.

Fuel cost and Energy charges in Working Capital

156. The Commission in its order dated 26.12.2017 in Petition No.152/GT/2015 had allowed interest on working capital based on 'as billed GCV' on provisional basis, as follows:

"165. ……We however direct the Petitioner to place on record the GCV of coal for the preceding three months on "as received" basis in terms of the directions contained in order dated 25.1.2016, at the time of truing-up of tariff of the generating station for 2014-19 in terms of Regulation 8 of the 2014 Tariff Regulations. The "as received GCV" furnished by the Petitioner for the few days of the month of October, 2016 for which sample is taken from the track hopper cannot be considered "as received" GCV of coal since the computation for fuel components in the working capital is undertaken based on the preceding three months i.e. for the month of January, 2014, February, 2014, and March, 2014. Also, the sample taken from track hopper is not in compliance with the Commission order dated 25.1.2016 in Petition No. 283/GT/2014, which specify that the measurement of GCV of coal on "as received" basis shall be taken from the loaded wagons at the unloading point either manually or through the Hydraulic Augur."

157. The Commission vide order dated 26.12.2017 in Petition No.152/GT/2015 allowed the fuel cost for computation of interest on working capital (IWC) based on price and GCV on 'as billed' basis with adjustment formula as Petitioner did not furnish the requisite "as received GCV". The Petitioner has not furnished the details of 'as received' GCV in the true-up petition also and has also not made any prayer

for revision of interest on working capital (IWC) with respect to GCV on 'as received' basis. In this background, we have considered the 'as billed' GCV to be 'as received' GCV, and the components of working capital i.e. the cost of coal for stock (30 days), cost of coal for generation (30 days) and Energy charges (for two months) as allowed in Commission's order dated 26.12.2017 in Petition No.152/GT/2015, has been considered for the purpose of tariff, in this order. Accordingly, the fuel components in working capital have been allowed as per order dated 26.12.2017 in Petition No.152/GT/2015 which is as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Cost of Coal towards stock - 30 days	10458.70	10487.35	10458.70	10710.71	10710.71
Cost of Coal for towards generation - 30 days	10315.43	10315.43	10315.43	10563.99	10563.99
Cost of Secondary fuel oil towards generation - 2 months	300.37	301.19	300.37	307.60	307.60

Working capital for Maintenance Spares

158. The Petitioner, in Form-13B of the petition, has claimed maintenance spares towards working capital as under:

(Rs. in lakh)

2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
3569.31	3786.53	4018.58	4255.10	4488.65

159. Regulation 28(1)(a)(iv) of the 2014 Tariff Regulations provides for maintenance spares @20% of the O&M expenses as specified in Regulation 29 of the 2014 Tariff Regulations. Therefore, in terms of Regulation 29(2) of the 2014 Tariff Regulations, the maintenance spares @20% of the O&M expenses, including water charges and capital spares are allowed are as under:

(Rs. in lakh)

2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
3549.24	3771.31	4005.96	4237.22	4478.13

Working capital for O & M Expenses

160. O&M expenses for 1 month as claimed by the Petitioner in Form-13B for the purpose of working capital are as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
1487.21	1577.72	1674.41	1772.96	1870.27

161. Regulation 28(a)(vi) of the 2014 Tariff Regulations provides for O&M expenses for one month towards Working Capital for coal-based generating stations. Accordingly, the O&M expenses (for 1 month) are allowed as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
1478.85	1571.38	1669.15	1765.51	1865.89

162. The difference in the O&M expenses for 1 month and the Maintenance spares allowed as above, as against those claimed by the Petitioner, is due to the fact that while the Petitioner had considered the O&M expenses in lieu of 2nd Township also for calculation under these heads, the same has not been considered (since dis-allowed in this order) in the calculations, while allowing the claims under these heads.

Working capital for Receivables

163. Receivables equivalent to two months of capacity charges and two months of energy charges towards Working Capital (as allowed in Commission's order dated 26.12.2017 in Petition No.152/GT/2015) are allowed as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Fixed charges – for two months	17253.62	17484.40	17233.33	16747.94	16621.10
Energy Charges – for two months	21074.50	21103.97	21074.50	21582.30	21582.30

Rate of interest on working capital

164. Regulation 28(3) of the 2014 Tariff Regulations provides as under:

"Interest on working Capital:

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later."

165. In terms of clause (3) of Regulation 28 of the 2014 Tariff Regulations, the rate of interest on working capital has been considered as 13.50% (Bank rate 10.00 + 350 bps). Accordingly, Interest on working capital has been computed as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Working Capital - Cost of coal for stock - 1 month	10458.70	10487.35	10458.70	10710.71	10710.71
Working Capital - Cost of coal for generation - 1 month	10315.43	10315.43	10315.43	10563.99	10563.99
Working Capital for O&M expenses - 1 month of O&M Expenses	1478.85	1571.38	1669.15	1765.51	1865.89
Working Capital - Cost of secondary fuel oil - 2 months	300.37	301.19	300.37	307.60	307.60
Working Capital for Maintenance spares	3549.24	3771.31	4005.96	4237.22	4478.13
Working Capital for Receivables (Fixed charges - 2 months)	17253.62	17484.40	17233.33	16747.94	16621.10
Working Capital for Receivables (Variable charges - 2 months)	21074.50	21103.97	21074.50	21582.30	21582.30
Total Working Capital	**64430.71**	**65035.02**	**65057.44**	**65915.27**	**66129.71**
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	**8698.15**	**8779.73**	**8782.75**	**8898.56**	**8927.51**

Annual Fixed Charges

166. Accordingly, the annual fixed charges approved for the generating station for the 2014-19 tariff period is summarized as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Return on Equity	26333.62	27727.29	28076.30	28102.15	28295.00
Interest on Loan	27957.86	25842.46	22561.92	18331.74	15953.23
Depreciation	22785.93	23700.34	23949.17	23969.12	24160.20
O&M Expenses	17746.18	18856.55	20029.82	21186.09	22390.63
Interest on Working Capital	8698.15	8779.73	8782.75	8898.56	8927.51
Total	**103521.74**	**104906.37**	**103399.96**	**100487.66**	**99726.57**

167. As stated in paragraph 153 above, the Ash disposal expenses allowed is as below:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19	Total
6098.44	3791.36	3647.73	3320.87	3340.46	20198.86

168. The annual fixed charges allowed in order dated 1.10.2019 in Petition No.152/GT/2015 and those allowed by this order are as under:

(Rs. in lakh)

Total annual fixed charges allowed in order dated 1.10.2019	99154.50	106314.26	107868.34	106552.83	111287.93
Total annual fixed charges allowed in this order	**103521.74**	**104906.37**	**103399.96**	**100487.66**	**99726.57**

169. The difference between the annual fixed charges already recovered by the Petitioner in terms of the order dated 26.12.2017 read with order dated 1.10.2019 in Petition No.152/GT/2015 and the annual fixed charges determined by this order shall be adjusted in terms of Regulation 8 of the 2014 Tariff Regulations.

DETERMINATION OF TARIFF FOR THE 2019-24 TARIFF PERIOD

170. The Petitioner has also sought determination of tariff of the generating station for the 2019-24 tariff period in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short 'the 2019 Tariff Regulations'). The capital cost and the annual fixed charges claimed by the Petitioner for the 2019-24 tariff period are as under:

Capital cost claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	487912.60	495633.42	567869.17	570388.32	571685.49
Add: Addition during the year	8043.42	74677.26	4259.96	2230.40	1409.61
Less: De-capitalisation during the year	1138.34	2927.46	2110.64	1119.45	727.30
Add: Normative IDC on excess equity	735.90	446.12	337.89	185.90	158.15
Add: Normative IDC on actual loan	79.84	39.84	31.94	0.32	0.10
Net Addition during the year	7720.82	72235.75	2519.16	1297.17	840.56
Closing Capital Cost	**495633.42**	**567869.17**	**570388.32**	**571685.49**	**572526.06**

Annual Fixed Charges claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	24749.94	27550.14	28974.28	28636.91	28520.47
Interest on Loan	19930.00	20362.72	20382.68	17312.75	14126.82
Return on Equity	27697.63	29925.95	32013.23	32113.07	32170.55
Interest on Working Capital	9004.43	9141.36	9303.66	9273.90	9285.71
O & M Expenses	27212.89	28222.13	30425.80	30830.27	32146.01
Ash Disposal Expenses	3425.59	3416.23	3416.23	3416.23	3425.59
Additional Tax	38.28	38.28	0.00	0.00	0.00
Total	**112058.77**	**118656.81**	**124515.87**	**121583.13**	**119675.14**

Capital Cost

171. Regulation 19 of the 2019 Tariff Regulations provides as under:

> *"19. Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*
> xxxx
> *(3) The Capital cost of an existing project shall include the following:*
>
> *(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
>
> *(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
> *(c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
>
> *(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
>
> *(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
>
> *(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."*

172. The Petitioner has claimed the opening capital cost of Rs.487912.60 lakh as on 1.4.2019. However, in accordance with Regulation 19(3) of the 2019 Tariff Regulations, the closing capital cost of Rs. 478969.24 lakh as on 31.3.2019, as approved in this order, for the 2014-19 tariff period, has been considered as the opening capital cost as on 1.4.2019, for determination of tariff for the 2019-24 tariff period.

Additional Capital Expenditure

173. Regulations 25 and 26 of the 2019 Tariff Regulations provide as under:

"25. Additional Capitalisation within the original scope and after the cut-off date:

(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

(a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;

(b) Change in law or compliance of any existing law;

(c) Deferred works relating to ash pond or ash handling system in the original scope of work;

(d) Liability for works executed prior to the cut-off date;

(e) Force Majeure events;

(f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and

(g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.

26. Additional Capitalisation beyond the original scope

(1) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check:

(a) Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;

(b) Change in law or compliance of any existing law;

(c) Force Majeure events;

(d) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;

(e) Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case to case basis:

Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M) or repairs and maintenance under O&M expenses, the same shall not be claimed under this Regulation;

(f) Usage of water from sewage treatment plant in thermal generating station.

(2) In case of de-capitalisation of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of de-capitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place with corresponding adjustments in cumulative depreciation and cumulative repayment of loan, duly taking into consideration the year in which it was capitalised."

174. The Petitioner has claimed additional capital expenditure in respect of assets/ works which form part of the original scope of work of the project, but after the cut-off date, in terms of the provisions of Regulation 25 of the 2019 Tariff Regulations. It has also claimed additional capital expenditure in respect of assets/ works which are beyond the original scope of work of the project in terms of the provisions of Regulation 26 of the 2019 Tariff Regulations. Accordingly, the year-wise projected additional capital expenditure claimed by the Petitioner for the 2019-24 Tariff Period is summarized and examined under:

(Rs. in lakh)

Sl. No.	Head of work/Equipment	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
A	**Projected Additional Capitalisation within the original scope of work, but after the cut-off date**						
1	Cost of Land &Site	25(1)(e)	3881.64	-	-	-	-
2	General Civil Works-Boundary Wall	25(1)(e)	160.00	-	-	-	-
3	Railway Package (inclusive of IDC)	25(1)(e)	-	68506.24	-	-	-
4	IT equipment	25(2)(b)	82.93	-	-	-	-
5	2 Numbers Flat Top Freezers @ Aahar I	25(2)(b)	-	-	-	-	-
6	C.T.Fan Gearbox	25(2)(b)	-	200.00	-	-	-
7	Centrifugal compressor and motor for BTG	25(2)(b)	-	350.00	400.00	-	-
8	Centrifugal Compressors for Ash Plant	25(2)(b)	-	300.00	300.00	300.00	300.00
9	Coal Mill Internals	25(2)(b)	-	100.00	200.00	200.00	-

Sl. No.	Head of work/Equipment	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
10	Coal Mill Journal Assembly	25(2)(b)	-	200.00	300.00	300.00	-
11	Cooling Tower Internals	25(2)(b)	-	100.00	100.00	100.00	100.00
12	Economiser Coil (both Upper & Lower Bank)	25(2)(b)	-	1200.00	-	-	-
13	Fabrication of expansion bellows	25(2)(b)	46.90	40.07	-	-	-
14	Godrej Storewell 12 numbers for GH	25(2)(b)	-	3.00	-	-	-
15	LG 230 litres Fridge 5 numbers	25(2)(b)	-	1.50	-	-	-
16	LTSH Coil (both Upper & Lower Bank)	25(2)(b)	-	-	800.00	-	-
17	Office Chairs	25(2)(b)	-	25.00	-	-	-
18	Refurbishment of DM Plant Piping and Tanks	25(2)(b)	118.02	-	-	-	-
19	Refurbishment of Economiser Coil Unit 2	25(2)(b)	50.00	-	-	-	-
20	Refurbishment of Economiser Coil Unit1	25(2)(b)	50.00	-	-	-	-
21	Refurbishment of Pulverizer Internals	25(2)(b)	100.00	-	-	-	-
22	Refurbishment of U1 & U2 HP Bypass System	25(2)(b)	-	-	-	-	-
23	Re-heater Modification & MTM installation	25(2)(b)	191.47	-	-	-	-
24	Re-Heater Straight Tubes & Bends	25(2)(b)	-	350.00	400.00	450.00	450.00
25	Replacement of Slew Hydraulic Motor of Stacker-cum-Re-claimer	25(2)(b)	-	-	159.87	-	-
26	Replacement of Township ACs	25(2)(b)	-	-	50.00	-	-
27	Vacuum Pump	25(2)(b)	-	200.00	200.00	-	-
28	ID fan motor with VFD replacement	25(2)(c)	-	450.00	450.00	450.00	450.00
29	Laboratory Instruments	25(2)(c)	-	21.94	57.08	52.90	22.11
30	MAX DCS Version up-gradation (XP) Unit 2	25(2)(c)	450.00	-	-	-	-
31	Replacement of Battery	25(2)(c)	-	80.00	80.00	90.00	-
32	Up-gradation of CHP Main PLC	25(2)(c)	-	60.00	-	-	-
33	Up-gradation of DMP PLC	25(2)(c)	-	50.00	-	-	-
34	Up-gradation of Raw Water PLC	25(2)(c)	-	50.00	-	-	-
B	**Projected Additional Capitalization beyond the original scope of work**						
35	Soak Pit for Station transformer in switchyard.	26(1)(a)	40.00	-	-	-	-
36	Up-gradation of ABT for RRAS & SCED	26(1)(a)	-	75.00	-	-	-
37	Implementation of AGC	26(1)(a)	80.00	-	-	-	-
38	Drinking Water Facility	26(1)(b)	19.77	-	-	-	-
39	Drivers' rest room	26(1)(b)	-	5.00	-	-	-
40	Facility creation for workmen: Rest Room, Toilet and drinking	26(1)(b)	-	37.50	37.50	37.50	37.50

Sl. No.	Head of work/Equipment	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
	water point						
41	Workers pathway	26(1)(b)	-	150.00	-	-	-
42	Augmentation of ash handling	26(1)(c)	1416.80	500.00	-	-	-
43	Augmentation of store	26(1)(c)	329.26	-	-	-	-
44	BCN 7 (Yard Conveyor) modification	26(1)(c)	-	-	-	-	-
45	Chute Interconnection in 4A to 6B & 4B to 6A	26(1)(c)	-	-	50.00	-	-
46	Coal Pit Run-off mechanised Drainage systems	26(1)(c)	399.53	-	-	-	-
47	Common C.W.Pump for Unit No.1& Unit No.2	26(1)(c)	-	-	-	-	-
48	Covered Parking Block at Township	26(1)(c)	-	2.50	-	-	-
49	Economiser Coil Repairing Bay with shed	26(1)(c)	-	600.00	-	-	-
50	Electric Vehicle (cart) for visitors movement	26(1)(c)	-	-	-	-	-
51	Industrial kitchen setup at MA-2	26(1)(c)	-	6.50	-	-	-
52	Installation of suspended magnet	26(1)(c)	52.41	-	-	-	-
53	Modernization of Gym, Rooftop cafeteria and Community hall	26(1)(c)	5.00	-	-	-	-
55	Workshop for EMD	26(1)(c)	-	50.00	-	-	-
56	Automation of Boom barrier	26(1)(d)	-	20.00	-	-	-
57	Boundary wall under pass area	26(1)(d)	-	100.00	-	-	-
58	CCTV installation all around plant. (76 CCTV planned)	26(1)(d)	-	200.00	200.00	150.00	-
59	Construction of high-rise safety platform and walkways)	26(1)(d)	300.00	-	-	-	-
60	E- Security system	26(1)(d)	148.99	100.00	-	-	-
61	Economiser platform for both boilers	26(1)(d)	-	350.00	-	-	-
62	Gate House Near JNT	26(1)(d)	120.70	-	-	-	-
63	Mini Fire tender	26(1)(d)	-	25.00	-	-	-
64	Road along Boundary wall (Periphery Road 18 kms)	26(1)(d)	-	-	150.00	100.00	50.00
C	**Total additional capitalexpenditure claimed**		**8043.42**	**74677.26**	**4259.96**	**2230.40**	**1409.61**
D	Less: De-capitalization during the year / period		1138.34	2927.46	2110.64	1119.45	727.30
E	**Net additional capitalexpenditure claimed**		**6905.08**	**71749.80**	**2149.32**	**1110.95**	**682.31**

Projected additional capital expenditure within the original scope of work of the project under Regulation 25(1)(e) of the 2019 Tariff Regulations

175. Regulation 25(1)(e) of the 2019 Tariff Regulations provide as under:

"25. Additional Capitalization within the original scope and after the cut-off date:

(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

(a) xxx

xxxxx

(e) Force Majeure events;

176. The following additional capital expenditure has been claimed by the Petitioner in respect of assets/ works which form part of the original scope of work of the project, but after the cut-off date, under Regulation 25(1)(e) of the 2019 Tariff Regulations:

(Rs. in lakh)

Head of work / Equipment	**2019-20**	**2020-21**
a. Railway Infrastructure Package (inclusive of IDC)	-	68506.24
b. Cost of Land & Site	3881.64	-
c. General Civil Works-Boundary wall	160.00	-

177. The Petitioner has claimed projected additional capital expenditure of Rs.68506.24 lakh for 'Railway Infrastructure Package' in 2020-21 under Regulation 25(1)(e) of the 2019 Tariff Regulations and has submitted the following:

a) Petitioner envisaged Railway Infrastructure Package to facilitate the transportation of coal to the Project. The Railway Package was planned to be executed in three phases, Phase I, Phase II and Phase III. Phase-I is essential for existing Stage-I (of the generating station with the approved Railway Project cost of Rs.574 crore (earlier Rs.405 crore) with a total approved Project cost of Rs.5696 crore.

b) The land acquired for Phase I, Stage-1 by the Petitioner was 82.01 acres, which comprises of 64.23 acres of Private land, 17.78 acres of Government land (which includes 4.81 acres of Krishi land). Additionally, this Phase included Railway land of 17 acres. The Private land and Government land is spread over nine villages. The Petitioner earnestly started the work for completion of the Railway Project immediately after Board approval and tying up finance in 2008.

178. The Petitioner has submitted that the completion of Railway Infrastructure Package was delayed due to reasons beyond the control of the Petitioner. The

Petitioner has also stated that it had already submitted detailed reasons in Petition No.152/GT/2015 for the delay in the Railway Infrastructure Package. The Petitioner has further submitted that the execution of few Project packages including the Railway Infrastructure Package was delayed on account of reasons, primarily in acquisition of requisite land parcels for this package, which are beyond the control of the Petitioner and, therefore, the capitalization of these packages could not be achieved within the cut-off date i.e. 31.3.2015. The summary of the reasons for the delay in the completion of the Railway Package are as below:

i) Re-alignment of the Dedicated Freight Corridor and revision in Railway norm of elevation from 1:400 to 1:1200;

ii) Rehabilitation and Resettlement (R&R) scheme for acquisition of land required for Railways Infrastructure has taken longer time than anticipated due to irregularities in payments made by the District Land Acquisition Officer (DLAO);

iii) Denial of allotment of total quantum of land by Eastern Railways;

iv) Multiple technical issues raised and multiple revisions of approved DPR, ESP, ESSP, S&T caused by Eastern Railways;

v) Unlawful encroachments in Railway lands and inaction by the Government of Jharkhand (GoJ) and Railways;

vi) Ownership claims by local residents on GM land (Gair Majarua land) allocated to Petitioner and inaction by GoJ;

vii) Disputes raised with respect to ownership of Private land by landowners and inaction by GoJ to resolve the same;

viii) Widespread disputes &scams relating to payment of compensation to wrong persons by the Government officials;

ix) Litigation with respect to acquisition of land and compensation thereof; and

x) Delay in the appointment of DLAO to oversee disputes pertaining to acquisition of land by Petitioner.

179. The Petitioner in Annexure-P/6 of the petition has furnished the details of time and cost overrun of the Railway Infrastructure Package along with justification. The Petitioner has submitted that it made all efforts to expedite the possession of land

parcels and completed the construction in those patches of land parcels in phases as and when the possession of these parcels were obtained, which at times needed changes in design and scope due to actual site measurements being different from estimates in design, when access was available for those parcels. The Petitioner has submitted that with the present status and speed of resolution of disputes, it is expected that the entire land related issues pertaining to Railway Infrastructure Package would be resolved and possession of all land parcels would be obtained by the end of June 2020 and accordingly the Railway Infrastructure Package would be completed by 31.3.2021. It has stated that land acquisition has been categorized as an 'uncontrollable factor' under the 2019 Tariff Regulations if the delay is for reasons not attributable to the Petitioner. The Petitioner has added that the significance of completing the Railway Infrastructure Package also arises from the fact that the present arrangement of transporting coal through trucks has been seen as an environmental concern and from fuel security point of view for ensuring supply to the beneficiaries on completion of the Railway Infrastructure Package gains utmost importance. The Petitioner has submitted that the delay in commissioning of Railway Infrastructure Package is mainly due to land related issues which were totally out of control of the Petitioner and the same is a 'force majeure' condition, which is to be considered and allowed in terms of Regulation 3(25) read with Regulation 25 of the 2019 Tariff Regulations.

180. As regards cost overrun of the Railway Infrastructure Package, the Petitioner has submitted that the same was beyond the control of the Petitioner and the increase in the Railway Infrastructure Package cost forced the Petitioner's Board to re-allocate the project cost. In addition, the Petitioner has stated that the Railway Infrastructure Package contract which was initially awarded to M/s L&T had to be split into three parts, on account of the unforeseen delays and was reallocated

among the initial contractor M/s L&T, and the new contractors M/s Amex and M/s Kanwar. The Petitioner's Board in its meeting dated 16.3.2019 had approved the cost and internal allocations under the 'Railway Infrastructure cost' for Rs.574.66 crore excluding IDC. It has further stated that during the execution of the packages identified under Railway infrastructure, the cost allocation was changed and approved by the Board for revised allocation, keeping the overall cost of Railway Infrastructure package within the approved budget of Rs.574.66 crore in the Board meeting dated 16.10.2019. The Petitioner has submitted that the total IDC is Rs.152.75 crore on Railway Infrastructure Package. We note that the total Railway Infrastructure Package cost approved by the Board works out to Rs.712.14 crore (Rs.559.38 crore + Rs.152.75 crore) out of which the Petitioner has capitalized and claimed Rs.28.13 crore (Rs.24.13 crore + Rs.4.49 crore of IDC) during 2015-16 which has not been allowed (as discussed in earlier part of this order) as the Railway Package could not be put to use during 2015-16.

181. The Petitioner has claimed projected additional capital expenditure of Rs.3881.64 lakh in 2019-20 towards the cost of 'Land & Site' and additional capitalization of Rs.160.00 lakh in 2019-20 towards 'General Civil Works' under Regulation 25(1)(e) of the 2019 Tariff Regulations and has submitted the following:

(a) Land & Site

a) The Petitioner has envisaged the revised demand for 115 acres GM land as per present circle rate at Rs.35.28 crore. Also, the payment for Krishi farmland for 4.81 acres (80% of which has already been paid) for Railways corridor consisting of land in Kumthol and Poddardih village and the remaining 20% of payment demand (for Rs.0.60 crore) is envisaged in 2019-20. Similarly, 80% payment for 6.96 acres of GM land for Stage 1 and 6.01 acres of land for Stage-2 meant for the Railway corridor has been paid and the balance demand for 20% is estimated at Rs. 2.54 crore in 2019-20.

b) Even after continuous follow-up, the balance demand is yet to be received from the Govt. of Jharkhand. The same is beyond the control of the Petitioner and ought to be considered as an 'uncontrollable factor'.

c) The detailed submissions justifying the 'force majeure' delay on account of land issues had already been furnished in the truing-up of tariff in this petition and the same are not repeated here for the sake of brevity. The detailed reasons for the delay have been finished in Annexure P/5 of the petition.

(b) General Civil Works

The delay in the execution of works in General Civil Works (GCW) Package is on account of various reasons beyond the control of the Petitioner as under:

(a) The balance works to be carried out under the GCW Package is mainly on account of the un-finished portion of the boundary wall around the Ash Pond and construction of boundary wall in 226 acres land.

(b) Although the remaining work is related to Ash Pond and construction of wall, the same is included under the 'General Civil Works' owing to the nature of the balance scope of work. The completion of the boundary wall around the Ash Pond has been delayed on account of land related issues, the resolution of which has taken much longer time than envisaged earlier. Therefore, the balance work of the boundary wall is expected to be completed by 2019-20.

(c) The detailed submissions justifying the delay in execution of General Civil Works has been furnished in the truing-up of tariff petition in Annexure P/12 of the petition and the same are not repeated herein for sake of brevity.

182. The Respondent, KSEBL has mainly submitted that the Petitioner is not eligible to seek the additional capitalization of the expenditure towards cost of land & site and for Railway Infrastructure Package, after the cut-off date. It has also submitted that there has been lack of co-ordination on part of the Petitioner with the local administration for resolution of disputes, which has led to the inordinate delay in the execution of the work. Accordingly, the Respondent has prayed that the impact of cost & time overrun for the aforesaid work may not be passed on to the beneficiaries.

183. The submissions have been considered. The Petitioner, in Petition No.152/GT/2015, had furnished detailed reasons for the delay in the execution of the Railway Infrastructure Package and submitted that the execution of few project packages including Railway Infrastructure Project package was delayed primarily on account of delay due to acquisition of requisite land parcels for this package, which

are beyond the control of the Petitioner and fall under 'force majeure' conditions. It had, therefore, submitted that the capitalization of expenditure on the scheme could not be achieved within the cut-off date and, accordingly, sought for extension of the cut-off date of the project till 31.3.2019 in view of the constraints faced in the execution of few project packages including Railways. Vide order dated 26.12.2017 in Petition No.152/GT/2015, the Petitioner was granted liberty to approach the Commission for additional capitalization, based on the actual additional expenditure incurred for these assets. The Petitioner, in this petition for truing up of tariff for the 2014-19 tariff period, claimed additional capitalization of these packages (Land & Site and GCW) after the cut-off date (for 2015-19) on the ground that these packages could not be completed within the cut-off date, due to 'force majeure' conditions, which were beyond the control of the Petitioner. It was also submitted by the Petitioner that most of the project packages were completed in 2015-16, except for the Railway System, GCW and Land & Site, which were expected to be completed by 31.3.2021. It was, however, submitted that some assets in these packages were put to use and part-capitalized during the 2014-19 tariff period and the balance to be capitalised during the 2019-24 tariff period.

184. It is noticed that the Petitioner had claimed actual additional capitalization of Rs.2861.56 lakh (including IDC of Rs.448.94 lakh) in 2015-16, towards Railway Infrastructure Package, forming part of the original scope of work of the project and had submitted that the said package was yet to be completed and operationalized by the Petitioner, owing to severe land acquisition disputes as narrated therein including submissions made in Petition No.152/GT/2015. However, on prudence check, it was evident that the 'Railway Infrastructure Package' had not been completed and put to use by the Petitioner. Only certain civil assets like roads, over-bridges and under-

passes were constructed and the expenditure incurred on these was sought to be capitalized. Since the construction of these civil assets do not have any nexus with the generation of power, the Commission, in this order, had not permitted the additional capitalization of these assets, until the Railway Infrastructure Package was completed. In other words, the capitalization of expenditure on 'Railway Infrastructure Package' after the cut-off date was never considered as the same had not been completed and put to use by the Petitioner. As regards the delay in Railway Infrastructure Package, the Petitioner has made detailed submissions in Annexure P/6 of the petition, similar to those made in Petition No.152/GT/2015. It is evident from these submissions that the delay was mainly on account of 'land acquisition' issues, which also involved litigation before the Courts and payment of compensation thereof. It is pertinent to mention that the Railway Infrastructure Package could not be commissioned until all land parcels in the route were available with the Petitioner free of any encumbrance. It is noticed that Regulation 22(2) of the 2019 Tariff Regulations provides for 'land acquisition' as an 'uncontrollable factor', except where the delay is attributable to the generating company or the transmission licensee, as the case may be. The relevant portion of the said regulation is extracted hereunder:

> *"The 'uncontrollable factors' shall include but shall not be limited to the following:*
>
> *a. Force Majeure events;*
> *b. Change in law; and*
> *c. Land acquisition except where the delay is attributable to the generating company or the transmission licensee."*

185. From the submissions of the Petitioner with regard to time overrun for Railway Infrastructure Package read with the submissions in Annexures P/5 & P/12 of this petition, it is noticed that a series of events had affected the progress of resolution of land acquisition issues. The Petitioner had made various correspondences/ communication with the local administration for expediting the land acquisition

process for Railway project and had also approached the Hon'ble High Court of Jharkhand seeking directions upon the local administration. Also, the identification of the rightful owners, the correction of earlier awards in terms of the directions of the Hon'ble High Court, the submission of claims and payment of compensation and obstacles created by encroachment have all led to the delay in possession of land and the construction and final commissioning of the said package got delayed. The Petitioner has taken efforts to expedite the possession of land parcels and to complete the construction in those patches of land parcels in phases as and when the possession of these parcels was obtained. We have, in paragraph 38 to paragraph 46 of this order, examined the submissions of the Petitioner with regard to the delay in the availability of land & site and the delay in execution of the General Civil Works, consequent upon the non-availability of land, attributed to the change in policy of State Government and Order of the Hon'ble High Court, and allowed the additional capitalisation of the expenditure claimed by the Petitioner for the period 2015-19 under Regulation 14(3)(i) of the 2014 Tariff Regulations, for compliance with the orders of the Hon'ble Court. Considering the fact that these are balance works which have spilled over from 2018-19 and keeping in view that the Railway Infrastructure Package, being an interdependent activity, contingent upon the clearance of land acquisition issues, we hold, that the delay is on account of events which are not attributable to the Petitioner. In our considered view, the delay due to non-availability of land & site, which has caused the delay in the execution of the General Civil Works for the period 2015-19, holds good for the delay in the completion of Railway Infrastructure Package for the period 2019-21 also. For these reasons, the projected additional capitalization of Rs.68506.24 lakh for 'Railway Infrastructure Package' in 2020-21 and the projected additional capitalization of Rs.4041.64 lakh (Rs.3881.64 lakh for cost of Land and Site and Rs.160.00 lakh for

General Civil Works) in 2019-20 is allowed under Regulation 25(1)(a) of the 2019 Tariff Regulations. However, the total cost including cost disallowed for the year 2015-16 on Railway Package shall be considered and dealt on merits, after prudence check, at the time of truing-up.

Projected additional capital expenditure under Regulation 25(2)(b) of the 2019 Tariff Regulations

186. Regulation 25(2)(b) of the 2019 Tariff Regulations provide as under**:**

> *"25(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:*
>
> *(a) xxxxxx;*
>
> *(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
>
> *xxxx"*

187. The following additional capital expenditure has been claimed by the Petitioner under Regulation 25(2)(b) of the 2019 Tariff Regulations:

(Rs. in lakh)

Sl. No.	**Head of work/ Equipment**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
1	Coal Mill Internals	0.00	100.00	200.00	200.00	0.00
2	Coal Mill Journal Assembly	0.00	200.00	300.00	300.00	0.00
3	Economiser Coil (both Upper & Lower Bank)	0.00	1200.00	0.00	0.00	0.00
4	LTSH Coil (both Upper & Lower Bank)	0.00	0.00	800.00	0.00	0.00
5	Refurbishment of Economiser Coil Unit 2	50.00	0.00	0.00	0.00	0.00
6	Refurbishment of Economiser Coil Unit1	50.00	0.00	0.00	0.00	0.00
7	Refurbishment of Pulverizer Internals	100.00	0.00	0.00	0.00	0.00
8	Re-Heater Straight Tubes & Bends	0.00	350.00	400.00	450.00	450.00
9	C.T.Fan Gearbox	0.00	200.00	0.00	0.00	0.00
10	Centrifugal compressor and motor for BTG	0.00	350.00	400.00	0.00	0.00
11	Centrifugal Compressors for Ash Plant	0.00	300.00	300.00	300.00	300.00
12	Replacement of Slew Hydraulic Motor of Stacker cum Re-claimer	0.00	0.00	159.87	0.00	0.00
13	Vacuum Pump	0.00	200.00	200.00	0.00	0.00

14	2 Numbers Flat top freezers @ Aahar I	0.00	0.00	0.00	0.50	0.00
15	Godrej storewell 12 nos for GH	0.00	3.00	0.00	0.00	0.00
16	LG 230 litres fridge 5 numbers	0.00	1.50	0.00	0.00	0.00
17	Office chairs	0.00	25.00	0.00	0.00	0.00
18	Replacement of township ACs	0.00	0.00	50.00	0.00	0.00
19	IT equipment	82.93	0.00	0.00	0.00	0.00
20	Cooling Tower Internals	-	100.00	100.00	100.00	100.00
21	Refurbishment of DM Plant Piping and Tanks	118.02	0.00	0.00	0.00	0.00
22	Fabrication of expansion bellows	46.90	40.07	0.00	0.00	0.00
23	Refurbishment of U1 & U2 HP Bypass system	0.00	0.00	0.00	0.00	0.00
24	Re-heater Modification & MTM installation	191.47	0.00	0.00	0.00	0.00

188. As regards the claim for additional capitalization on items/ assets like Coal Mill Internals, Coal Mill Journal Assembly, Economiser Coil (both Upper & Lower Bank), LTSH Coil (both Upper & Lower Bank), Refurbishment of Economiser Coil Unit 2, Refurbishment of Economiser Coil Unit1, Refurbishment of Pulverizer Internals, Re-Heater Straight Tubes & Bends, the Petitioner has submitted that due to poor quality of coal, higher quantity of ash is generated and coarse type of ash is produced in the generating station. It has also stated that due to the abrasive nature and more quantity of ash, the life of these equipment has reduced and are, therefore, required to be replaced. Accordingly, it has submitted that the replacements of these assets are necessary on account of Force majeure conditions. The Respondent, KSEBL has submitted that the amount claimed under this head mainly involves expenditure projected for replacement of assets or equipment and is covered under R&M expenses and, therefore, the claim may be rejected.

189. The matter has been considered. The 2019 Tariff Regulations do not contain any provision for correlating the life of the asset/ equipment corresponding to the quality of coal. Different generating stations use different quality of coal as per the Fuel Supply Agreements (FSA) executed by them with coal companies, depending

upon the mine from which coal is procured. The Petitioner has based its claim of replacement of assets to poor quality of coal that has led to higher generation of ash apart from ash being coarse in nature. The Petitioner has submitted that due to abrasive nature and higher quantity of ash, the life of equipment have reduced and, therefore, are required to be replaced. The Petitioner has submitted that these events (higher quantity and coarse nature of ash which being abrasive, have lowered life of equipment/ asset) are Force majeure conditions. However, we note that the Petitioner has not furnished whether the coal received at the generating station is as per the provisions of FSA and as per the design coal considered at the time of selection of the equipment/ technology. The Petitioner has also not mentioned if the quality of coal being supplied is different from the one agreed in FSA with coal companies and whether the matter has been taken up with coal companies. Moreover, reduction in the life of equipment and replacement of the same due to poor quality of coal, cannot qualify as a force majeure condition to be eligible for grant of relief under Regulation 25(2)(b) of the 2019 Tariff Regulations. In view of this, the projected additional capital expenditure claimed in this respect is not allowed.

190. As regards the claim of the Petitioner under Regulation 25(2)(b) of the 2019 Tariff Regulations for additional capitalization of expenditure on items/ works such as C.T. fan gearbox, Centrifugal compressor & motor for BTG, Centrifugal compressors for Ash Plant, Replacement of slew hydraulic motor of stacker-cum-reclaimer, Vacuum Pump, Refurbishment of U1 & U2 HP bypass system and Cooling tower internals, the justification furnished by the Petitioner is as below:

C.T. Fan Gearbox

The Gear Boxes installed in Cooling Towers are operational since COD of the units and in continuous operation over 8 years. Moreover, these gearboxes are placed inside the Cooling tower cell, so they work under highly moist

environment and probability of water ingress inside the gearbox is very high. The combined effect of ageing and operating in highly moist environment has resulted in more chances of premature failure as is also evident from past records. Consequently, the unavailability of CT fan due to breakdown of Gear Box can result in less cooling of hot circulating water from condenser, leading to less condensation of inlet steam and increase in back pressure at turbine exhaust. Higher back pressure means low vacuum which in-turn increases inlet steam consumption and deteriorates heat rate of Turbine Generator (TG) cycle. In worst case, the generation of the unit may also need to be reduced to maintain vacuum and backpressure of the turbine. In view of the above facts and to increase the availability and reliability of units for smooth, uninterrupted power supply, it has been proposed for procurement of 50% of the total installed gear boxes and internal gears to replace the existing ones. The cost of Rs.2 Crore shall be incurred in 2020-21 for the same, which will avoid any unavailability of cooling tower fans due to sudden breakdown of Gear Box in running condition.

Centrifugal Compressor and motor for Boiler Turbine Generator

It is proposed to replace the existing screw compressors of BTG with centrifugal compressors of suitable capacity. The proposal is based on the running experience of screw compressors installed at site. Majority of screw compressor manufacturers do not support site/local repairs and overhauls of the screw elements instead recommend for replacement based on running hours. As per the OEM, the expected service life is approximately 4 years (32000 operating hours) for oil free air elements. To maintain reliability and avoid unexpected failures, both the air ends are to be replaced as per schedule. For installed capacity of 06 nos. of such compressors, material cost of air ends alone works out to Rs.3 crore for every 6 years (considering Rs.50 lakh for 01 set of HP and LP screw elements). Over a remaining service period they prove to be cost effective compared to procurement of capital spares for such major overhaul of screw compressors every 4 years as recommended by the OEM. The total cost of Rs.7.5 crore is estimated to be spent in 2 years i.e. Rs.3.5 crore in 2020-21 and Rs.4 crore in 2021-22. In view of the envisaged overall cost benefits from the proposed project, the capital expenditure for installation of centrifugal compressors for BTG instrument and service air requirements may kindly be approved.

Centrifugal Compressors for Ash Plant

Both Stage-I & II compressors are screw compressors and average life of such compressors are 4-5 years or 40000 hours and require repair/replacement for reliable operation. However, manufacturers of screw compressors do not support site/local repairs and overhauls of the air elements of compressor instead recommend for replacement based on running hours. As demonstrated above, it is expected that the overall cost of such recurring replacement over

remaining plant life would be higher compared to one-time capital expenditure required for substituting screw compressors with centrifugal compressors. It is proposed to undertake phase-wise replacement of Stage-I conveying Air compressors by centrifugal compressor. The total project cost is estimated to be Rs.12 crore which will be capitalized phase-wise in 2020-21, 2021-22, 2022-23 and 2023-24.

Cooling Tower Internals

Over a period of continuous use under the highly moist environment the combined with the effect of ageing has resulted in more chances of premature failures of Cooling Tower Internals. Therefore, for reliable operation of cooling tower healthiness of all components, viz, PVC fills, drive shaft, drift eliminators, flow control butterfly valves and blades of axial flow fans of cooling tower is very much essential. In view of the above facts and to increase availability and reliability of units for smooth, uninterrupted power supply, it has been proposed for procurement of IDCT internal spares of Rs.4 crore spread over 2020-21 to 2023-24 to replace the existing ones for smooth running of plant.

Refurbishment of U1 & U2 HP Bypass system

It is submitted that due to frequent failure of various components in the servo valve, the reliability and availability of this critical system has reduced drastically. Malfunction in the servo valve has led to inadvertent opening of the HP bypass valve during normal operation of the unit leading to loss of generation. Also, on many occasions due to blocking in these servo valves, the bypass valves failed to open whenever required leading to delay in the Unit start up or Unit shut down activity. Meanwhile, the Petitioner is working out to figure out the root cause of such failures and solution for the same. After the analysis, this expenditure may be incurred during 2019-20 to 2023-24 and, therefore, it is requested to the Commission to grant liberty to the Petitioner to seek capitalization against Refurbishment of HP bypass hydraulic servo system under applicable regulations, subject to prudence check at the time of truing-up exercise.

Replacement of slew hydraulic motor of stacker-cum-reclaimer

During reclaiming, abnormal pressure and speed variation has been observed. In view of above observation, the OEM was called on-site to assess the situation and rectify the issue. On inspection, heavy wear and tear of the hydraulic system was observed and the OEM has advised to operate with 50% reduced slewing motion and replacement of the slew hydraulic motor including brakes. The observations and corrective measures as suggested by the OEM has been recorded in the minutes of the meeting dated 8.3.2019 and minutes of the meeting dated 2.7.2019. The total cost of the proposal would be of Rs.1.60 crore in 2021-22 and the same is based on the offer submitted by authorized distributor.

Vacuum Pump

The vacuum pumps have cast iron impellers which have a service life of about 5 year. The OEM (M/s Edwards ltd.) does not recommend any major welding repairs on the impeller as it compromises the safety of impeller during operation. One no spare vacuum pump available under project mandatory spares was installed during annual over-hauling in place of 01 number pump and local repair was made for the other pump. Similarly, heavy erosion was also recorded at both the impellers at Unit 2 during its AOH in May, 2019. Impeller blade and casing damage has occurred due to dislodging of the worn-out blade causing permanent damage to other blades as well as the casing. Therefore, the proposed capital expenditure of Rs.4 crore (Rs.2 crore in 2020-21 and Rs.2 crore in 2021-22) for the procurement of vacuum pump may be approved.

191. The submissions have been considered. The Petitioner, in justification of the claim for the aforesaid items/ assets, has mainly submitted that these equipment are required to be procured as 'spares' or on account of the fact that these items have 'worn out' or likely to be 'unserviceable' in due course of time. The Petitioner has also submitted that OEM has recommended their replacement in place of repair or change of the defective part. It is observed that in some of the cases, the Petitioner's claim is premised on poor quality of coal and in some cases, the claim is based on the recommendations of OEM. These factors do not, in our view, constitute change in law or a force majeure event, warranting any relief to the Petitioner. However, after examining the justifications furnished by the Petitioner, it is observed that in case of Centrifugal Compressor & motor for Boiler Turbine Generator and Centrifugal Compressors for Ash Plant, the OEM has suggested the replacement owing to the obsolescence/ unavailability of spares/ service support by OEM. In view of this, the projected additional capitalization of Rs.750.00 lakh (Rs.350.00 lakh in 2020-21 and Rs.400.00 lakh in 2021-22) for Centrifugal Compressor & motor for Boiler Turbine Generator and Rs.1200.00 lakh (Rs.300 lakh during each year from 2020-24) is allowed under Regulation 25(2)(c) of the 2019 Tariff Regulations. The Petitioner is

however, directed to furnish the recommendations of OEM at the time of truing-up of tariff.

192. However, for other items such as coal mill internals, cooling tower internals, economizer coil DM plant equipment, C.T fan gearbox etc. required to be replaced before the life of plant due to wear/ tear, we hold that the failure/ replacement of items does not fall under force majeure. However, replacement of such consumables may be met from the capital spares and may be claimed under capital spare consumption during truing up. In view of this, the additional capital expenditure claimed by the Petitioner is not allowed. Further, the prayer of the Petitioner for granting liberty to seek capitalization against 'Refurbishment of HP bypass hydraulic servo system' at the time of truing-up shall be considered as per the merit and provisions of regulations at the time of truing-up of tariff.

193. The Petitioner has also claimed additional capitalization for some minor assets/ items like Flat top freezers (2 numbers), Godrej storewell (12 numbers for guest house), office chairs, LG 230 litres fridge (5 numbers) and for replacement of township ACs. As regards flat top freezers, the Petitioner has submitted that their replacement is required as the existing units are not functioning properly due to deteriorated condition. As regards Godrej storewell, it has been submitted that the wooden setup of cupboards in DVC guest houses has deteriorated and a replacement by Godrej steel cupboards will help in damage-free arrangements. For office chairs, the Petitioner has stated that the replacement of chairs (including those in conference rooms) for officers and guests to ensure proper ergonomics and safety of individuals. In respect of LG 230 litres fridge, it has been submitted that as part of providing basic amenities at project office, gate house, CHP, switchyard and technical building pantry, the fridge, being used has completed its useful life and is

not commensurate with the useful life of the project. For replacement of township ACs, the Petitioner has stated that all ACs are more than 7 years old and, therefore, their replacement will be required by 2023-24 and will be done in a phased manner, depending on the condition of the units at various blocks in township. The Petitioner has contended that these minor items have life cycle of 7-8 years and need recurrent replacement. It has stated that the provision for Compensation Allowance that existed in the 2014 Tariff Regulations to compensate for addition of minor assets, is not there in the 2019 Tariff Regulations. Hence, the Petitioner has stated that there is no specific provision to claim the expenses for minor asset additions, which are important for the power plant and significant cost of Rs.0.81 crore is expected to be incurred during the 2019-24 tariff period. Accordingly, the Petitioner has submitted that the additional capitalization of these assets may be allowed in exercise of power vested under Regulation 76 read with Regulation 25(2)(b) of the 2019 Tariff Regulations. The submissions of the Petitioner have been considered. Since the additional capital expenditure claimed by the Petitioner do not relate to the operation of the generating station and are minor in nature, the claim for additional capitalization under Regulation 25(2)(b) of the 2014 Tariff Regulations is not allowed.

Projected additional capitalisation of the expenditure under Regulation 25(2)(c) of the 2019 Tariff Regulations

194. The following additional capital expenditure has been claimed by the Petitioner in respect of assets/ works, which are within the original scope of work of the project, but after the cut-off date, under Regulation 25(2)(c) of the 2019 Tariff Regulations:

(Rs. in lakh)

Sl. No.	**Head of work / Equipment**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
1	Induced Draft fan motor with Variable Frequency Drive replacement	0.00	450.00	450.00	450.00	450.00

2	Laboratory Instruments	0.00	21.94	57.08	52.90	22.11
3	Replacement of Battery	0.00	80.00	80.00	90.00	-
4	Up-gradation of CHP main PLC	0.00	60.00	0.00	0.00	0.00
5	Up-gradation of DMP PLC	0.00	50.00	0.00	0.00	0.00
6	Up-gradation of Raw water PLC	0.00	50.00	0.00	0.00	0.00

195. Regulation 25(2)(c) of the 2019 Tariff Regulations provides as under:

"25. Additional capitalization within the original scope and after the cut-off date:

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and..."

Induced Draft fan motor with Variable Frequency Drive replacement

196. The Petitioner has claimed additional capitalization of Rs.1800.00 lakh (Rs.450.00 lakh in 2020-21, Rs.450.00 lakh in 2021-22, Rs.450.00 lakh in 2022-23 and Rs.450.00 lakh in 2023-24) for Induced Draft fan motor with Variable Frequency Drive replacement under Regulation 25(2)(c) of the 2019 Tariff Regulations. The Petitioner has submitted that the said item/ asset was supplied by M/s BHEL and is in service for more than 7 years. It has submitted that there have been multiple instances of channel tripping in the past, leading to loss of generation and reliability and from past records and minutes recorded in MoM dated 3.8.2019 with M/s BHEL, a tripping of particular LCI channel continued for more than 15 days in presence of BHEL supervisory engineer and the tripping count reached to more than 40 days. In view of the technological obsolescence, the recommendation of OEM for up-gradation and to address issue of present unreliability of the system, the Petitioner has proposed to retrofit the existing system with the latest technology, having improved diagnostic features and to achieve reliable and sustainable operation of ID fan.

197. The matter has been examined. The Petitioner has submitted that there have been multiple instances of channel tripping in the past and has referred to the MoM dated 3.8.2019 with OEM. On scrutiny of various correspondences made by the Petitioner with OEM, we find that the replacement of the asset was based on the expert opinion of the OEM as recorded in the said MoM. In view of this, the claim of the Petitioner for additional capitalization of Rs.450.00 lakh in 2020-21, Rs.450.00 lakh in 2021-22, Rs.450.00 lakh in 2022-23 and Rs.450.00 lakh in 2023-24 for the said asset is allowed along with the corresponding decapitalization of Rs.284.43 lakh in 2020-21, Rs.271.56 lakh in 2021-22, Rs.259.28 lakh in 2022-23 and Rs.247.55 lakh in 2023-24. The Petitioner is, however, directed to furnish the obsolescence certificate from the competent authority at the time of truing-up of tariff.

Laboratory Instruments

198. The Petitioner has claimed projected additional capitalization of Rs.154.03 lakh (Rs.21.94 lakh in 2020-21, Rs.57.08 lakh in 2021-22, Rs.52.90 lakh in 2022-23 and Rs.22.11 lakh for 2023-24) for Laboratory Instruments under Regulation 25(2)(c) of the 2019 tariff Regulations. The Petitioner has submitted that 'laboratory instruments' are getting old i.e. more than 8 to 10 years and new instruments need to be procured. It has also stated that laboratory Instruments presently in service at site, are quite old and have outlived their service life. The Petitioner has also submitted that some of these machines are slow in response and hang quite frequently and spares and service support for old machines are restricted due to component obsolescence. The Petitioner has further stated that OEM has declared the obsolescence of most spares and that most of the instruments cannot be serviced or repaired due to non-availability of spares, change in software and technology development (as the same have become obsolete in market). The

Petitioner has submitted that in view of the said constraints i.e., obsolescence of the laboratory equipment and criticality of the system for plant operations, the Petitioner has no choice but to go for complete up-gradation of the entire system to higher version as recommended by OEM in a phased manner from 2020-21 to 2023-24. It has stated that an estimated additional expenditure of Rs 154 lakh, as per initial offer, spread over the years 2020-21 to 2023-24 is required for up-gradation of Laboratory Instruments.

199. The matter has been examined. The Petitioner has stated that the OEM has declared obsolescence of most spares and that most of the instruments cannot be serviced or repaired due to non-availability of spares, change in software and technology development. The relevant portion of the said recommendation is as under:

> *"This is to confirm that some of the instruments mentioned below from the order cannot be serviced or repaired due to non-availability of spares, change in software and technology development because they became obsolete in market, thus it makes highly impossible to keep them in working condition……..*
>
> *So we recommend you to upgrade the laboratory with new instruments in order to maintain a better performance to minimize downtime*"

200. The Petitioner has also referred to the correspondence made with M/s Orbit Technologies Limited with regard to the non-availability/ obsolescence of some of the items like PH meter, turbidity meter, conductivity meter, LPG gas cylinder &regulator, hot air oven, bomb calorimeter etc., and that the laboratory spares could not be serviced or repaired due to non-availability of spares, change in software and technology development. We, therefore, find merit in the claim of the Petitioner and accordingly allow the projected additional capitalization of Rs.154.03 lakh (Rs.21.94 lakh for 2020-21, Rs.57.08 lakh for 2021-22, Rs.52.90 lakh for 2022-23, Rs.22.11 lakh for 2023-24) for Laboratory Instruments under Regulation 25(2)(c) of the 2019 Tariff Regulations.

Replacement of Battery

201. The Petitioner has claimed projected additional capitalization of Rs.250.00 lakh (Rs.80.00 lakh for 2020-21, Rs.80.00 lakh for 2021-22 and Rs.90.00 lakh for 2022-23) towards Replacement of battery under Regulation 25(2)(a) read with Regulation 25(2)(c) of the 2019 Tariff Regulations along with the corresponding unrecovered depreciation value of the assets. The Petitioner has submitted that in case of system blackout, batteries feed the Direct Current (DC) equipment of the plant and switchyard equipment such as Emergency Oil Pump (EOP), Lube Oil Pump (LOP), Jacking Oil Pump (JOP) and Emergency lighting, thereby ensuring the safe shutdown of the plant and safe operation of the switchyard equipment. The Petitioner has submitted that as per OEM, the serviceable life of these battery sets is 8 to 10 years under normal application. It has also stated that the existing 220 V and 48 V battery banks have been supplied by M/s Exide/ M/s HBL and in view of the obsolescence, as confirmed by OEMs and to avoid criticality of the system for plant operation, it is necessary to replace the existing battery sets with new ones for improving the overall reliability of DC system. The Petitioner has, therefore, proposed to replace these battery sets as they will complete their useful life by 2020-2021 and has accordingly proposed the aforesaid additional expenditure for replacement of these battery banks.

202. The matter has been examined. It is observed that the claim of the Petitioner regarding obsolescence of these batteries has not been duly supported by OEM certificate. It is, however, noticed that OEM in its letters has confirmed the life of these batteries to be around 10-12 years and that the batteries form part of the essential safety system against tripping of the plant. As the useful life of these assets (batteries), which gets completed during the 2019-24 tariff period, are not

commensurate with the useful life of the project, the projected additional capitalization for 'Replacement of Battery' is allowed along with adjustment of de-capitalization and depreciation under Regulation 25(2)(a) of the 2014 Tariff Regulations, subject to truing-up based on actuals.

Up-gradation of Coal Handling Plant Main PLC, Up-gradation of DMP PLC, and Up-gradation of Raw Water PLC

203. The Petitioner has claimed projected additional capitalization of Rs.160.00 lakh (Rs.60.00 lakh for PLC of CHP, Rs.50.00 lakh for PLC of DMP and Rs.50.00 lakh for PLC of Raw water) in 2020-21 for Up-gradation of PLC in terms of Regulation 25(2)(c) of the 2019 Tariff Regulations and has submitted the following:

> **(a) Up-gradation of Coal Handling Plant main PLC**: The Programmable Logic Control ("PLC") system consists of Measurement and Closed Loop/ Open Loop Control system ('CLCS' and 'OLCS'), Data bus system, Operator workstations, Engineer workstation, Software including data diagnostics and data bus system with Control and Communication with the process. The workstations Human Machine Interface (HMI) supplied with PLC system is based on Microsoft Windows XP Operating platform. Microsoft has declared Windows XP as obsolete and has withdrawn the support for all XP based systems including automatic security updates. In the absence of such support from Microsoft one cannot update the critical virus definition files and, thus, makes the system vulnerable for the system security. Hence, the system needs up-gradation to higher version of Windows platform to ensure improved reliability and availability. The OEM in its life cycle report on installed PLC -HMI System at CHP has strongly recommended immediate attention on migration from Windows XP to Windows 10 Professional Operating System, owing to technological obsolescence. Accordingly, it is proposed to incur amount of Rs.0.60 crore in 2020-21.
>
> **(b) Up-gradation of DMP PLC:** The availability of this PLC system is very important for the smooth and normal operation of the generating unit. This system is based on Windows XP operating system and at that time (when the agreement was inked in with M/s BGR Energy) Windows XP operating system was the most popular and reliable Windows platform provided by all leading industrial automation companies for their control system. As Microsoft has withdrawn the support for Windows XP operating system, the Petitioner needs to upgrade the PLC to higher version of Windows. Since spares and services support for the old XP machines are restricted due to component obsolescence,

it is necessary to upgrade the XP based PLC system to higher version of Windows platform. The OEM, in its life cycle report has strongly recommended upgrading the obsolete portion of the system, retaining majority of existing hardware along with panels, etc. Since there is not going to be any major hardware or software modification, the up-gradation work can be carried out in smooth manner in normal planned shutdowns of the plant. It is, therefore, proposed to incur an amount of 0.50 crore in 2020-21 on account of technology obsolescence/non-support by the OEM.

(c) Up-gradation of Raw Water PLC: The workstations (HMI) supplied with PLC system is based on Microsoft Windows XP Operating platform. Microsoft has declared Windows XP as obsolete and has withdrawn the support for all XP based systems including automatic security updates. In the absence of such support from Microsoft, one cannot update the critical virus definition files and, thus, makes the system vulnerable for the system security. Hence, the system needs up-gradation to higher version of Windows platform to ensure improved reliability and availability. HMI systems presently in service at site are quite old and have outlived their service life. Some of these machines are slow in response and hang quite frequently. Spares and services support for the old machines are restricted due to component obsolescence. Workstations presently available in the market are with latest Windows OS and these current machines are not one to one interchangeable with the existing old machines presently in use. The OEM in its life cycle report strongly recommended to up-grade the obsolete portion of the system, retaining majority of existing hardware along with panels, etc. It is, therefore, proposed to incur an amount of Rs.0.50 crore in 2020-21 on account of technology obsolescence/non-support by OEM.

204. The submissions have been considered. It is evident from the submissions of the Petitioner that PLC installed in the Coal Handling Plant, DMP PLC, Raw Water PLC have become obsolete as Microsoft has declared Windows XP as obsolete and had withdrawn its support for all Windows XP based systems. The Petitioner has furnished the OEM recommendations in support of its claim for obsolescence of PLC. In view of this, we allow the total projected additional capitalization of Rs.160.00 lakh in 2020-21 under Regulation 25(2)(c) of 2019 Tariff Regulations.

205. In addition, the Petitioner has also claimed additional capitalization for new schemes like Augmentation of ash handing system, Max DCS version up-gradation (XP) Unit-2, Refurbishment of DM Plant Piping and Tanks, IT Equipment, Re-heater

Modification & MTM installation and Fabrication of expansion bellows, during 2019-20 and 2020-21. In justification of the same, the Petitioner has submitted that these new schemes, could not be completed within the 2014-19 tariff period due to various factors viz. (i) changes in schedule of annual maintenance plan or duration of maintenance plan of units, (ii) limited days of the annual outage and (iii) technical constraints etc. The Petitioner has submitted that such small deviations in capital investment are inevitable and there is nil or insignificant impact on the overall project cost. The Petitioner has further submitted detailed submissions in justification for the additional capitalization claimed for these new schemes during the 2014-19 tariff period. Accordingly, the Petitioner has stated that the capitalization of these schemes has been phased during 2019-20 and 2020-21 and that the same may be allowed under Regulations 25(2)(b) and 25(2)(c) read with Regulation 76 of the 2019 Tariff Regulations.

206. The Respondent, KSEBL has submitted that carry forward of schemes approved for 2014-19 period may not be allowed as there is no provision in the 2019 Tariff Regulations to claim such expenditure for the 2019-24 tariff period.

207. We have examined the matter. The Petitioner has claimed additional capitalization of the aforesaid schemes which are beyond the original scope of work of the project (apparently on the ground of force majeure condition), stating that these schemes have been carried forward from the 2014-19 tariff period on various factors. It has also relied upon the submissions made in respect of these schemes during the 2014-19 tariff period. It is noticed that the claim of the Petitioner for additional capitalization towards 'Augmentation of ash handling system' for Rs.700.13 lakh in 2017-18 and Rs.848.07 lakh in 2018-19 was allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations as the same was for safety of

environment and based on the directions of JSPCB. Since the additional capital expenditure is for compliance with existing law, we allow the same under Regulation 26(1)(a) of the 2019 Tariff Regulations. As regards the additional capitalization claimed for new scheme viz. Max DCS version up-gradation (XP) Unit-2for Rs.450.00 lakh in 2019-20, it is noticed that the Petitioner had claimed the additional capitalization of Rs.67.52 lakh in 2015-16 and Rs.438.86 lakh 2017-18 mainly on the ground that M/s BHEL had stopped extending its support after mid-2016 and had strongly recommended to upgrade to higher versions. Considering the fact that the Petitioner had incurred the said expenditure under unavoidable circumstances, the additional capital expenditure claimed has been allowed during the years 2015-16 and 2017-18 in this order. Accordingly, we allow the additional capitalization of the said expenditure for Rs.450.00 lakh in 2019-20 under Regulations 25(2)(c) and 25(2)(d) of the 2019 Tariff Regulations, as the same is in continuation of the schemes carried out and claimed during the 2014-19 tariff period.

208. However, in respect of other schemes like Refurbishment of DM Plant Piping and Tanks, IT Equipment, Re-heater Modification & MTM installation and Fabrication of expansion bellows during 2019-20 and 2020-21, it is noticed that the claim of the Petitioner had been disallowed during the 2014-19 tariff period. Also, justification furnished by the Petitioner in support of the claim that it is due to change in law or force majeure are not justifiable. In view of this, the claim of the Petitioner for additional capitalisation of these assets is not allowed.

Projected additional capital expenditure under Regulation 26(1) of the 2019 Tariff Regulations

209. The Petitioner has also claimed projected additional capital expenditure for various assets/ works which are beyond the original scope of work of the project

under sub-clauses (a), (b), (c) and (d) of clause (1) of Regulation 26 of the 2019 Tariff Regulations, which provide for the following:

> "*26. Additional Capitalisation beyond the original scope*
>
> *(1) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check:*
>
> *(a) Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;*
>
> *(b) Change in law or compliance of any existing law;*
>
> *(c) Force Majeure events;*
>
> *(d) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;*
>
> *(e) xxxxxx.."*

210. The following projected additional capital expenditure claimed by the Petitioner for the assets/ works under Regulation 26(1)(a) of the 2019 Tariff Regulations for the years 2019-20 and 2020-21 are examined below:

(Rs. in lakh)

Asset/Work	2019-20	2020-21
Implementation of Automatic Generation Control system	80.00	-
Soak-pit for Station Transformer in switchyard.	40.00	-
Up-gradation of ABT for RRAS & SCED	-	75.00

Implementation of Automatic Generation Control system

211. The Petitioner has claimed projected additional capitalization of Rs.80.00 lakh in 2019-20 towards implementation of Automatic Generation Control (AGC) system under Regulation 26(1)(a) of 2019 Tariff Regulations. In justification for the same, the Petitioner has pointed out that the Commission vide its order dated 28.8.2019 in Petition No.319/RC/2018 (NLDC v NTPC & Ors.) regarding Automatic Generation Control (AGC) implementation in India has issued the following directions:

> "*34 (i)All thermal ISGS stations with installed capacity of 200 MW and above and all hydro stations having capacity exceeding 25 MW excluding the Run-of-River Hydro Projects irrespective of size of the generating station and whose tariff is determined or adopted by CERC are directed to install equipment at the unit control rooms for transferring the required data for AGC as per the requirement to be notified by the*

National Load Despatch Centre (NLDC). NLDC shall notify the said requirements within one month of this order"

212. The Petitioner has submitted that pursuant to the aforesaid order dated 28.8.2019, Power System Operation Corporation Limited (POSOCO)/ NLDC vide letter dated 17.9.2019 has notified to the generating stations, the requirements for AGC connecting equipment along with the list of plants identified for monitoring by NLDC, which includes the generating station of the Petitioner. The Petitioner has further submitted that NLDC in its letter, has sought details from the Petitioner regarding the infrastructure for meeting the specified requirements and the arrangements to be completed by the power plants before 31.1.2020, so that the AGC system is put in place before 28.2.2020, in terms of the Commission's order dated 28.8.2019 in Petition No.319/RC/2018. Based on this, the Petitioner has sought the approval of the additional capital expenditure for Rs.80 lakh in 2019-20 as per initial offer (and based on pilot projects implemented in NTPC generating stations) for implementation of AGC in the generating station of the Petitioner, under Regulation 26(1)(a) of the 2019 Tariff Regulations. Since the projected additional capital expenditure claimed by the Petitioner for Rs.80 lakh in 2019-20 is in terms of the directions of NLDC, based on the Commission's order dated 28.10.2019 in Petition No.319/RC/2019, we allow the same under Regulation 26(1)(a) of the 2019 Tariff Regulations.

Soak-pit for Station Transformer in switchyard

213. The Petitioner has claimed projected additional capitalization of Rs.40.00 lakh in 2019-20 towards 'Soak Pit for Station Transformer in switchyard' under Regulation 26(1)(a) of the 2019 Tariff Regulations. The Petitioner has submitted that 'soak pit' proposed for the station transformer in switchyard is for compliance with Regulation 44 of the CEA (Measures relating to Safety and Electric Supply) Regulations, 2010.

The Petitioner has enclosed copy of CEA report dated 5.6.2018 and has submitted that since there is presently no such arrangement for Station Transformers in the generating station of the Petitioner, the Regional Inspectoral organization of the CEA, had noticed the deficiency (in sl. no. 5 of the report dated 5.6.2018) and has directed the Petitioner for compliance with the same. Therefore, in order to comply with the existing regulations of CEA, the Petitioner has projected additional capital expenditure of Rs.40 lakh in 2019-20 for Soak Pit for station transformer in switchyard under Regulations 26(1)(a) and 26(1)(b) of the 2019 Tariff Regulations.

214. The matter has been examined. Regulation 44 of the CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 mandates the following:

> *"Regulation 44: Use of electricity at voltage exceeding 650 V. Provisions shall be made for suitable oil soak pit and where use of more than 9000 litres of oil in any one oil tank, receptacle or chamber is involved, provision shall be made for the draining away or removal of any oil which may leak or escape from the tank, receptacle or chamber containing the same."*

215. The Regulations of CEA mandating suitable soak oil pit for station transformer was notified during the year 2010, which is much before COD of the generating station (in 2012) and the deficiency has been pointed out by CEA in its report dated 5.6.2018. Therefore, the Petitioner should have complied with requirements of CEA Regulations at the time of COD of the generating station. However, since the claim of the Petitioner is towards compliance with existing law, we allow the projected additional capitalization for Rs.40 lakh in 2019-20 for the said asset/ work. At the time of truing-up, the Petitioner shall submit reasons for the delay/ deferment of the work.

Up-gradation of ABT system for RRAS & SCED

216. The Petitioner has claimed projected additional capitalization of Rs.75 lakh in 2020-21 for up-gradation of ABT system for RRAS & SCED under Regulation

26(1)(a) of 2019 Tariff Regulations. In justification of the same, the Petitioner has submitted that it has an online system for monitoring and controlling schedules, as advised by Eastern Region Load Despatch Centre (ERLDC) which is named as Availability Based Tariff (ABT) system. It has stated that the core of ABT System is energy meters, which are of L&T make and the software was developed by M/s CMS computer Ltd. about 8 years ago. The Petitioner has pointed out that with the implementation of Reserve Regulation and Ancillary Services (RRAS) and Security Constrained Economic Dispatch (SCED), the schedule is revised every 15 minute time-block as compared to the earlier revision after 4 time-blocks. It has stated that all revision of schedule has to be updated in the server manually and the same is then reflected in the display screen for necessary action by the operation engineers. The Petitioner has stated that with the implementation of RRAS and SCED, it has become difficult for it to maintain proper manual updating of scheduled generation in ABT system to re-align with ERLDC schedule, as the cushion time for manual entry is no more available. The Petitioner has submitted that the Commission in its order dated 16.7.2018 in Petition No 7/SM/2018, has endorsed the 5-minute scheduling, metering, accounting and settlements and has also implemented the same on a pilot basis and has also recommended that all future procurements of energy meter should have recording at 5-minute interval. In this regard, the Petitioner has stated that at present L&T meters in the generating station of the Petitioner do not have registers to capture the 5-minute data and, accordingly, it has to be replaced with new meters, in which block duration is programmable and can be adjusted from 15 minutes to 5 minutes, to be future ready and compliant with the 5-minute data requirements as may be required in near future. Accordingly, the Petitioner has projected additional capitalization of Rs 75 lakh in 2020-21, as per initial offer, in

accordance with the observations of the Commission in its order dated 16.7.2018 in Petition No. 7/SM/2018 under Regulation 26(1)(a) of the 2019 Tariff Regulations.

217. The matter has been considered. Up-gradation of the existing ABT system for RRAS & SCED is required to comply with the changing scenario, to update the revised schedules from ERLDC. As the requirement for up-gradation of the existing ABT system for RRAS and SCED is pursuant to the Commission's order dated 16.7.2018 in Petition No 7/SM/2018, the claim of the Petitioner for projected additional capitalization of Rs.75 lakh in 2020-21 is allowed under Regulation 26(1)(a) of the 2019 Tariff Regulations.

Facility creation for workmen (Rest Room, Toilet & Drinking water point), Drivers rest room, Drinking water facility and workers pathway

218. The Petitioner has claimed projected additional capitalization of Rs.19.77 lakh in 2019-20 for Drinking water facility, Rs.5.00 lakh in 2020-21 for Drivers rest room, Rs.150.00 lakh in 2020-21 for Workers pathway and Rs.150.00 lakh (Rs.37.50 lakh each from 2020-21 to 2023-24) for Facility creation for Workmen (Rest Room, Toilet & Drinking water point) under Regulation 26(1)(b) of the 2019 Tariff Regulations. In justification of the same, the Petitioner has submitted the following:

a) **Facility creation for workmen (Rest room, Toilet & Drinking water point):** As FGD and Railway system is envisaged, commensurate increase in work force is expected and the existing facilities might fall short or might be far from the construction place as per Factories Act. So, in order to ensure hygienic and safe environment for workers, more Rest rooms, Toilets and drinking water points are needed. An estimated expenditure of Rs.150 lakh as per initial offer, (Rs.37.50 lakh each spread over the years 2020-21 to 2023-24) is proposed to be incurred for development of such facilities.

b) **Workers Pathway:** For protection from heat in summer and rain during monsoon season for workers commuting from Gate house to workplace with distance ranging from 2-5 kms, two sitting sheds between Raahi bridge and Aahar-3 (CHP) are needed. Also, long sheds between Gate house-2 to BTG area and between material gate to technical building parking area are required. This would ensure proper working environment for workers. An estimated

expenditure of Rs.150 lakh is initially proposed to be incurred in 2020-21 for development of such facilities. The above requirements are for compliance with the Section 18, Section 19 and Section 47 of the Factories Act, 1948, which mandate to provide drinking water facilities, toilets, shelters, rest rooms and lunchrooms in a factory.

219. The Petitioner has referred to Section 18, Section 19 and Section 47 of the Factories Act, 1948, which mandate to provide drinking water facilities, toilets, shelters, rest rooms and lunchrooms in a factory and has claimed the projected additional capitalization of these assets/ works under Regulation 26(1)(b) of the 2019 Tariff Regulations. In our view, the additional expenditure claimed by the Petitioner is in the nature of revenue expenditure and the same can be met from the O&M expenses allowed to the generating station under the 2019 Tariff Regulations. Accordingly, the projected additional capital expenditure of Rs.19.77 lakh in 2019-20 for Drinking water facility, Rs.5.00 lakh in 2020-21 for Drivers rest room, Rs.150.00 lakh during 2020-21 for Workers pathway and Rs.150.00 lakh (Rs.37.50 lakh each for the years 2020-21 to 2023-24) for Facility creation for workmen (Rest room, Toilet & Drinking water point) is not allowed.

220. The Petitioner has also claimed projected additional capitalization for various assets/ works like BCN 7 (Yard conveyor) modification, Chute Interconnection in 4A to 6B & 4B to 6A (Rs.5 lakh in 2021-22), Common C.W. Pump for Units-1&2 (Rs.300 lakh in 2021-22), Economiser Coil Repairing Bay with Shed (Rs.600 lakh in 2020-21), Installation of Suspended Magnet (Rs.52 lakh in 2019-20), Workshop for Electrical Maintenance Department (EMD) (Rs.5 lakh in 2020-21) and certain Minor assets, under Regulation 26(1)(c) (*Force Majeure events*) of the 2019 Tariff Regulations and has submitted the following:

a) **BCN 7 (Yard Conveyor) Modification:** The Petitioner has submitted that it has observed during stacking/reclaiming from mid-zone 3 and zone 4, M2 motor trips and, thereafter, it is required to be manually unloaded before it can

be restarted, hampering the operation of Coal Handling Plant (CHP). The root cause analysis was carried out by in-house diagnostic team and it was found that inadequate tension in the belt, as the primary cause for such tripping and it was recommended to add extra counterweight to overcome the problem and structural changes to accommodate the extra counterweight. The Petitioner seeks liberty to allow the Petitioner to approach the Commission in case the capital expenditure becomes unavoidable for reliable operation of the plant.

b) **Chute Interconnection in 4A to 6B & 4B to 6A:** Normally CHP is equipped with two parallel conveyors with interconnectivity for ensuring redundancy. However, as per existing configuration, the belt conveyors, just after the crushers, have no cross interconnectivity between them leading to no interchange of coal flow from A stream to B Stream or vice versa. Therefore, presently the system reliability depends upon 3 streams, i.e., (BCN 4A/B, 6A/B & 8A/B) which are in series. It was envisaged to have 2nd reversible stacker-cum-reclaimer in the second phase of the project along the BCN 5- the Yard conveyor and discharge chutes extending up to BCN 6A/B. Since, Phase 2 of the project looks uncertain; it is now proposed to construct a new interconnecting chutes between BCN 4A/B and 6A/B to improve the overall BCN-4A/6A & 4B/6B route availability from 65% (as per 2019 data) to 85% while stacking. Accordingly, the expenditure of Rs.5 lakh is projected for year 2021-22.

c) **Common C.W. Pump for Units-1&2:** Each unit of the generating station is having three numbers of Cooling Water (CW) pumps with all of them in running configuration without any standby. So, the non-availability of CW Pump has direct consequence on the reliability of the generation unit. This standby pump will also ensure regular preventive maintenance of CW Pumps and, hence, unit reliability will increase. Accordingly, the additional capitalization projected for the standby pump is Rs.300 lakh for 2021-22.

d) **Economiser Coil Repairing Bay with Shed:** Economiser coils suffer maximum erosion loss of tubes due to coarse high ash content in coal ranging from 40% to 46%. Because of heavy erosion, the units have suffered 16 numbers of Boiler tube leakages at economizer section since the COD of both the units. During shutdowns, these coils need to be taken out from the boiler for safe and careful inspection and repair. Thus, to facilitate safe and thorough inspection of the economizer coil, a maintenance bed is required for positioning of the damaged coils for inspection, repair, testing and proper stacking in the bay, for future use, in successive overhauls. The projected additional capital expenditure is Rs.600 lakh to be incurred in 2020-21, for construction of above facility.

e) **Installation of Suspended Magnet:** As part of the CHP, there are Inline Magnetic Separators (ILMS) (1 number on each belt) installed at the discharge

point of conveyor (BCN-3A/3B) which discharges coal to the crusher (Ring Granulators). In order to control the frequent tripping of conveyor due to MDT sensing both types of metals and to eliminate the possibility of metal pieces entering the crusher, it is required to install a trolley mounted suspended electromagnet prior to the MDT. Therefore, the projected additional capital expenditure to be incurred is Rs.52 lakh in 2019-20, for the procurement and installation of suspended magnet.

f) **Workshop for Electrical Maintenance Department (EMD):** Due to space constraint at the present common workshop, there is no fixed allocated space for maintenance activities of electrical department. The availability of centralized space shall facilitate the overhauling of all types of High Tension & Low Tension motors, 400 kV breakers and other electrical equipment's at single location, which would help the Petitioner to improve the quality of work, ensure safe environment for workers and also to manage resources, ultimately leading to lower downtime. In view of the above, a workshop for EMD is proposed to be set up at a projected additional capital expenditure of Rs.5 lakh in 2020-21.

g) **Minor assets like Covered parking block at township, Industrial kitchen setup at MA-2, Modernization of gym, Rooftop cafeteria and Community hall, Six seater dining table for workers, Electric vehicle (cart) for Staff visitors movement:** Many minor items highlighted below have life cycle of 7-8 years and these items need recurrent replacement. The provision of compensation allowance which was included in the 2014 Tariff Regulations to compensate for minor asset addition, has now been removed in the 2019 Tariff Regulations and, thus, there is no specific provision to permit the expenses for minor asset additions.

221. It is observed that the projected additional capital expenditure claimed by the Petitioner in respect of these assets/ works [(a) to (g) above], mainly pertain to addition of new equipment to the existing set-up either as a standby or for incorporation of new facilities. Though the Petitioner has claimed additional capitalization of these works/ assets based on 'force majeure' conditions, it has not established the presence of any such force majeure events to consider the claims made as above. Since no case for force majeure events have been made out by the Petitioner, the claim for assets/ works like BCN 7 (Yard conveyor) modification, Chute Interconnection in 4A to 6B & 4B to 6A, Common C.W. Pump for Units-1&2,

Economiser Coil Repairing Bay with Shed, Installation of Suspended Magnet, Workshop for Electrical Maintenance Department (EMD) and certain Minor assets, claimed under Regulation 26(1)(c) of the 2019 Tariff Regulations is not allowed. Also, the prayer of the Petitioner to grant liberty to approach the Commission in case the additional capital expenditure for BCN 7 (Yard conveyor) modification becomes unavoidable is rejected.

Augmentation of store and Coal pit run-off mechanised Drainage System

222. The Petitioner has claimed projected additional capitalization of Rs.329.26 lakh for Augmentation of store and Rs.399.53 lakh for 'Coal Pit Run-off mechanized drainage system' in 2019-20 under Regulation 26(1)(c) of the 2019 Tariff Regulations. The Petitioner has submitted the following as regards augmentation of store:

> *"These are the 'carry forward schemes beyond the original scope of work'. Few schemes that were envisaged for the control period 2014-19 could not be completed within the control period due to various reasons beyond the control of the Petitioner. The capitalization towards these schemes got carried forward to control period 2019-24. The relevant regulations under which the capitalization for such schemes are Regulation 26(1)(c) read with Regulation 3(25) and Regulation 76 of the 2019 Tariff Regulations. The above mentioned items are claimed under specific provisions of the 2019 Tariff Regulations and justifications are provided in the truing-up section. In view of above, it is prayed that the Commission may approve the proposed additional capitalization for control period 2019-24 as proposed."*

223. The Petitioner has not demonstrated the existence of any force majeure condition for justifying the additional capitalization claimed in respect of this augmentation of store, which has been carried forward from the 2014-19 tariff period. It is pertinent to mention that the claim of the Petitioner for additional capitalization of this asset/ work has not been allowed under 'force majeure' in the 2014-19 tariff period. In view of this, the projected additional capital expenditure of Rs.329.26 lakh claimed for 'Augmentation of store' is not allowed.

224. As regards the claim for Coal Pit run-off mechanized drainage system during 2014-19 tariff period, the same has been allowed in paragraph 94 of this order.

225. In view of this decision, the claim of the Petitioner for projected additional capitalization of Rs.399.63 lakh in 2019-20 is allowed under Regulation 26(1)(c) of the 2019 Tariff Regulations.

Boundary wall under pass area

226. The Petitioner has claimed projected additional capitalization of Rs.100.00 lakh in 2020-21 towards "Boundary wall under pass area' under Regulation 26(1)(d) of the 2019 Tariff Regulations and has stated the following:

> *"The Intelligence Bureau (IB) conducted a security inspection at plant premises in November 2018 and submitted a report on the same to MPL. The IB report recommended that barbed wire fence on both sides of the village road passing through the middle of plant may be replaced with masonry perimeter wall on both sides with provision of concertina coil overhang. Also, concertina coil overhang may be provided all over the perimeter wall. This direction ensures safety of plant from danger of intrusion. Accordingly, additional capitalization has been proposed and the same falls within the scope of Regulation 26 (1)(d) of the 2019 Tariff Regulations. The estimated cost of Rs. 100 lakh for the work is proposed to be incurred in 2020-21 and the Commission may kindly approve the same."*

227. The Petitioner has enclosed the recommendations of IB in support of its claim for additional capital expenditure towards 'Boundary wall under pass area' in 2020-21. Since the recommendations of IB for higher security and safety of the plant, is statutory in nature, we allow the projected additional capital expenditure claimed by the Petitioner for Rs.100.00 lakh for Boundary wall for pass area in 2020-21, under Regulation 26(1)(d) of the 2019 Tariff Regulations.

Automation of Boom Barrier

228. The Petitioner has claimed projected additional capitalization of Rs.20.00 lakh in 2020-21 towards 'Automation of Boom Barrier' under Regulation 26(1)(d) of the 2019 Tariff Regulations and has submitted the following:

"*The automatic boom barrier would offer security at the exit and the entry points of the plant. Automatic barrier can be used to successfully control pedestrian and vehicle traffic. It can be used to achieve better security. In order to ensure higher security and safety of the plant 'boom barrier' is required. The cost of the proposal is Rs. 20 lakh to be incurred in 2020-21 and the Commission may kindly approve the same."*

229. Regulation 26(1)(d) of the 2019 Tariff Regulations provides for capitalization of additional expenditure (projected or incurred) required for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security. The Petitioner, in this case, has not established through documentary evidence that the additional capital expenditure is required to be incurred based on the advice or direction of any Indian Government Instrumentality or statutory authorities. In the absence of any justification, the claim of the Petitioner for additional capitalization of Rs.20.00 lakh in 2020-21 is not allowed.

CCTV Installation

230. The Petitioner has claimed projected additional capitalization of Rs.550.00 lakh (Rs.200.00 lakh in 2020-21 Rs.200.00 lakh in 2021-22 Rs.150.00 lakh in 2022-23) for installation of CCTV all around the generating station, under Regulation 26(1)(d) of the 2019 Tariff Regulations and has submitted as under:

"The surrounding areas of MPL plant have strongholds of CPI (maoist) cadre. Also, there is always possibility of damage to the MPL from disgruntled subverted outsourced workers/employees during strikes/agitation. There are several incidents of such disturbances in the past. So, in order to ensure safety of plant a proper monitoring of plant premises is needed. CCTV installation all over the plant may help averting any unwanted incidents and also activities of people in and around plant can easily be monitored. Accordingly, additional capitalization has been proposed for an estimated cost of Rs.550 lakh during the period 2020-23 in a phased manner and the Commission may kindly approve the same."

231. The Petitioner has not established through documentary evidence that the additional capital expenditure is required to be incurred based on the advice or direction of any Indian Government Instrumentality or statutory authorities. In the

absence of any justification, the claim of the Petitioner for additional capitalization of Rs.550.00 lakh during the period 2020-23 for this asset/ work is not allowed.

Economiser platform for both boilers

232. The Petitioner has claimed projected additional capitalization of Rs.350.00 lakh in 2020-21 towards 'Economiser platform for both boilers' under Regulation 26(1)(d) of the 2019 Tariff Regulations and has submitted as under:

> *"During annual outage most of the maintenance works are undertaken in the economizer and LTSH region due to maximum erosion of coils. Due to space and design constraints through inspection, lifting of multiple coils and carrying out repair activity becomes difficult. Moreover, due to multiple activities being carried out simultaneously, it becomes unsafe for the workers and employees. In view of above constraint and safety of the workmen, it is proposed to fabricate permanent structure to create additional space for the coil removal, inspection, immediate repair and re-placement of coil in the boiler. Additional space shall enhance safety to the workplace and thereby avoiding any unwanted eventuality. In addition, it will reduce downtime for peak, off-peak availability. This expenditure is admissible in terms of Regulations 26(1)(d) of the 2019 Tariff Regulations and the cost of the work for Rs.350 lakh is proposed to be incurred in 2020-21 and the Commission may kindly approve the same."*

233. The Petitioner has submitted that the additional capital expenditure is required for better safety/ security of plant based on the advice or direction of any Indian Government Instrumentality or statutory authorities. In view of the above, the projected additional capitalization claimed for Rs.350.00 lakh in 2020-21 for the asset/ work is allowed. The Petitioner is however directed to furnish at the time of truing up of tariff, the relevant advice or direction of any Indian Government Instrumentality or statutory authority to substantiate the said claim.

Mini Fire Tender

234. The Petitioner has claimed projected additional capitalization of Rs.25.00 lakh in 2020-21 for Mini Fire Tender under Regulation 26(1)(d) of the 2019 Tariff Regulations. Reason as submitted by the Petitioner is as under:

> *"The fire fighting system was installed as per IS 3034 and Tariff Advisory Committee TAC guidelines at MPL. During the forest fire (Both sides of boundary wall of plant) i.e.*

grass fire inside and outside of plant, it is very difficult to extinguish with heavy Fire Tender due to narrow approach. The water intake is about 1.5 km away from the main plant and the passage / bridge was made for Light Motor Vehicle LMV) only. To cater to fire in that area an LMV mounted fire tender / Mini fire tender is required. It is submitted that MPL plant is stretched over a vast area. There are many spots where large fire tender finds it difficult to reach. Therefore, a mini fire tender is required for places where large fire tender is unable to reach during emergency. Also, this is compliance to IS 3034 in respect to safety of the plants and its workers. The estimated cost of Rs.25 lakh is to be incurred in 2019-20 and the said expenditure fall within the scope and purview of Regulation 26(1)(d) of the 2019 Tariff Regulations."

235. The Petitioner has not established through documentary evidence that the additional capital expenditure is required to be incurred based on the advice or direction of any Indian Government Instrumentality or statutory authorities. However, considering the fact that the asset is required for the safe operation of the plant, we allow the projected additional capital expenditure claimed. The Petitioner is directed to furnish, at the time of truing up of tariff, the relevant advice or direction of any Indian Government Instrumentality or statutory authority to substantiate the said claim.

Road along Boundary wall

236. The Petitioner has claimed projected additional capitalization of Rs.450.00 lakh (Rs.150.00 lakh in 2020-21, Rs.150.00 lakh in 2021-22, Rs.100.00 lakh in 2022-23 and Rs.50.00 lakh in 2023-24) for 'Road along Boundary wall' under Regulation 26(1)(d) of the 2019 Tariff Regulations and has submitted as under:

"The Petitioner has submitted that Intelligence Bureau (IB) conducted security inspection at plant premises in November 2018. IB submitted its security inspection report to MPL giving some instructions for ensuring safety and security of the plant. IB perceived threat from the surrounding areas since it is having stronghold of CPI (Maoist) cadre. Further, Gate blocking/agitations by the Plant Affected People are very common features. IB in its report observed that the patrolling track along the perimeter wall is not metaled. It is away from the perimeter at several points and it is not continuous. The continuity of motorable patrolling track is essential for reaching of security personnel and fire tenders at the remotest areas. It recommended laying of metaled patrolling track all along the perimeter for seamless movement of security personnel and fire tenders. It is needed for higher security and safety of the plant as directed by Intelligence Bureau responsible for national or internal security. The copy of inspection report by IB is already enclosed. The estimated cost of Rs.450 lakh and is proposed to be incurred during the period 2021-24 covering the periphery road of 18

km. The said expenditure falls within the scope and purview of Regulation 26(1)(d) of the 2019 Tariff Regulations and hence the same may be allowed."

237. The Petitioner has enclosed the recommendations of IB in support of its claim for capitalization of the expenditure towards Road along Boundary wall during the period 2020-24. Since the recommendations of IB for higher security and safety of the plant, is statutory in nature, we allow the projected additional capital expenditure claimed by the Petitioner for Rs.450.00 lakh during 2020-24 for Road along Boundary wall under Regulation 26(1)(d) of the 2019 Tariff Regulations.

Gate House Near JNT, E-security system, Construction of high-rise safety platform and walkways

238. The Petitioner has claimed projected additional capitalization of Rs.120.70 lakh in 2019-20 for Gate house near JNT, Rs.248.99 lakh (Rs.148.99 lakh in 2019-20 and Rs.100.00 lakh in 2020-21) for E-security system and Rs.300.00 lakh in 2019-20 for Construction of high-rise safety platform and walkways under Regulation 26(1)(d) of the 2019 Tariff Regulations and has submitted the following:

"These are the 'carry forward schemes beyond the original scope of work'. It is submitted that few schemes that were envisaged for the control period 2014-19 could not be completed within the control period due to various reasons beyond the control of the Petitioner. The capitalization towards these schemes got carried forward to control period 2019-24. The relevant regulations under which the capitalization for such schemes are Regulation 26(1)(c) read with Regulation 3(25) and Regulation 76 of the 2019 Tariff Regulations. The above mentioned items are claimed under specific provisions of the 2019 Tariff Regulations and justifications are provided in the truing-up section. In view of above, it is prayed that the Commission may approve the proposed additional capitalization for control period 2019-24 as proposed."

239. The Petitioner has not established through documentary evidence that the additional capital expenditure is required to be incurred based on the advice or direction of any Indian Government Instrumentality or statutory authorities. In the absence of any justification, the claim of the Petitioner for additional capitalization of Rs.120.70 lakh in 2019-20 for Gate house near JNT, Rs.248.99 lakh (Rs.148.99 lakh

in 2019-20 and Rs.100.00 lakh in 2020-21) for E-security system and Rs.300.00 lakh in 2019-20 for Construction of high-rise safety platform and walkways is not allowed.

De-capitalization

240. The projected de-capitalization claimed by the Petitioner in Form-1(i) is as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1138.34	2927.46	2110.64	1119.45	727.30

241. Based on the above discussion, the projected additional capitalization and de-capitalization allowed for the purpose of tariff is summarized as under:

(Rs. in lakh)

Sl. No.	Head of work / Equipment	2019-20	2020-21	2021-22	2022-23	2023-24
1	Cost of Land & Site	3881.64	0.00	0.00	0.00	0.00
2	GCW- Boundary wall	160.00	0.00	0.00	0.00	0.00
3	Railway Package inclusive of IDC	0.00	68506.24	0.00	0.00	0.00
4	Laboratory Instruments	0.00	21.94	57.08	52.90	22.11
5	MAX DCS Version up-gradation (XP) Unit 2	450.00	0.00	0.00	0.00	0.00
6	Replacement of Battery	0.00	80.00	80.00	90.00	0.00
7	Up-gradation of CHP Main PLC	0.00	60.00	0.00	0.00	0.00
8	Up-gradation of DMP PLC	0.00	50.00	0.00	0.00	0.00
9	Up-gradation of Raw Water PLC	0.00	50.00	0.00	0.00	0.00
10	Up-gradation of ABT for RRAS & SCED	0.00	75.00	0.00	0.00	0.00
11	Implementation of AGC	80.00	0.00	0.00	0.00	0.00
12	Augmentation of Ash handling	1416.80	500.00	0.00	0.00	0.00
13	Boundary wall under pass area	0.00	100.00	0.00	0.00	0.00
14	Road along Boundary wall (Periphery road 18 kms)	0.00	150.00	150.00	100.00	50.00
15	Coal Pit Run-off mechanised Drainage system	399.53	0.00	0.00	0.00	0.00
16	ID fan Motor with VFD	0.00	450.00	450.00	450.00	450.00
17	Economiser Platform	0.00	350.00	0.00	0.00	0.00
18	Centrifugal compressor & motor for BTG	0.00	350.00	400.00	0.00	0.00

Sl. No.	Head of work / Equipment	2019-20	2020-21	2021-22	2022-23	2023-24
19	Centrifugal compressor for Ash Plant	0.00	300.00	300.00	300.00	300.00
20	Mini Fire Tender	0.00	25.00	0.00	0.00	0.00
	Total additional capitalization (A)	6387.97	71068.18	1437.08	992.9	822.11
	Projected de-capitalization **(B)**	1138.74	2927.46	2110.64	1119.45	727.30
	Net capitalization allowed **(A-B)**	5249.63	68140.72	-673.56	-126.55	94.81

Discharge of liabilities

242. The Petitioner has not claimed any discharge of liabilities during the 2019-24 tariff period.

Normative IDC

243. The Petitioner has claimed following amounts of normative IDC on excessive equity and on actual loan:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Normative IDC on Excess equity	735.90	446.12	337.89	185.90	158.15
Normative IDC on actual loan	79.84	39.84	31.94	0.32	0.10

244. In terms of the discussions and decision in paragraph 105 to paragraph 112 above, the normative IDC allowed for the 2019-24 tariff period are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
98.26	1093.21	22.11	15.27	12.65

Capital Cost allowed for the 2019-24 tariff period

245. Based on the opening capital cost and the projected additional capital expenditure allowed in the preceding paragraphs, the capital cost allowed for the 2019-24 tariff period is as below:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	478969.24	484317.13	553551.06	552899.60	552788.32
Net additional capital expenditure allowed within original scope of work of the project	3353.30	66290.72	-1523.46	-526.55	-255.19

Net additional capital expenditure allowed beyond the original scope of work of the project	1896.33	1850.00	850.00	400.00	350.00
Normative IDC allowed	98.26	1093.21	22.11	15.27	12.65
Total net additional capital expenditure allowed	5347.89	69233.93	(-) 651.45	(-) 111.28	107.46
Capital Cost as on 31st March of the year	484317.13	553551.06	552899.60	552788.32	552895.78

246. Regulation 18 of the 2019 Tariff Regulations provides as under:

"18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan: Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio."

247. Gross loan and equity amounting to ₹335278.47 lakh and ₹143690.77 lakh respectively as on 31.3.2019 as determined vide para 122 and 125 above, has been considered as the gross loan and equity as on 1.4.2019. Based on the above quoted Regulation, the debt-equity ratio of 70:30 has been applied on year wise allowed additional capital expenditure for arriving at the additions to loan and equity during each year of the tariff period 2019-24. The debt-equity ratio considered for the purpose of computation of tariff for 2019-24 tariff period is as follows:

(Rs in lakh)

	Capital cost as on 1.4.2019	**(in %)**	**Additional Capitalization during 2019-24**	**(%)**	**Capital cost as on 31.3.2024**	**(%)**
Debt	335278.47	70.00	51748.58	70.00	387027.05	70.00
Equity	143690.77	30.00	22177.96	30.00	165868.73	30.00
Total	**478969.24**	**100.00**	**73926.54**	**100.00**	**552895.78**	**100.00**

Return on Equity

248. Regulation 30 of 2019 Tariff Regulations provide as below:

"30. Return on Equity:

(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%;

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. *in case of existing generating station, as and when any of the 61 requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues*;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%: Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%.

249. Regulation 31 of the 2019 Tariff Regulations provides as under:

"*31. Tax on Return on Equity*

1. The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from

other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below: Rate of pre-tax return on equity = Base rate / (1-t) Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess. Illustration- (i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

Rate of return on equity = 15.50/(1-0.2155) = 19.758% (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 crore/Rs 1000 crore = 24%; (d) Rate of return on equity = 15.50/ (1-0.24) = 20.395%. (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.

250. For calculation of ROE in respect of works within the original scope of work but beyond cut-off date, the Petitioner has grossed up the base rate with MAT rate of 2019-20 (17.472%) for the entire 2019-24 tariff period. The Petitioner has also grossed up the weighted average rate of interest with the same MAT rate (17.472%) for calculation of ROE in respect of the additional capitalization beyond the original scope of work.

251. As regards computation of ROE, Regulation 31 of the 2019 Tariff Regulations, as quoted above, specifically provides for grossing up of the base rate allowed under

Regulation 30 of the 2019 Tariff Regulations. The base rate for return on equity (i.e. for works within the original scope of the project) for the generating station is 15.50% as per Regulation 30 of the 2019 Tariff Regulations. The same has been allowed for grossing up with the MAT rate of 17.472% for all the years of the 2019-24 tariff period, subject to truing up.

252. Regulation 31 of the 2019 Tariff Regulations provides for grossing up of the base rate and does not provide for grossing up of weighted average rate of interest to be used for ROE for additions beyond the original scope of the project. Accordingly, in line with Regulation 31 of the 2019 Tariff Regulations, ROE has been allowed as under:

A. Return on Equity allowed at base rate for works within the original scope of project:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Gross Notional Equity	143690.77	144715.59	164921.86	164479.80	164340.90
Addition due to additional capitalisation	1024.82	20206.27	-442.07	-138.90	-86.77
Closing Equity	144715.59	164921.86	164479.80	164340.90	164254.13
Average Equity	144203.18	154818.73	164700.83	164410.35	164297.51
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax rate for the year (MAT of 2019-20 applied for the period)	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity	18.782%	18.782%	18.782%	18.782%	18.782%
A: Return on Equity allowed at base rate	**27083.53**	**29077.29**	**30933.29**	**30878.74**	**30857.54**

B. Return on Equity allowed at Weighted Average Rate of Interest (WARI) for additional capitalisation beyond the original scope of project:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Net Opening Equity	0.00	579.55	1143.45	1390.08	1495.60
Add: Increase in equity due to addition during the year / period	579.55	563.90	246.63	105.52	119.01
Net closing Equity	579.55	1143.45	1390.08	1495.60	1614.61
Average Equity	289.77	861.50	1266.77	1442.84	1555.10
WARI	8.79%	8.79%	8.79%	8.79%	8.79%
B: Return on Equity allowed at WARI	25.47	75.73	111.35	126.83	136.69

253. Thus, the total ROE allowed for the generating station is as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
A: Return on Equity allowed at base rate	27083.53	29077.29	30933.29	30878.74	30857.54
B: Return on Equity allowed at WARI	25.47	75.73	111.35	126.83	136.69
Total Return on Equity allowed (A+B)	**27109.00**	**29153.01**	**31044.64**	**31005.56**	**30994.24**

Interest on Loan

254. Regulation 32 of the 2019 Tariff Regulations provides as under:

> ***"**32. Interest on loan capital:*
> *(1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*
> *(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*
>
> *(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*
>
> *(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*
>
> *(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized: Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered: Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.*
>
> *(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*
>
> *(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."*

255. The salient features for computation of interest on loan are summarized below:

a) The gross normative loan amounting to Rs.335278.47 lakh has been considered as on 1.4.2019;

b) Cumulative repayment of loan amounting to Rs.164733.83 lakh as on 31.3.2019 has been considered as on 1.4.2019;

c) The repayment for the year has been considered equal to the depreciation allowed for that year;

d) Interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest for 2018-19, which is subject to truing-up.

256. Interest on loan has been worked out as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Gross Normative Loan	335278.47	339021.99	387485.74	387029.72	386951.83
Cumulative Repayment up to Previous Year	164733.83	188876.16	214160.52	241482.36	269161.00
Net Loan-Opening	170544.64	150145.83	173325.22	145547.36	117790.83
Addition due to additional capitalisation	3743.53	48463.75	-456.02	-77.89	75.22
Repayment during the year	**24588.73**	**26492.50**	**28243.13**	**28223.66**	**28223.56**
Less: Repayment adjustment on account of de-capitalization	446.40	1208.14	921.29	545.02	390.71
Net Repayment	24142.34	25284.36	27321.84	27678.64	27832.85
Net Loan-Closing	150145.83	173325.22	145547.36	117790.83	90033.20
Average Loan	160345.23	161735.52	159436.29	131669.10	103912.02
Weighted Average Rate of Interest on Loan	8.790%	8.790%	8.790%	8.790%	8.790%
Interest on loan	**14094.35**	**14216.55**	**14014.45**	**11573.71**	**9133.87**

Depreciation

257. Regulation 33 of the 2019 Tariff Regulations provides as under:

"33. Depreciation

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units: Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system: Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.

258. In line with Regulation 33 of the 2019 Tariff Regulations, the cumulative depreciation amounting to Rs.164733.83 lakh as on 31.3.2019 has been considered for the purpose of tariff. Further, the value of freehold land included in the average capital cost has been adjusted while calculating depreciable value for the purpose of tariff. Accordingly, depreciation has been calculated as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (A)	478969.24	484317.13	553551.06	552899.60	552788.32
Addition due to Projected additional capitalisation (B)	5347.89	69233.93	(-)651.45	(-)111.28	107.46
Closing Gross Block (C)	484317.13	553551.06	552899.60	552788.32	552895.78
Average Gross Block (D) = [(A+C)/2]	481643.18	518934.09	553225.33	552843.96	552842.05
Value of Freehold land included in Gross Block (E)	17513.13	17513.13	17513.13	17513.13	17513.13
Depreciable value (F) = [(D-E) x 90%]	417717.05	451278.87	482140.98	481797.75	481796.03
Remaining depreciable value at the beginning of the year (G) = [F - 164733.83]	252983.22	262402.70	267980.46	240315.39	212635.03
Number of completed years at the beginning of the year (H)	7.58	8.58	9.58	10.58	11.58
Balance useful life at the beginning of the year (I)	17.42	16.42	15.42	14.42	13.42
Rate of Depreciation	5.1052%	5.1052%	5.1052%	5.1052%	5.1052%
Depreciation (K)	**24588.73**	**26492.50**	**28243.13**	**28223.66**	**28223.56**
Cumulative depreciation at the end of the year (before adjustment for de-capitalization) (L) = [K + Cumulative depreciation at the end of previous year*]	**189322.56**	**215815.06**	**244058.19**	**272281.85**	**300505.41**
Less: Depreciation adjustment on account of de-capitalization (M)	**446.40**	**1208.14**	**921.29**	**545.02**	**390.71**
Net Cumulative depreciation at the end of the year (N)	188876.16	214160.52	241482.36	269161.00	296993.84

** Note: The Cumulative Depreciation at the end of 2018-19 is Rs.164733.83 lakh.*

259. The depreciation allowed as above is subject to revision at the time of truing up of tariff for 2019-24 tariff period.

Unrecovered Depreciation on De-capitalisation

260. The Petitioner has claimed following amounts of unrecovered depreciation for the respective financial years of 2019-24 tariff period

(Rs. in lakh)

2020	2021	2022	2023	2024	Total
538.14	1297.37	813.33	378.54	207.54	**3234.92**

261. In line with our discussion and decision on this issue, in paragraph 133 and paragraph 134 of this order, the prayer of the Petitioner to allow the recovery of

unrecovered depreciation (in respect of asset not in use) for the 2019-24 tariff period is not allowed, as the same is not in conformity with the provisions of the 2019 Tariff Regulations.

O&M expenses

262. The O&M expenses claimed by the Petitioner for the 2019-24 tariff period are as below:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Normative O&M Expenses as per Regulation 35(1)(i) of the 2019 Tariff Regulations	23635.50	24465.00	25326.00	26218.50	27132.00
Water Charges as per Regulation 35(1)(6) of the 2019 Tariff Regulations	1930.35	2117.58	2329.34	2562.28	2826.22
Security expenses as per Regulation 35(1)(6) of the 2019 Tariff Regulations	808.07	882.05	956.60	1037.45	1125.15
Capital spares as per Regulation 35(1)(6) of the 2019 Tariff Regulations	170.02	55.00	850.00	0.00	0.00
Rental and Conveyance Expenses in lieu of 2nd township	75.65	79.43	83.40	87.57	91.95
O&M expenses for RO Plant	593.40	623.07	880.57	924.60	970.83
Total O&M Expenses	**27212.99**	**28222.13**	**30425.91**	**30830.40**	**32146.15**

263. The Respondent KSEBL has contended that claim for additional O&M expenses in lieu of 2nd township and Ash disposal expenses is not in line with the 2019 Tariff Regulations and, therefore, may be rejected. It has further contended that there is no provision under the 2019 Tariff Regulations to claim additional O&M expenses to run the Reverse Osmosis plant and the same may also be disallowed.

264. Regulation 35(1)(i) of the 2019 Tariff Regulations provide the following Normative O&M expense norms for 500 MW series for coal based generating stations:

(Rs. lakh/MW)

2019-20	2020-21	2021-22	2022-23	2023-24
22.51	23.30	24.12	24.97	25.84

265. In terms of Regulation 35(1)(i) of the 2019 Tariff Regulations, the Petitioner has claimed the following Normative O&M expenses for the 2019-24 tariff period:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
23635.50	24465.00	25326.00	26218.50	27132.00

266. The Normative O&M expenses claimed by the Petitioner is in accordance with Regulation 35(1)(i) of the 2019 Tariff Regulations and hence allowed.

Water Charges

267. Regulation 35(6) of the 2019 Tariff Regulations provide as under:

> *"(6) The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:*
>
> *Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system, subject to prudence check. The details regarding the same shall be furnished along with the petition;*
>
> *xxxxx*

268. The Petitioner has claimed Water charges (on projected basis) in terms of Regulation 35(6) of the 2019 Tariff Regulations as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1930.35	2117.58	2329.34	2562.28	2826.22

269. In support of the projected water charges claimed, the Petitioner has furnished the following computations:

		2019-20	2020-21	2021-22	2022-23	2023-24
Gross generation	MU	7839.72	7818.30	7818.30	7818.30	7839.72
Specific Raw water Consumption for FY 2018-19	m^3/MWh	2.31	2.31	2.31	2.31	2.31
Total Raw Consumption	m^3	18142383	18092814	18092814	18092814	18142383
Rate of Raw water charges	Rs./m^3	10.64	11.70	12.87	14.16	15.58
Total Raw water Expenses	Rs. in lakh	**1930.35**	**2117.58**	**2329.34**	**2562.28**	**2826.22**

270. The Petitioner has submitted that the Water charges are based on the gross generation during the year and the estimated Specific Raw water consumption per unit. It has submitted that Specific Raw water consumption in 2018-19 is 2.31 m^3 per Megawatt hour (MWh) which is below the Ministry of Environment & Forest guidelines and the same has been projected during the 2019-24 tariff period. The Petitioner has submitted that DVC vide its Office Memorandum dated 23.7.2019 had revised the Water tariff for Industrial consumers (drawing water from reservoir/ river) including the Petitioner from Rs.5.7/kl to Rs.10.64/kl, with an annual escalation of 10% effective from 1.4.2019. Considering the revised tariff including the annual escalation and Water consumption at Specific Raw water consumption of 2.31 m^3/MWh, the Petitioner has prayed that the Commission may approve the projected Raw Water charges for the 2019-24 tariff period as claimed. The Petitioner has also furnished the copy of the DVC OM dated 23.7.2019 along with the communication made by the Petitioner with DVC.

271. Considering the fact that Water charges projected by the Petitioner for the 2019-24 tariff period is based on actual consumption of water during the year 2018-19 and the tariff rates specified by DVC for water, we allow the projected water charges claimed by the Petitioner for the 2019-24 tariff period. However, the projected water charges allowed are subject to truing-up, based on prudence check of the actual water charges paid.

Security Expenses

272. The first proviso to Regulation 35(6) of the 2019 Tariff Regulations provide as under:

"Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses;

273. The actual Security expenses incurred by the Petitioner for the 2014-19 tariff period is as under:

(Rs. in crore)

	2014-15	2015-16	2016-17	2017-18	2018-19
Plant Security	5.51	6.44	6.46	6.44	6.96
Other Security related - AMC	0.00	0.02	0.12	0.15	0.35
Total Security Expenses	5.51	6.46	6.59	6.59	7.32

274. The Security Expenses projected by the Petitioner for the 2019-24 tariff period is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Plant Security	754.88	818.39	887.23	961.86	1042.78
Other Security related AMC	38.40	41.64	45.14	48.93	53.05
Total Security Expenses	793.29	860.02	932.37	1010.80	1095.83

275. In addition to the above, the Petitioner has claimed projected additional security expenses for the following:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Issuance of smart card	5.00	5.50	6.05	6.66	7.32
Purchase of Security gadgets	8.00	8.80	9.68	10.65	11.71
AMC for Turnstile	1.58	6.93	7.62	8.39	9.22
AMC for Boom Barrier	0.20	0.80	0.88	0.97	1.06
Total	14.78	22.03	24.23	26.66	29.32

276. Accordingly, the total Security Expenses (on projection basis) claimed by the Petitioner in terms of Regulation 35(1)(6) of the 2019 Tariff Regulations is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Security Expenses	793.29	860.02	932.37	1010.80	1095.83
Additional Security Expenses	14.78	22.03	24.23	26.66	29.32
Total Security expenses	**808.07**	**882.05**	**956.60**	**1037.45**	**1125.15**

277. Considering the fact that the additional capitalization towards the Construction of Boom Barrier has not been allowed in this order, the expenditure for AMC of the said asset is not allowed as part of the security expenses. Accordingly, the projected Security expenses allowed for the 2019-24 tariff period are as under.

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Security expenses claimed as per Regulation35(1)(6) of the 2019 Tariff Regulations	808.07	882.05	956.6	1037.45	1125.15
Less Security expenses not allowed (for boom barrier)	0.20	0.80	0.88	0.97	1.06
Security Expenses allowed	**807.87**	**881.25**	**955.72**	**1036.48**	**1124.09**

Capital spares

278. The last proviso to Regulation 35(6) of the 2019 Tariff Regulations provide as under:

> *"Provided also that the generating station shall submit the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance as per Regulation 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 or Special Allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization."*

279. The Capital spares claimed by the Petitioner in terms of Regulation 35(6) of the 2019 Tariff Regulations are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
170.00	55.00	850.00	0.00	0.00

280. The Petitioner has submitted that it requires several capital spares for critical equipment during the 2019-24 tariff period in order to ensure the reliability and availability of the main equipment. It has further submitted that these capital spares have not been included in the additional capitalization claims projected by the Petitioner above. Accordingly, the Petitioner has submitted that the Commission may approve the expenditure on capital spares as under:

(Rs. in lakh)

Item/Activity	2019-20	2020-21	2021-22	2022-23	2023-24
Coal Mill Gearbox	0.00	0.00	400.00	0.00	0.00
Crusher Rotor Assembly (Capital Spare -Imported)	0.00	0.00	150.00	0.00	0.00
Procurement of 400 kV Breaker	0.00	55.00	0.00	0.00	0.00
TDBFP Recirculation valve	170.00	0.00	0.00	0.00	0.00
TG Bearing Set	0.00	0.00	300.00	0.00	0.00
Total Capital Spares	170.00	55.00	850.00	0.00	0.00

281. It is evident from the last proviso to Regulation 35(6) of the 2019 Tariff Regulations that the Petitioner is required to furnish proper details and justification, the actually consumed capital spares, at the time of truing up of tariff. Therefore, the Petitioner is granted liberty to approach the Commission with details of capital spares consumed, at the time of truing-up of tariff in terms of the last proviso to the said regulation and the same will be considered in accordance with law.

Rental and Conveyance expenses in lieu of 2nd Township

282. In addition to the normative O&M expenses, the Petitioner has claimed Rental and Conveyance expenses in lieu of 2nd township, as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
75.65	79.43	83.40	87.57	91.95

283. The Petitioner has considered the incremental rate of 5% per annum on the average of the total expenditure incurred during the 2014-19 tariff period, to claim the projected Rental and Conveyance expenses in lieu of 2nd township, as under:

(Rs.in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Lease Rental **(a)**	86.15	90.45	94.98	99.73	04.71
Rent deduction from employees **(b)**	73.30	76.96	80.81	84..85	89.09
Transportation cost **(c)**	62.80	65.94	69.23	72.69	76.33
Total (a-b+c)	**75.65**	**79.43**	**83.40**	**87.57**	**91.95**

284. The reasons furnished by the Petitioner in support of the claim are the same as those furnished by the Petitioner for the 2014-19 tariff period as extracted in paragraph 145 and paragraph 146 of this order. The Commission, after considering the submissions of the Petitioner had rejected the claim of the Petitioner under this head in paragraph 149 of this order. In line with the said decision, the additional O&M expenses for Rental and Conveyance Expenses in lieu of 2nd township for the 2019-24 tariff period is for 2019-24 tariff period is not allowed.

O&M Expenses for RO Plant

285. The Petitioner has also claimed additional O&M Expenses towards Reverse Osmosis Plant for the 2019-24 tariff period as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
593.40	623.07	880.57	924.60	970.83

286. The Petitioner has submitted that in order to comply with the statutory directions, it has to run the Reverse Osmosis (RO) Plant. It has also submitted that with the commissioning of the RO Plant, the Petitioner is required to incur substantial expenditure towards O&M expenses of the RO Plant on a daily basis. While pointing out that O&M expenses mainly consist of cost towards consumables and service cost, the Petitioner has submitted that the consumable cost mainly consists of cost towards chemical consumption on daily basis, cost towards routine maintenance spares and replacement of cartridge, membrane, media etc. Accordingly, the Petitioner, as per preliminary estimates and considering the chemical cost, the rate of replacement of membranes and consumption of regular maintenance spares and an annual escalation of 5%, has projected the cost of consumables during the 2019-24 tariff period as below:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Chemical consumables	442.44	464.56	487.79	512.18	537.79
Replacement of Cartridge & Membrane	90.36	94.88	99.62	104.60	109.83
Resin and Media top up	9.6	10.08	10.58	11.11	11.67
Maintenance Spares	51.00	53.55	56.23	59.04	61.99
Total Consumables	593.40	623.07	654.22	686.93	721.28
O&M Services	**0.00**	**0.00**	226.34	237.66	249.54
Total O&M Expenses	**593.40**	**623.07**	**880.57**	**924.60**	**970.83**

287. The O&M expense norms for the thermal generating station covers the O&M of power plants in general, including equipment's such as ETP, STP etc., which also uses the consumables/chemicals and for other plants not having RO system, which

may be treating water with other alternative technologies. Regulation 35(6) of the 2019 Tariff Regulations provide for the grant of O&M expenses towards Water charges, Security Expenses and Capital spares, separately. As the provisions of 2019 Tariff Regulations do not provide for the grant of additional O&M expenses toward RO System of plant, the claim of the Petitioner is not permissible.

288. Based on the above discussion, the O&M expenses allowed for the 2019-24 tariff period is summarized as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Normative O&M expenses as per Regulation 35(1)(i) of the 2019 Tariff Regulations	23635.50	24465.00	25326.00	26218.50	27132.00
Water Charges as per Regulation 35(1)(6) of the 2019 Tariff Regulations	1930.35	2117.58	2329.34	2562.28	2826.22
Security expenses as per first proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations	807.87	881.25	955.72	1036.48	1124.09
Capital spares as per last proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Total O&M Expenses allowed	26373.72	27463.83	28611.06	29817.26	31082.31
Total O&M Expenses claimed	**27212.99**	**28222.13**	**30425.91**	**30830.40**	**32146.15**

Ash Disposal Expenses

289. The Commission in its order dated 25.4.2019 in Review Petition No 16/RP/2018 (in Petition No. 152/GT/2015) had allowed the projected 'Ash disposal' expenses for the 2014-19 tariff period based on the following observations:

> *"42. In the present case, the Petitioner is only claiming the cost incurred by it pertaining to the activity of ash disposal during the period 2014-18 periods on the same basis as was approved during 2011-14. The Additional O&M expenses for Ash Disposal claimed by the Petitioner in the impugned Order is basically due to limited ash pond capacity, which require mandatory disposal of ash from the pond, as per the statute prescribed by MoEF and not of the nature of expenses claimed by NTPC, in Petition No. 172/MP/2016. Hence, there is an error apparent on the face of the record and the expenditure of ₹260.90 lakh claimed by the Petitioner for Ash disposal during 2014-18 is allowed. However, the same will be trued up at the end of tariff period with prudence check and the Petitioner is directed to submit the relevant documents in support of the said expenditure."*

290. Accordingly, we have, in paragraph 153 of this order, allowed the audited actual 'Ash disposal' expenses for the 2014-19 tariff period as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19	Total
6098.44	3791.36	3647.73	3320.87	3340.46	20198.86

291. The Petitioner has claimed Ash disposal expenses (on projection basis) for the 2019-24 tariff period as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
3425.52	3416.16	3416.16	3416.16	3425.52

292. The Petitioner has submitted that on account of dropping of Ash conveying pipeline, due to uncertainty in the allocation of the abandoned mines for ash disposal by ECL management, the ash disposal expenses may be allowed. It is observed that the coal received at Maithon site is of sub-optimal quality as compared to the design coal and ash content is to the tune of 43% to 46% (approx.). However, due to limited capacity of the Ash ponds, the Petitioner has considered the option of disposing unutilized ash through bulkers to sites for back filling of mines and to other approved locations for land filling, thereby incurring the cost towards excavation and transportation of pond ash. The projected ash disposal expenses claimed by the Petitioner are as follows.

Period	Consumption Plan ***(As Per 85% PLF)*** (MT)	Ash Generation (MT)	Fly Ash (gainful utilisation) (MT)	Fly Ash (stowing of mines) (MT)	Bottom Ash (MT)	Pond Ash (MT)	Ash Disposal cost ***(Rs. in lakh)***
2019-20	4598744	1868010	373602	1338016	311335	159404	3425.6
2020-21	4586180	1862906	372581	1334361	310484	158968	3416.2
2021-22	4586180	1862906	372581	1334361	310484	158968	3416.2
2022-23	4586180	1862906	372581	1334361	310484	158968	3416.2
2023-24	4598744	1868010	373602	1338016	311335	159404	3425.6

293. The Respondent KSEBL has contended that claim for additional O&M expenses for Ash disposal expenses is not in line with the 2019 Tariff Regulations and, therefore, may be rejected.

294. The matter has been considered. We observe that the Ash disposal expenses claimed by the Petitioner and allowed to this generating station since COD, is in view of limited capacity of the Ash ponds and the mandatory ash disposal in terms of the notification of MOEF&CC mandating 100% ash utilization. Considering the limited capacity of ash ponds and the fact that the Petitioner is under an obligation of meeting 100% ash utilization as per MOEF & CC notification, we, in line with our dated 25.4.2019 in Review Petition No.16/RP/2018 (in Petition No.152/GT/2015) (as quoted in paragraph 289 above), allow the expenses claimed towards Ash disposal, on projection basis, for the 2019-24 tariff period as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
3425.52	3416.16	3416.16	3416.16	3425.52

295. This is however subject to prudence check at the time of truing-up of tariff of the generating station. The Petitioner is directed to award Ash disposal contracts based on the transparent bidding process and shall submit the details of bidding while claiming the actual ash disposal expenses during truing up of tariff for the 2019-24 tariff period. Considering the fact that the reimbursement of ash disposal expenses is allowed based on the special circumstances (limited ash pond storage) for this generating station, these expenses are not made part of the O&M expenses allowed and the consequent annual fixed charges determined in this order.

296. Accordingly, the total O&M expenses allowed to the generating station for the 2019-24 tariff period is summarised as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Normative O&M expenses as per Regulation 35(1)(i) of the 2019 Tariff Regulations	23635.50	24465.00	25326.00	26218.50	27132.00
Water Charges as per Regulation 35(1)(6) of the 2019 Tariff Regulations	1930.35	2117.58	2329.34	2562.28	2826.22
security expenses as per Regulation 35(1)(6) of the 2019 Tariff Regulations	807.87	881.25	955.72	1036.48	1124.09
Capital spares as per Regulation 35(1)(6) of the 2019 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Total O&M Expenses allowed as per Regulations	**26373.72**	**27463.83**	**28611.06**	**29817.26**	**31082.31**
Total O&M Expenses claimed (excluding Ash expenses claimed)	27212.99	28222.13	30425.91	30830.4	32146.15

Operational Norms

297. The operational norms considered by the Petitioner in Form-3 of the petition, is as under:

Normative Annual Plant Availability Factor (%)	85
Station Heat Rate (kcal/kWh)	2388
Auxiliary Power Consumption (%)	6.25
Specific Oil Consumption (ml/kWh)	0.50

Normative Annual Plant Availability Factor (NAPAF)

298. In terms of Regulation 49(A)(a) of the 2019 Tariff Regulations, the NAPAF of the thermal generating station is 85%. Hence, the NAPAF of 85% as considered by the Petitioner is in order and the same has been considered for the purpose of tariff.

Station Heat Rate

299. Regulation 49(C)(b)(i) of the 2019 Tariff Regulations provides for Station Heat Rate as under:

"(b) Gross Station Heat Rate

(b) Thermal Generating Station achieving COD on or after 1.4.2009.

(i) Coal-based and lignite-fired Thermal Generating Stations

= 1.05 X Design Heat Rate (kCal/kWh)

Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure.

Provided that the design heat rate shall not exceed the following maximum design unit heat rates depending upon the pressure and temperature ratings of the units:

Pressure Rating (Kg/cm2)	*150*	*170*	*170*
SHT/RHT (0C)	*535/535*	*537/537*	*537/565*
Type of BFP	*Electrical Driven*	*Turbine Driven*	*Turbine Driven*
Max Turbine Heat Rate (kCal/kWh)	*1955*	*1950*	*1935*
Min. Boiler Efficiency			
Sub-Bituminous Indian Coal	*0.86*	*0.86*	*0.86*
Bituminous Imported Coal	*0.89*	*0.89*	*0.89*
Sub-Bituminous Indian Coal	*2273*	*2267*	*2250*
Bituminous Imported Coal	*2197*	*2191*	*2174*

Provided further that in case pressure and temperature parameters of a unit are different from above ratings, the maximum design unit heat rate of the nearest class shall be taken:

Provided also that where unit heat rate has not been guaranteed but turbine cycle heat rate and boiler efficiency are guaranteed separately by the same supplier or different suppliers, the unit design heat rate shall be arrived at by using guaranteed turbine cycle heat rate and boiler efficiency:

Provided also that where the boiler efficiency is below 86% for Sub-bituminous Indian coal and 89% for bituminous imported coal, the same shall be considered as 86% and 89% respectively for Sub-bituminous Indian coal and bituminous imported coal for computation of station heat rate:

Provided also that maximum turbine cycle heat rate shall be adjusted for type of dry cooling system:

Provided also that if one or more generating units were declared under commercial operation prior to 1.4.2019, the heat rate norms for those generating units as well as generating units declared under commercial operation on or after 1.4.2019 shall be lowest of the heat rate norms considered by the Commission during tariff period 2014-19 or those arrived at by above methodology or the norms as per the sub-clause (C)(a)(i) of this Regulation:):"

300. The Petitioner in Form-2 of the petition has furnished the Boiler Efficiency as 87.80% and the Turbine Heat Rate as 1945 kCal/kWh. Considering the operating margin of 5% as specified in Regulation 49(C)(b)(i), the Gross Station Heat Rate of the generating station works out as 2326.03 kCal/kWh (1945x1.05)/0.878). Against this, the Petitioner in Form-3 of the petition has considered the SHR of 2388 kCal/kWh for the 2019-24 tariff period, seeking relaxation in the Station Heat Rate on the following grounds:

(a) The Commission in its order dated 26.12.2017 in Petition No.152/GT/2015, had approved the Station Heat Rate of 2375 kCal/kWh for the 2014-19 tariff period at level of Gross Station Heat Rate of the existing thermal generating station i.e. 2375 kCal/kWh in terms of the 2014 Tariff Regulations. The Gross Station Heat Rate of the Petitioner's station was 2377 kCal/kWh (1.045x1945/0.855) considering the boiler efficiency of 85.5% and Turbine Heat Rate of 1945kCal/kWh in terms of Regulation 36 (C) (c) of the 2014 Tariff Regulations. Considering the submissions of the Petitioner and noting the poor quality of coal received at the plant, the Commission had approved the boiler efficiency of 85.5% obtained during the PG test with actual coal compared to 87.80% as guaranteed by OEM (M/s BHEL) using design coal. The relevant para of the order dated 26.12.2017 is extracted below:

"152. We have examined the matter. The issue of deviation in the design boiler efficiency and the actual boiler efficiency was raised by the Petitioner in Petition No. 274/2010 and the Commission after considering the submissions of Petitioner and the actual values of the PG test vide had relaxed the norms of the station heat rate vide order dated 19.11.2014……
Xxxxx

153. The Commission in 2009-14 tariff allowed the GSHR of 2425 kCal/kWh with a rider that up to 2360.47 kCal/kWh should be passed on to the beneficiaries in full and the benefit of heat rate achieved below 2360.47 kCal/ kWh, may be retained by the Petitioner. The Petitioner has submitted that Boiler Efficiency is 85.5% by using actual coal received by the Petitioner as the quality of coal received remains the same. By considering the boiler efficiency of 85.5% and Turbine cycle heat rate of 1945 Kcal/kWh, the Gross Station Heat Rate of the generating station works out as 2377 kCal/kWh (1.045x1945/0.855) for the period 2014-19. However, the Petitioner has considered the Gross Station Heat Rate of 2375 kCal/kWh. The GSHR claimed by the Petitioner during 2014-19 is less than the GSHR allowed during 2009-14 period. In view of this, the Gross Station Heat Rate of 2375 Kcal/ kWh for the period 2014-19 has been allowed." (emphasis supplied)

301. The Petitioner has submitted that due to availability of sub-optimal quality of coal in the region, the quality of the actual coal received at the plant has not improved and, therefore, the condition remains the same till date. Accordingly, the Petitioner has prayed that the Commission may approve the boiler efficiency at 85.5% as obtained during the PG test with the actual coal for the 2019-24 tariff period, in exercise of the power vested under Regulation 3(25) read with Regulation 54 of the 2019 Tariff Regulations. According to the Petitioner, by considering the Boiler Efficiency of 85.5% as the quality of coal received remain suboptimal and with the Turbine Heat Rate of 1945 kCal/kWh, the Gross Station Heat Rate works out as 2388 kCal/kWh (1.05x1945/0.855) for the 2019-24Tariff Period.

302. The Commission vide ROP of the hearing dated 2.6.2020 had directed the Petitioner to furnish the actual coal quality (GCV, proximate and ultimate analysis)

received in generating station during the year 2019-20 and the coal quality of worst coal, design coal and best coal envisaged by the OEM for guaranteed parameter of boiler efficiency. In response, the Petitioner vide affidavit dated 20.6.2020 has furnished the details and submitted as under:

a) Since the current coal quality has not improved vis-à-vis the coal quality that was there at the time of PG test, the Petitioner has proposed to consider the Boiler efficiency as 85.5% in the 2019-24 tariff period as well.

b) The proximate and ultimate analysis data submitted by the Petitioner for the entire period of 2019-20 is not a correct representative of the coal that will be fired in the balance period of the control period. The same is on account of the fact that imported coal of high quality (which was initiated during H2 of 2018-19 due to coal scarcity at that time) was used along with domestic coal for first 5 months. Approximately 1.98 lakh MT of Imported coal was received in H2 of 2018-19 with opening stock of ~32000 MT in April 2020 and ~28000 MT received in Q1 of 2019-20.

c) Since coal supplies from domestic sources have improved after the said period, albeit the quality has not improved. It is most likely that only domestic coal shall be fired in the balance control period as well. Further, the coal quality is likely to be the same as in the latest 9 months when only domestic coal was fired. Accordingly, for the purposes of comparing the coal quality during PG test and the present/future coal quality of domestic coal, the Petitioner proposes to discard the data for first two months of 2019-20 and consider the coal characteristics for the last 9 months i.e. September 2019 to May 2020.

d) With respect to coal quality during the PG test, the ash content has reduced slightly by 2.11% from 42.98% to 40.87% (against design of 36.19%), which has resulted in small increase in GCV by 109 kCal/kg, which should theoretically improve the boiler efficiency. Simultaneously, the moisture content in the coal has also increased by 0.59%, which causes some more heat loss due to evaporation and hence causes decrease in efficiency. The correction to be applied for variation in GCV and moisture may be done by linear approximation of the correction curves for GCV and moisture variation supplied by the OEM. A copy of the correction curves for GCV and Moisture is annexed herewith.

e) The GCV correction curve shows that for an improvement of GCV of 240 kCal/kg (from 4431 to 4671), the efficiency improves by 0.28%. Similarly, for an increase in moisture by 0.4% (from 7.11 to 7.61), the efficiency drops by 0.05%. Applying these corrections to the PG test result of 85.5%, the theoretical net improvement in efficiency comes to only 0.049% (109x0.28/240 – 0.59x0.05/0.5) i.e. 85.5% improves to 85.55% only. Thus, the current coal quality should theoretically yield approximately the same efficiency as was measured during PG test i.e. 85.5%.

303. The Respondent KSEBL has objected to the prayer of the Petitioner and has submitted that the claim of the Petitioner may not be allowed.

304. The matter has been considered. The Commission in its orders relating to the 2009-14 and 2014-19 tariff periods had considered the Boiler Efficiency as 85.5% against the Design Efficiency of 87.8% for the generating station, in relaxation of the Tariff Regulations, based on the lower boiler efficiency achieved during PG test due to poor quality of coal having more ash content and more moisture. The details of the coal quality (domestic coal) furnished by the Petitioner, in response to the ROP dated 2.6.2020, indicate that there is slight improvement in the GCV of coal and also some increase in moisture is observed, as compared to the coal burnt at the time of PG test. It is also observed that the variation in quality of coal from PG test quality to the quality of coal received during the year 2019-20 has improved the efficiency by 0.05% only. The COD of the generating station is 24.7.2012. The Petitioner was granted relaxation in Boiler Efficiency due to poor quality of coal received during the previous tariff periods, as stated above. The question for consideration is 'whether the relaxation granted to the Petitioner during the previous tariff periods is required to be continued on a perpetual basis, during the entire contract period.

305. The Petitioner has considered PG Test performance based on the quality of coal permissible to the Boiler and Plant characteristics. Also, the PPA was executed by the Petitioner based on demonstrable plant characteristics. The Boiler efficiency had undergone changes due to receipt of poor quality of coal in comparison to the quality envisaged at the time of PG test. The deterioration of coal quality is temporary and cannot alter the plant characteristics on a perpetual basis**.** Coal is being procured by the Petitioner after execution of the Fuel Supply Agreement with the coal supplier. It was the obligation of the Petitioner, while entering into FSA, to

ensure the desired quality of coal, by enforcing the provisions of FSA or by exploring any other alternate sources of coal. The Petitioner, having not been prevented from exploring alternate source of coal, cannot, on a perpetual basis, be permitted to pass on the burden on the beneficiaries on this count, more so when the Petitioner has not fulfilled the said obligations. It is further noticed that the Petitioner has not furnished any documentary evidence substantiating the efforts taken by it to ensure the good quality of coal. In our view, the relaxation of SHR of the generating station, in perpetuity, based on coal quality, will render the operational parameters specified under the 2019-24 Tariff Regulations for all generators redundant, as more often than not, the coal quality may no match with design coal. In view of this, there is no merit in the prayer of the Petitioner for relaxation of SHR on grounds of deterioration in quality of coal. The Petitioner is directed to ensure the required quality of coal as envisaged during the PG test. Accordingly, considering the operating margin of 5% as specified in Regulation 49(C)(b)(i) of the 2019 Tariff Regulations, the GSHR of the generating station works out as 2326.03 kcal/kWh [1945*1.05)/0.878] and the same is considered and allowed.

306. Regulation 49(E)(a)(ii) of the 2019 Tariff Regulations provides for Auxiliary power Consumption (APC) as under:

"(E) Auxiliary Energy Consumption

(a) Coal-based generating stations except at (b) below:

	With Natural Draft cooling tower or without cooling tower
(i) 200 MW series	*8.5%*
(ii) 300 MW and above	
Steam driven boiler feed pumps	*5.75%*
Electrically driven boiler feed pumps	*8.0%*

Provided that for thermal generating stations with induced draft cooling towers and where tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8% respectively:…"

307. Both the units of the generating station of the Petitioner, with capacity of 300 MW and above have Steam-driven Boiler Feed Pumps & Induced Draft Cooling Tower. Therefore, both the units qualify for a normative APC of 6.25% (5.75% for Units having Steam-driven BFP and additional 0.50% for having Induced Draft Cooling Tower). In view of the above, the normative APC of 6.25% as considered by the Petitioner is in order and therefore allowed.

Specific Oil Consumption

308. Regulation 49(D)(a) of the 2019 Tariff Regulations provides for the Secondary fuel oil consumption of 0.50 ml/kWh for Coal based generating stations. Hence, the Secondary fuel oil consumption considered by the Petitioner in terms of the said regulation is allowed.

Interest on Working Capital

309. Sub-section (a) of clause (1) of Regulation 34 of the 2019 Tariff Regulations provides as under:

> *"34 (1) the working capital shall cover:*
>
> *(a) Coal-based/lignite-fired thermal generating stations*
>
> *(i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
>
> *(ii) Cost of coal or lignite and limestone for 30 days for generation corresponding to the normative annual plant availability factor;*
>
> *(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
>
> *(iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;*
>
> *(v) Receivables equivalent to 45 days of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and*
>
> *(v) Operation and maintenance expenses, including water charges and security expenses for one month."*

Fuel Cost and Energy Charges in Working Capital

310. The Petitioner has claimed the cost for fuel component in working capital based on price and on 'as received' GCV of coal procured and burnt for the months of October 2018, November 2018, and December 2018 and Secondary fuel oil for months of October 2018, November 2018, and December 2018 as under:

(Rs. in lakh)

Year	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Cost of coal for 50 days	28573.30	28573.30	28573.30	28573.30	28573.30
Cost of Secondary fuel oil 2 months	279.86	279.09	279.09	279.09	279.86

311. The computation of Energy Charges and Fuel component (coal cost) in working capital during the 2019-24 tariff period is based on "as received GCV" of coal. The Petitioner has claimed Energy Charge Rate (ECR) of 281.01 paise/kWh, based on the Weighted Average Price, GCV of coal (on 'as received' basis) and Oil procured and burnt for the three months (October, 2018 to December, 2018). The cost for fuel components in working capital has been computed deducting the 85 kCal per Kg from the Weighted Average Gross Calorific Value of coal 'as received' on account of the variation during storage, as specified under Regulation 43(2) (b) of the 2019 Tariff Regulations and considering the GCV and cost of coal procured and GCV and cost of Secondary fuel oil procured for the three months (October, 2018 to December, 2018) as given below:

(Rs. in lakh)

Year	**2019-20 & 2023-24**	**2020-21 to 2022-23**
Working Capital towards Cost of Coal for stock (20 days of generation at NAPAF)	11266.15	11266.15
Working Capital towards Cost of Coal for Generation (30 days of generation at NAPAF)	16899.22	16899.22
Coal cost for 50 days of generation at NAPAF	28165.37	28165.37
Cost of Secondary fuel oil (2 months of generation at NAPAF)	315.50	314.64

Maintenance Spares

312. The Petitioner has claimed maintenance spares in working capital as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
5443.00	5644.00	6085.00	6166.00	6429.00

313. Regulation 34(1)(a)(iv) of the 2019 Tariff Regulations provide for maintenance spares @ 20% of the O&M expenses, including water charges and security expenses. Accordingly, maintenance spares towards Working Capital are allowed as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
5274.74	5492.77	5722.21	5963.45	6216.46

Receivables

314. Regulation 34(1)(a)(iv) of the 2019 Tariff Regulations provide for Working Capital towards Receivables equivalent to 45 days of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor. Accordingly, Receivables equivalent to 45 days of capacity charges and energy charges is worked out as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Receivables equivalent to 45 days of capacity charges	12427.67	13037.68	13544.78	13387.75	13244.30
Receivables equivalent to 45 days of energy charge	25582.51	25582.51	25582.51	25582.51	25582.51

O & M Expenses (1 month)

315. O&M expenses for 1 month as claimed by the Petitioner for the purpose of working capital ise as under:

(Rs. in lakh)

2019-20	2020-2021	2021-22	2022-23	2023-24
2267.70	2351.80	2535.50	2569.20	2678.80

316. Regulation 34(a)(vi) of the 2019 Tariff Regulations provides for Working Capital towards O&M expenses including water charges and security expenses for

one month of O&M expenses for coal-based generating station. Accordingly, O&M expenses (1 month) is allowed as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
2197.81	2288.65	2384.26	2484.77	2590.19

Rate of Interest on Working Capital

317. Regulation 34(3) of 2019 Tariff Regulations provides as below:

> *"(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:*
>
> *Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24."*

318. In line with the Regulation 34(3) of the 2019 Tariff Regulations, the rate of interest on working capital for 2019-20 is 12.05% (i.e. 1 year SBI MCLR of 8.55% as on 1.4.2019 + 350 bps) and for 2020-21 is 11.25% (i.e. 1 year SBI MCLR of 7.75% as on 1.4.2020 + 350 bps). However, since tariff of the generating station is being determined by this order during the year 2021-22, the SBI MCLR as on 1.4.2021 (7.00%) is also available, which is lower in comparison to the same as on 1.4.2020 (7.75%). Since, the rate of interest on working capital is subject to truing-up, based on the bank rate as on 1st April of each financial year, we consider it prudent to allow the rate of interest as on 1.4.2021 for the subsequent financial years. Accordingly, the rate of interest considered is 12.05% for 2019-20, 11.25% for 2020-21 and for the subsequent years of the tariff period, the rate of interest of 10.50% (i.e. 1 year SBI MCLR of 7.00% as on 1.4.2021 + 350 bps) has been considered. Necessary computations in support of interest on working capital are as below:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for Cost of coal towards stock (20 days of generation at NAPAF)	11266.15	11266.15	11266.15	11266.15	11266.15

Working Capital for cost of coal towards generation (30 days of generation at NAPAF)	16899.22	16899.22	16899.22	16899.22	16899.22
Working Capital for Cost of secondary fuel oil for two months	315.50	314.64	314.64	314.64	315.50
Working Capital for Maintenance spares @ 20% of O&M expenses	5274.74	5492.77	5722.21	5963.45	6216.46
Working Capital for Receivables equivalent to 45 days of capacity charges on the NAPAF	12427.67	13037.68	13544.78	13387.75	13244.30
Working Capital for Receivables equivalent to 45 days of energy charges on the NAPAF	25582.51	25582.51	25582.51	25582.51	25582.51
Working Capital for O&M expenses (one month of O&M expenses)	2197.81	2288.65	2384.26	2484.77	2590.19
Total Working Capital	73963.61	74881.62	75713.77	75898.49	76114.33
Rate of Interest on Working Capital	12.05%	11.25%	10.50%	10.50%	10.50%
Interest on Working Capital	**8912.61**	**8424.18**	**7949.95**	**7969.34**	**7992.01**

Additional Tax on Income due to adoption of Indian Accounting Standards ('Ind AS')

319. In addition to the components of the annual fixed charges allowed under the regulations, viz; Return on equity, Interest on normative loan, Depreciation, interest on working capital and O&M expenses, the petitioner has also claimed additional tax arisen on account of amendments in the Finance Act, 2017 to be recovered separately over and above the annual fixed charges as per the change in law provisions. The additional tax amount claimed by the Petitioner is Rs.38.28 lakh each for the years 2019-20 and 2020-21 respectively.

320. The matter has been examined. As regards the recovery of additional tax liability due to implementation of Ind AS, it is observed that the 2019 Tariff Regulations provide for tax recovery by way of grossing up of Return on Equity (ROE) with effective tax rate; or the Minimum Alternate Tax (MAT) in case of a generating company or transmission licensee, as the case may be, paying MAT, of

the respective financial year. Further, no income, other than generation/ transmission activities, is considered for the purpose of tax recovery. In the present case, ROE is allowed for grossing up with MAT rate, as envisaged under the 2019 Tariff Regulations. It is further observed that the implementation of Ind AS has an accounting treatment implication and does not result in income from generation business activity. Similar claim of the Petitioner for the 2014-19 tariff period has been disallowed in this order. Accordingly, the prayer of the Petitioner for the 2019-24 tariff period, to allow the recovery of additional tax liability on increased income due to implementation of Ind AS is not allowed.

Annual Fixed Charges

321. Accordingly, the annual fixed charges approved for the generating station for the 2019-24 tariff period are summarized as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Return on Equity	27109.00	29153.01	31044.64	31005.56	30994.24
Interest on Loan	14094.35	14216.55	14014.45	11573.71	9133.87
Depreciation	24588.73	26492.50	28243.13	28223.66	28223.56
O & M Expenses	26373.72	27463.83	28611.06	29817.26	31082.31
Interest on Working Capital	8912.61	8424.18	7949.95	7969.34	7992.01
Annual Fixed Charges	**101078.41**	**105750.08**	**109863.23**	**108589.54**	**107425.98**

Note: (1) All figures are on annualised basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such the sum of individual items may not be equal to the arithmetic total of the column.

322. As stated in paragraph 294 above, the Ash disposal expenses allowed are as below:

(Rs. in lakh)

2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**Total**
3425.52	3416.16	3416.16	3416.16	3425.52	17099.52

323. The annual fixed charges determined as above are subject to truing-up in terms of Regulation 13 of the 2019 Tariff Regulations.

Energy Charge Rate (ECR)

324. As stated above, the Petitioner has claimed Energy Charge Rate (ECR) of 281.01 paise/kWh based on the weighted average price, GCV of coal & Oil procured and burnt for the preceding three months i.e. October 2018 to December 2018. The Petitioner did not subtract 85 kCal/kg from Weighted Average Gross calorific value of coal as received, on account of variation during storage at generating station, provided in Regulation 43(2)(b) of the 2019 Tariff Regulations, while computing the IWC and the energy charge rate. The Commission has adjusted the same in accordance with the Regulation 43(2)(b) of 2019 tariff regulations. ECR worked out, based on the operational norms specified under the 2019 Tariff Regulations and on 'as received' GCV of coal for the preceding 3 months i.e. October 2018 to December 2018, is given below:

Description	Unit	2019-24
Capacity	MW	1050
Gross Station Heat Rate	Kcal/kWh	2326.03
Aux. Energy Consumption	%	6.25
Weighted average GCV of oil	Kcal/lit	9100
Weighted average GCV of Coal *	Kcal/kg	**3999.16** (4084.16 - 85)
Weighted average price of oil	Rs/KL	48292.22
Weighted average price of Coal	Rs/MT	**4530.33**
Rate of energy charge ex-bus	Rs/kWh	2.831

325. The Fuel component and Energy charges allowed in working capital are as under:

(Rs. in lakh)

Year	2019-20 and 2023-24	2020-21 to 2022-23
Cost of Coal for stock (20 days)	11266.15	11266.15
Cost of Coal for Generation (30 days)	16899.22	16899.22
Cost of Secondary fuel oil 2 months	315.50	314.64
Energy charges for 45 days	25582.51	25582.51

326. There is variation between the Coal cost, Secondary fuel oil cost and Energy charges considered and allowed as above towards Interest on Working Capital as against those claimed by the Petitioner. This is attributable to the variation between the values of SHR, GCV and the Cost of coal and Secondary fuel claimed by the

Petitioner and considered and allowed by the Commission. As regards the variation in the Secondary fuel oil, the price and GCV of HFO only (as per consistent methodology adopted) has been considered after excluding the quantity in stock, while the Petitioner had considered the combined cost and GCV of LDO and HFO, including the stock. Similarly, the GCV and landed price of coal, has been arrived at after excluding the stock of coal, whereas, the Petitioner had included the stock of coal. The fuel quantity in stock has been excluded to arrive at the exact value of landed price and GCV of fuel procured during the three months from October 2018 to December 2018, as stipulated under the 2019 Tariff Regulations.

327. The Petitioner, on a month to month basis, shall compute and claim Energy Charges from the beneficiaries based on the formulae given under Regulation 43 of the 2019 Tariff Regulations.

Application Filing Fees and Publication Expenses

328. The Petitioner has also sought reimbursement of fees paid by it for the 2019-24 tariff period for filing the tariff petition and the publication expenses incurred for the same. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Summary

329. The annual fixed charges allowed for the 2014-19 tariff period (after truing-up) is as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
103521.74	104906.37	103399.96	100487.66	99726.57

330. The annual fixed charges approved for the 2019-24 tariff period is as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
101078.41	105750.08	109863.23	108589.54	107425.98

331. Petition No. 408/GT/2020 is disposed of in terms of the above.

Sd/-	*Sd/-*	*Sd/-*
(Arun Goyal)	**(I.S. Jha)**	**(P.K. Pujari)**
Member	**Member**	**Chairperson**

Annexure – I

Weighted average rate of depreciation for the 2014-19 tariff period

Sr. No.	Name of the Assets	Depreciation rates as per Regulations	Gross Block 2014-15	Depreciation amount for 2014-15	Gross Block 2015-16	Depreciation amount for 2015-16	Gross Block 2016-17	Depreciation amount for 2016-17	Gross Block 2017-18	Depreciation amount for 2017-18	Gross Block 2018-19	Dep. Amount for 2018-19
A	**Land under full ownership**	0.00%	8635.47	0	17305.94	0	17340.93	0	17341.33	0	17427.03	0
B	**Land under lease**											
(a)	for investment in the land	3.34%	6068.48	202.69	8004.12	267.34	7936.78	265.09	7936.78	265.09	8907.31	297.5
C	**Assets purchased new**											
a.	PI & Machinery in generating stations											
(i)	Steam electric NHRB & waste heat recovery boilers	5.28%	372736.3	19680.48	376462.2	19877.21	380837	20108.19	382079.1	20173.77	389131.9	20546.17

b.	Cooling towers & circulating water systems	5.28%	10070.52	531.72	10070.52	531.72	10070.52	531.72	10070.52	531.72	10070.52	531.72
d.	Building & Civil Engineering works											
(i)	Offices and showrooms	3.34%	2711.34	90.56	2811.1	93.89	2812.63	93.94	2909.02	97.16	10399.72	347.35
(ii)	Containing thermo-electric generating plant	3.34%	20269.2	676.99	23623.96	789.04	24300.49	811.64	24311.59	812.01	24333.73	812.75
(iii)	Containing hydro-electric generating plant	3.34%	0.00	0	263.44	8.8	526.88	17.6	526.88	17.6	263.44	8.8
(v)	Roads other than Kutcha roads	3.34%	2920.61	97.55	5064.62	169.16	5366.43	179.24	5436.96	181.59	2738	91.45
(vi)	Others	3.34%	15021.06	501.7	17794.86	594.35	20042.28	669.41	20230.55	675.7	10558.2	352.64
e.	Transformers, Kiosk, sub-station equipment & other fixed apparatus (including plant)											

(i)	Transformers including foundations having rating of 100 KVA and over	5.28%	5485.01	289.61	5499.34	290.37	5513.68	291.12	5513.68	291.12	5611.47	296.29
f.	Switchgear including cable connections	5.28%	13204.1	697.18	13220.88	698.06	13270.68	700.69	13270.68	700.69	13407.67	707.93
(iii)	Lines on steel on reinforced concrete support	5.28%	0.00	0	1.73	0.09	3.47	0.18	1.73	0.09	0	0
k.	Self-propelled vehicles	9.50%	287.41	27.3	274.95	26.12	268.7	25.53	298.91	28.4	304.54	28.93
(ii)	Portable	9.50%	10.18	0.97	10.18	0.97	10.18	0.97	10.18	0.97	8.01	0.76
m. (i)	Office furniture and furnishing	6.33%	679.29	43	770.74	48.79	793.91	50.25	770.89	48.8	764.54	48.4
(ii)	Office equipment	6.33%	584.44	37	652.13	41.28	685.24	43.38	684.06	43.3	683.58	43.27
(iii)	Internal wiring including fittings and apparatus	6.33%	588.41	37.25	578.59	36.62	579.64	36.69	579.64	36.69	579.64	36.69

(iv)	Strret Light fiitings	5.28%	64.03	3.38	64.03	3.38	64.03	3.38	32.02	1.69	0.00	0
(ii)	Telephone lines and telephones	6.33%	8.03	0.51	13.51	0.86	15.93	1.01	16.2	1.03	13.19	0.84
p.	I. T Equipment including software	15.00%	246.44	36.97	265.7	39.86	252.74	37.91	255.11	38.27	291.12	43.67
q.	Any other assets not covered above	5.28%	387.17	20.44	388.38	20.51	388.59	20.52	382	20.17	386.19	20.39
	TOTAL		**451342**	**22975.28**	**465835**	**23538.4**	**473739.8**	**23888.46**	**475316.5**	**23965.86**	**478452.8**	**24215.54**
	Weighted Average rate of depreciation		**5.09%**		**5.05%**		**5.04%**		**5.04%**		**5.06%**	

ANNEXURE P/1A

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 4/RP/2022
In
Petition No. 408/GT/2020

Coram:

Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member

Date of Order: 13th December, 2022

In the matter of:

Petition for review of the Commission's order dated 8.1.2022 in Petition No. 408/ GT/ 2020 pertaining to truing-up of tariff for the 2014-19 tariff period and for determination of tariff for the 2019-24 tariff period in respect of Maithon Power Limited.

And

In the matter of

Maithon Power Limited
Jeevan Bharti, 10th Floor,
Tower I, 124, Connaught Circus,
New Delhi – 110001. …**Review Petitioner**

Vs

1. Tata Power Delhi Distribution Limited,
33 kV Grid Sub Station Building,
Hudson Lane, Kingsway Camp,
New Delhi – 110 009.

2. Damodar Valley Corporation,
DVC headquarters, DVC Towers,
VIP Road, Kolkata – 700054

3. West Bengal State Electricity Distribution Company Limited
Vidyut Bhavan, Bidhan Nagar, Sector 11,
Kolkata- 700 091.

4. Kerala State Electricity Board Limited
Vydyuthi Bhavanam, Pattom,
Thiruavanathapuram – 695004

5. Tata Power Trading Company Limited
Corporate Centre, 'A' Block, 34,
Sant Tukaram Road, Carnac Bunder,
Mumbai 400 006. **… Respondents**

Parties present:

Shri Venkatesh, Advocate, MPL
Shri Asutosh K. Srivastava, Advocate, MPL
Shri Nihal Srivastava, MPL
Shri Pankaj Prakash, MPL
Shri Dilip Kumar, MPL

ORDER

Petition No. 408/GT/2020 was filed by the Review Petitioner, Maithon Power Limited for truing-up of tariff of Maithon Right Bank Thermal Power Project (1050 MW) (in short 'the generating station') for the 2014-19 tariff period in terms of the 2014 Tariff Regulations and for determination of tariff of the generating station for the 2019-24 tariff period in terms of the 2019 Tariff Regulations and the Commission vide its order dated 8.1.2022 (in short 'the impugned order') disposed of the said petition. Aggrieved by the impugned order dated 8.1.2022, the Review Petitioner has filed this Review Petition seeking review on the ground that there are errors apparent on the face of record, on the following issues:

(A) Disallowance of the following expenditure incurred/ proposed to be incurred for the enhancement of security at the generating station:

(i) Expenditure incurred for construction of Gate House/Security Infra/E-Security for the period 2014-19 and proposed to be incurred for the period 2019-24;

(ii) Expenditure to be incurred for the installation of CCTV camera for 2020-21 to 2022-23;

(iii) Expenditure to be incurred for automation of Boom Barrier for 2020-21;

(B) Wrongful disallowance of relaxation of Station Heat Rate for the period 2019-24; and

(C) Disallowance of Normative IDC on Capital Works in Progress.

Hearing dated 29.3.2022

2. The Review Petition was heard on 'admission' through 'video conferencing' on 29.3.2022. During the hearing, the learned counsel for the Review Petitioner made detailed oral submissions in the matter and prayed that the Review Petition may be allowed on the grounds raised in paragraph 1 above. The Commission, after hearing the learned counsel for the Review Petitioner, reserved its order on 'admissibility' of the Review Petition. Thereafter, by interim order dated 23.5.2022, the Review Petition was 'admitted' on the grounds [A(i) to A(iii)] in paragraph 1 above, and the prayers with regard to issues (B) and (C) above, were rejected. However, in the said order, liberty was granted to the Review Petitioner, to raise issues with regard to certain computational errors pertaining to the approval of additional capitalization schemes and segregation of approved schemes under the head 'within the original scope or beyond original scope' for determination of 'return on equity' as per the 2019 Tariff Regulations, with proper justification, at the time of truing-up of tariff of the generating station for the 2019-24 tariff period. The parties were accordingly granted time to complete their pleadings, prior to the next date of hearing.

Hearing dated 12.8.2022

3. During the hearing, the learned counsel for the Review Petitioner referred to the IB report and made detailed oral submissions with regard to the additional capital expenditure proposed/incurred towards the (i) Construction of gate house/security infra/e-security for the periods 2014-19 and 2019-24; (ii) Automation of Boom Barrier for 2020-21 and for (iii) Installation of CCTV camera during 2020-21 to 2022-23, which was disallowed by order dated 8.1.2022. He further submitted that since the additional capital expenditure proposed/incurred was based on the report of IB, Ministry of Home Affairs, which was enclosed to the main petition, the claim of the Review Petitioner

may be allowed. None appeared on behalf of the Respondents. Accordingly, the Commission reserved its order in the matter.

4. Thus, the following issues are being examined in the present case.

> *(A) Expenditure incurred for construction of Gate House/Security Infra/E-Security for the period 2014-19 and proposed to be incurred for the period 2019-24;*
>
> *(B) Expenditure to be incurred for the installation of CCTV camera for 2020-21 to 2022-23*
>
> *(C) Expenditure to be incurred for automation of Boom Barrier for 2020-21;*

5. Since the aforesaid issues relate to the additional capitalization of expenditure incurred/ projected to be incurred, on account of enhancement of safety at the generating station, the same are clubbed and examined below, based on the submissions and documents available on record.

A. Expenditure incurred for construction of Gate House/Security Infra/E-Security for the period 2014-19 and proposed to be incurred for the period 2019-24:

6. The Commission in the impugned order dated 8.1.2022 has observed the following:

> *"82……. Admittedly, the additional capital expenditures claimed by the Petitioner is beyond the original scope of work of the project and is after the cut-off date. The Petitioner's submission that the additional capitalization has been incurred is on account of Force Majeure events and the same may be allowed in exercise of the power to relax is not acceptable, as the submissions made by the Petitioner do not demonstrate the existence of any force majeure events. Alternatively, the prayer of the Petitioner to allow the said claim under Regulation 14(3)(iii) of the 2014 Tariff Regulations is also not acceptable, as the Petitioner has not furnished any documentary evidence indicating that the expenditure incurred is for higher security or safety of plant as advised or is based on the directions of the Appropriate Governmental agencies or Statutory authorities responsible for national/ internal security. In view of this, the additional capitalization claimed by the Petitioner under this head is not allowed*
>
> *xxx*
>
> *239. The Petitioner has not established through documentary evidence that the additional capital expenditure is required to be incurred based on the advice or direction of any Indian Government Instrumentality or statutory authorities. In the absence of any justification, the claim of the Petitioner for additional capitalization of Rs.120.70 lakh in 2019-20 for Gate house near JNT, Rs.248.99 lakh (Rs.148.99 lakh in 2019-20 and Rs.100.00 lakh in 2020-21) for E-security system and Rs.300.00 lakh in 2019-20 for Construction of high-rise safety platform and walkways is not allowed."*

7. The Review Petitioner has submitted the following:

(a) An additional Gate house near JNT equipped with turnstile gates and the strengthening of the E- security system for the main gate, labor gate, and the plant premises became imminent. These turnstiles have dual authentication, the first being an access card and the second being biometric. Two boom barriers, one for the entry road and the other for the exit road, have been built. For automated gate operation, a RFID system has also been installed.

(b) The construction of this gate complex has facilitated streamlined entry and exit of workers in and around the plant area, avoiding villagers trespassing; defined two-wheeler parking slot with arrangement of frisking, scanning of workmen's belongings, clearly defined route map for entry and exit.

(c) Therefore, in view of the above, ACE of Rs. 4.01 crores for the period of 2016-19 was incurred under Regulation 14 (3) (iii) of the 2014 Tariff Regulations and ACE of Rs 3.69 crore was proposed for the period of 2019-20 and 2020-21 under Regulation 26 (1) (d) of the 2019 Tariff Regulations for JNT/Gate house/E-security.

B. Expenditure to be incurred for the installation of CCTV camera for 2020-21 to 2022-23

8. The Commission in the impugned order dated 8.1.2022 has observed the following:

> *"231. The Petitioner has not established through documentary evidence that the additional capital expenditure is required to be incurred based on the advice or direction of any Indian Government Instrumentality or statutory authorities. In the absence of any justification, the claim of the Petitioner for additional capitalization of Rs.550.00 lakh during the period 2020-23 for this asset / work is not allowed."*

Submissions of the Review Petitioner

9. The Review Petitioner has submitted the following:

(a) There are 48 CCTV cameras installed for the monitoring of the premises of the generating station, the same has also been mentioned in the IB report dated 10.01.2019. Though there is no specific recommendation on installing additional CCTV, but it did not bar the Review Petitioner from reviewing the sufficiency of CCTV cameras in its generating station in the light of threat perception indicated in the IB report.

(b) There were less than 300 security guards for a huge premise extending over more than 1100 acres. Therefore, installation of additional CCTV cameras all over the generating station was necessary to avert any unwanted incidents and to monitor the activities of people in and around plant.

(c) The Commission in its various orders/ judgements have allowed the expenses incurred due to installation of CCTV based on the recommendations of IB. (Ref.

order dated 8.8.2016 in 219/GT/2014 – NTPC vs APCCC and order dated 4.2.2014 in Petition No. 137/GT/2013 (NTPC vs APPTCL)

(d) Therefore, the Review Petitioner has proposed the expense of Rs. 5.50 crores (Rs 2 crores in 2020-21, Rs 2 crores in 2021-22 and Rs 1.5. crores in 2022-23) towards installation of CCTV cameras to be incurred in a phased manner under the Regulation 26(1)(d) of the 2019 Tariff Regulations.

C. Expenditure to be incurred for automation of Boom Barrier for 2020-21*;*

10. The Commission in the impugned order dated 8.1.2022 had observed the following:

"229. Regulation 26(1)(d) of the 2019 Tariff Regulations provides for capitalization of additional expenditure (projected or incurred) required for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security. The Petitioner, in this case, has not established through documentary evidence that the additional capital expenditure is required to be incurred based on the advice or direction of any Indian Government Instrumentality or statutory authorities. In the absence of any justification, the claim of the Petitioner for additional capitalization of Rs.20.00 lakh in 2020-21 is not allowed."

Submissions of the Review Petitioner

11. The Review Petitioner has submitted the following:

(a) The automatic Boom Barrier can be used to successfully control pedestrian and vehicle traffic and achieve better security.

(b) The same is required to effectively manage and address the security concerns raised by the IB. Therefore, the additional capital expenditure of Rs. 0.2. crore was proposed for 2020-21 under Regulation 26(1)(d) of the Tariff Regulations 2019 for 'automation of Boom Barrier'.

Analysis and decision

12. We have examined the matter and perused the IB report. The Review Petitioner had claimed total additional capital expenditure towards Gate house near JNT/ Security infra/ E-security for Rs. 4.01 crore during the period 2016-19, under Regulation 14(3)(iii) of the 2014 Tariff Regulations and total additional capital expenditure for Rs. 3.69 crore during the period 2019-21, under Regulation 26(1)(d) of the 2019 Tariff Regulations. Similarly, the Review Petitioner had also claimed the projected additional capital expenditure of Rs. 5.50 crore towards Installation of CCTV

cameras during the period 2020-22, under Regulation 26(1)(d) of the 2019 Tariff Regulations and Rs.20.00 lakh towards Automatic Boom Barrier in 2020-21 under Regulation 26(1)(d) of the 2019 Tariff Regulations. The Review Petitioner is mainly aggrieved with the disallowance of the aforesaid additional capital expenditure which were incurred during the period 2016-19 and proposed to be incurred during the period 2019-24, towards enhancement of security measures based on the IB report dated 10.1. 2019.

13. On perusal of the IB report, we notice that several recommendations have been made with regard to physical security, access control, cyber security etc., related to the plant premises. Also, certain specific recommendations have been made in the said report, with directions to the Review Petitioner to initiate and implement the same. The report also captures the threat assessment to the premises/plant of the Review Petitioner. It is also noticed that there has been a security audit of the generating station of the Review Petitioner, during November, 2018. It is in this background, that the Review Petitioner, in order to enhance the security of the premises /plant, had sought the additional capitalization of the aforesaid items/assets. Even otherwise, the Review Petitioner has not been barred from reviewing and enhancing the security related aspects of its generating station, mainly, in the light of the threat perception, indicated in the IB report. In our view, the additional capital expenditure claimed in respect of the aforesaid assets is only a culmination of preliminary instructions given to officers of the Review Petitioner (security audit), during November, 2018, by the IB and its report dated 10.1.2019. Moreover, the installation of these assets is essential for surveillance and safety of the generating station particularly considering its location and the threat assessment to the premises/plant. These aspects, were inadvertently not considered at the time of

passing the impugned order 8.1.2022. The non-consideration of the same, according to us, is an error apparent on the face of the record and review on this count is maintainable. Accordingly, the additional capitalization claimed by the Review Petitioner, in respect of the items/assets (as mentioned in para 12 above) for the period 2016-19 and for the period 2019-24, are admissible and accordingly allowed. Issues (A), (B) and (C) are disposed of as above.

14. Consequent upon the additional capital expenditure towards Gate house near JNT/ Security infra/ E-security for Rs. 4.01 crore during the period 2016-19, being allowed in this order, as above, under Regulation 14(3)(iii) of the 2014 Tariff Regulations, the tariff in respect of the generating station for the period 2014-19 is required to be corrected/modified, as stated in the subsequent paragraphs:

Revision of tariff for the 2014-19 tariff period

15. The tariff of this generating station, which was trued-up for the period 2014-19 vide impugned order dated 8.1.2022, stands revised, as under:

Additional capital expenditure allowed

16. The additional capital expenditure allowed in the table under paragraph 101 of the order dated 8.1.2022 is modified as under:

(Rs in lakh)

Sl. No.	Package Name	2014-15	2015-16	2016-17	2017-18	2018-19
1	BTG	730.69	777.30	0.00	0.00	0.00
2	Cost of Land and Site	21142.23	69.98	0.40	0.00	2112.86
3	General Civil Works	10577.92	791.99	184.39	154.47	147.49
4	Plant Water System	252.36	0.00	0.00	0.00	0.00
5	Ash Handling System	48.65	26.23	0.00	0.00	0.00
6	Coal Handling System	1042.53	282.72	0.00	0.00	0.00
7	Balance of Plant	18.21	445.57	0.00	0.00	0.00
8	Township & Colony	57.12	43.38	0.00	0.00	0.00
9	Pre-Operative expenses	207.87	0.00	0.00	0.00	0.00
10	IT system for Software & Hardware	457.52	0.00	0.00	0.00	0.00

Sl. No.	Package Name	2014-15	2015-16	2016-17	2017-18	2018-19
11	RO system	0.00	7798.20	(-)28.04	57.38	0.00
12	Fire Tender with shed	0.00	61.53	0.60	14.47	1.30
13	Fixed Foam System for LDO & HFO	0.00	60.74	0.00	0.00	0.00
14	Construction of Road in Ash area	0.00	0.00	80.29	18.15	0.00
15	NABL Accredited Lab	0.00	70.52	112.96	5.62	55.18
16	Yard Sprinkling & Fire detection system in CHP	0.00	0.00	0.00	0.00	18.91
17	Up-gradation of Protection System	0.00	0.00	0.00	1.45	47.30
18	Wind barrier in Ash Pond	0.00	0.00	0.00	0.00	29.90
19	Installation of CAAQMS	0.00	0.00	67.58	0.00	0.00
20	Online effluent monitoring system	0.00	13.95	0.00	0.00	0.00
21	Augmentation of ash handling system	0.00	0.00	0.00	700.13	848.07
22	Ash bagging system	0.00	0.00	27.21	0.00	0.00
23	MAX DCS Version up-gradation (XP) Unit 1	0.00	67.52	0.00	438.86	0.00
24	Drinking water facility	0.00	0.00	0.00	10.07	13.16
25	Spare GT	0.00	846.76	35.73	0.00	0.00
26	Coal Pit run-off drainage system	0.00	0.00	0.00	0.00	321.88
27	Gate house near JNT/security infra/e-security	0.00	0.00	45.07	98.58	257.66
28	IDC in the above	144.82	349.53	0.00	0.00	0.00
A	**Total additional capitalization allowed**	**34679.91**	**11705.92**	**526.19**	**1499.18**	**3853.70**

17. Accordingly, the net additional capitalization allowed, after considering the decapitalization/ deduction, and before adjustment of liabilities and IDC as per books, in the table under paragraph 103 of the order dated 8.1.2022, is revised as under:

(Rs in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
A	Total additions allowed	34679.91	11705.92	526.19	1499.18	3853.70
B	Less: De-capitalization allowed	3214.56	131.14	69.61	132.63	81.37
C	Less: De- capitalization not performed in books.	0.00	96.56	192.54	717.48	350.46
D	Less: Cash capitalization towards land	5506.76	0.00	0.00	0.00	0.00
E	**Total Deductions**	**8721.32**	**227.70**	**262.15**	**850.11**	**431.83**
F	**Net additional capitalization allowed before adjustment of liabilities and IDC as per books (A-E)**	**25958.59**	**11478.22**	**264.04**	**649.07**	**3421.87**

18. The net additional capital expenditure allowed after adjustment of undischarged liabilities in the table under paragraph 104 of the order dated 8.1.2022, is revised as under is as under:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Net additional capitalization allowed	25958.59	11478.22	264.04	649.07	3421.87
Less: Un-discharged liabilities *(pertaining to additional capitalization allowed)*	391.10	71.03	163.06	0.00	0.00
Net additional capitalization allowed on cash basis	**25567.49**	**11407.19**	**100.98**	**649.07**	**3421.87**

Normative IDC on Additional Capitalization

19. The normative IDC on additional capital expenditure, in the table under paragraph 112 of the order dated 8.1.2022, stands revised as under:

(Rs in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
760.89	221.46	10.39	26.14	59.30

Capital cost for the 2014-19 tariff period

20. Based on the above, the capital cost allowed for the period 2016-19, in the table under paragraph 116 of the order dated 8.1.2022, stands revised as under:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	432039.88	463204.76	474874.98	475058.38	475895.66
Add: Net additional capitalization allowed on cash basis	25567.49	11407.19	100.98	649.07	3421.87
Add: Discharges allowed	4980.50	391.10	72.03	162.07	0.00
Normative IDC allowed	760.89	221.46	10.39	26.14	59.30
Less: IDC Capitalized in Books excluding Railways	144.00	349.53	0.00	0.00	0.00
Closing capital cost	**463204.76**	**474874.98**	**475058.38**	**475895.66**	**479376.83**

Return on Equity

21. Return on Equity worked out and allowed in paragraph 122 of the order dated 8.1.2022, stands revised as under:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Notional Equity	129611.96	138961.43	142462.50	142517.51	142768.70
Addition due to Additional Capitalization	9349.47	3501.07	55.02	251.18	1044.35
Closing Equity	138961.43	142462.50	142517.51	142768.70	143813.05
Average Equity	134286.70	140711.96	142490.00	142643.11	143290.87
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax rate for the year	20.961%	21.342%	21.342%	21.342%	21.549%
Rate of Return on Equity (Pre-Tax)	19.610%	19.705%	19.705%	19.705%	19.758%
Return on Equity	**26333.62**	**27727.29**	**28077.66**	**28107.82**	**28311.41**

Interest on loan

22. The calculations for interest on loan in the table under paragraph 125 of the order dated 8.1.2022, stands revised as under:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Notional loan	302427.92	324243.34	332412.49	332540.86	333126.96
Cumulative Repayment of Loan up to previous year	47164.35	69464.84	93120.51	117006.23	140728.35
Net Opening loan	255263.57	254778.50	239291.98	215534.63	192398.62
Addition due to additional capitalization	21815.42	8169.15	128.38	586.10	2436.82
Repayment of loan during the period	22785.93	23700.34	23950.33	23973.95	24174.21
Less: Repayment adjustment on account of de-capitalization	485.44	44.67	64.60	251.84	148.55
Net Repayment	22300.49	23655.67	23885.73	23722.12	24025.66
Net Closing loan	254778.50	239291.98	215534.63	192398.62	170809.78
Average loan	255021.03	247035.24	227413.31	203966.63	181604.20
Weighted Average Rate of Interest on loan	10.96%	10.46%	9.92%	8.99%	8.79%
Interest on loan	**27957.86**	**25842.46**	**22563.45**	**18337.45**	**15969.11**

Depeciation

23. Accordingly, depreciation allowed in paragraph 131 of the order dated 8.1.2022 is revised as under:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (A)	432039.88	463204.76	474874.98	475058.38	475895.66
Addition due to Additional Capitalization (B)	31164.88	11670.22	183.39	837.28	3481.17
Closing Gross Block (C)	463204.76	474874.98	475058.38	475895.66	479376.83
Average Gross Block (D=(A+C)/2)	447622.32	469039.87	474966.68	475477.02	477636.25
Value of Freehold Land included in gross block (E)	8635.47	17305.94	17340.93	17341.13	17427.23
Depreciation value (F= (D-E) x90%)	395088.16	406560.54	411863.18	412322.30	414188.12
Remaining depreciable value (G=F- Cumulative Depreciation (as shown under 'M') at the end of previous year)	347923.82	337095.70	318742.67	295316.07	273459.77
No. of completed years at the beginning of the year (H)	2.58	3.58	4.58	5.58	6.58
Balance Useful life at the beginning of the Year (I)	22.42	21.42	20.42	19.42	18.42
Rate of Depreciation (J) as per Annexure-I to this order	5.09%	5.05%	5.04%	5.04%	5.06%
Depreciation (K)	**22785.93**	**23700.34**	**23950.33**	**23973.95**	**24174.21**
Cumulative depreciation (at the end of the period) (L= K + Cumulative depreciation at the end of previous year*)	69950.28	93165.18	117070.83	140980.18	164902.56
Less: Depreciation adjustment on account of de-capitalization (M)	485.44	44.67	64.60	251.84	148.55
Cumulative depreciation after adjustment due to de-capitalization (at the end of the period) (N=L-M) *	69464.84	93120.51	117006.23	140728.35	164754.01

** Note: The Cumulative Depreciation at the end of 2013-14 is Rs. 47164.35 lakh.*

Interest on Working Capital

Working capital for Receivables

24. The Receivables equivalent to two months of capacity charges and two months of energy charges towards working capital in the table under paragraph 163 of order dated 8.1.2022 stands revised as under:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Fixed charges-for two months	17253.62	17484.40	17234.02	16750.71	16628.99
Energy Charges-for two months	21074.50	21103.97	21074.50	21582.30	21582.30

25. Accordingly, the interest on working capital as computed in the table under paragraph 165 of the order dated 8.1.2022 stands revised as under:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of coal for stock- 1 month	10458.70	10487.35	10458.70	10710.71	10710.71
Cost of coal for generation- 1 month	10315.43	10315.43	10315.43	10563.99	10563.99
O&M expenses – 1 month	1478.85	1571.38	1669.15	1765.51	1865.89
Cost of secondary fuel oil – 2 months	300.37	301.19	300.37	307.60	307.60
Maintenance spares	3549.24	3771.31	4005.96	4237.22	4478.13
Receivables (Fixed charges -2 months)	17253.62	17484.40	17234.02	16750.71	16628.99
Receivables (Variable charges -2 months)	21074.50	21103.97	21074.50	21582.30	21582.30
Total	**64430.71**	**65035.02**	**65058.13**	**65918.04**	**66137.60**
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	**8698.15**	**8779.73**	**8782.85**	**8898.93**	**8928.58**

Annual Fixed Charges

26. Based on the above, the annual fixed charges approved for the generating station for the period 2014-19 in the table under paragraph 166 stands modified/ revised as under:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	26333.62	27727.29	28077.66	28107.82	28311.41
Interest on Loan	27957.86	25842.46	22563.45	18337.45	15969.11
Depreciation	22785.93	23700.34	23950.33	23973.95	24174.21
O&M Expenses	17746.18	18856.55	20029.82	21186.09	22390.63
Interest on Working Capital	8698.15	8779.73	8782.85	8898.93	8928.58
Total	**103521.74**	**104906.37**	**103404.10**	**100504.25**	**99773.94**

27. The annual fixed charges allowed in order dated 1.10.2019 in Petition No.152/GT/2015 and those allowed by this order (as in paragraph 168 of order date 8.1.2022) is revised as under:

(Rs in lakh)

Total annual fixed charges allowed in order dated 1.10.2019	99154.50	106314.26	107868.34	106552.83	111287.93
Total annual fixed charges allowed in this order	103521.74	104906.37	103404.10	100504.25	99773.94

Revision of tariff for the 2019-24 tariff period

28. The closing capital cost of Rs.479376.83 lakh as on 31.3.2019 as allowed in this order, will be considered as the opening capital cost as on 1.4.2019 for the period 2019-24 at the time of truing up. Further, the projected additional capital expenditure of Rs. 5.50 crore towards Installation of CCTV cameras during the period 2020-22, under Regulation 26(1)(d) of the 2019 Tariff Regulations and Rs.20.00 lakh towards Automatic Boom Barrier in 2020-21 under Regulation 26(1)(d) of the 2019 Tariff Regulations, as allowed in paragraph 13 of this order, shall however be considered, at the time of truing up of tariff for the period 2019-24, subject to the Review Petitioner furnishing all relevant details/documents, in support of the actual expenditure incurred.

29. Review Petition No. 4/RP/2022 in Petition No. 408/GT/2020 is disposed of in terms of the above.

Sd/-	***Sd/-***	***Sd/-***
(Pravas Kumar Singh)	**(Arun Goyal)**	**(I. S. Jha)**
Member	**Member**	**Member**

ANNEXURE P/2

TARIFF FILING FORMS (THERMAL)

FOR TRUING-UP OF TARIFF

FOR

Maithon Power Limited

(From 01.04.2019 to 31.03.2024)



Checklist of Main Tariff Forms and other information for tariff filing for Thermal Stations

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM- 1	Summary of Tariff	√
FORM -1 (I)	Statement showing claimed capital cost	√
FORM -1 (II)	Statement showing Return on Equity	√
FORM-2	Plant Characteristics	√
FORM-3	Normative parameters considered for tariff computations	√
FORM-3A**	Statement showing O&M Expenses	√
FORM-3B	Statement of Special Allowance	NA
FORM- 4	Details of Foreign loans	NA
FORM- 4A	Details of Foreign Equity	NA
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	√
FORM-5A	Abstract of Claimed Capital Cost for the existing Projects	NA
FORM- 6	Financial Package upto COD	NA
FORM- 7	Details of Project Specific Loans	√
FORM- 8	Details of Allocation of corporate loans to various projects	NA
FORM-9A**	Summary of Statement of Additional Capitalisation claimed during the period	√
FORM-9 ##	Statement of Additional Capitalisation after COD	√
FORM- 10	Financing of Additional Capitalisation	√
FORM- 11	Calculation of Depreciation on original project cost	√
FORM- 12	Statement of Depreciation	√
Form-12A	Statement of unrecovered depreciation	√
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	√
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	NA
FORM- 15	Details of Fuel for Computation of Energy Charges	√
FORM- 15A	Details of Seconday Fuel for Computation of Energy Charges	√
FORM- 15B	Computation of Energy Charges	√
FORM- 16	Details of Limestone for Computation of Energy Charge Rate	NA
FORM-17	Details of Capital Spares	√
FORM- 18	Non-Tariff Income	NA
FORM-19	Details of Water Charges	√
FORM-20	Details of Statutory Charges	NA

Provided yearwise for the period 2019-24

PART-I

List of Supporting Forms / documents for tariff filing for Thermal Stations

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM-A	Abstract of Capital Cost Estimates	NA
FORM-B	Break-up of Capital Cost for Coal/Lignite based projects	NA
FORM-C	Break-up of Capital Cost for Gas/Liquid fuel based Projects	NA
FORM-D	Break-up of Construction/Supply/Service packages	NA
FORM-E	Details of variables , parameters , optional package etc. for New Project	NA
FORM-F	Details of cost over run	NA
FORM-G	Details of time over run	NA
FORM –H	Statement of Additional Capitalisation during end of the useful life	NA
FORM –I	Details of Assets De-capitalised during the period	√
FORM –J	Reconciliation of Capitalisation claimed vis-à-vis books of accounts	NA
FORM –K	Statement showing details of items/assets/works claimed under Exclusions	√
FORM-L	Statement of Capital cost	NA
FORM-M	Statement of Capital Woks in Progress	NA
FORM-N	Calculation of Interest on Normative Loan	√
FORM-O	Calculation of Interest on Working Capital	√
FORM-P	Incidental Expenditure up to SCOD and up to Actual COD	NA
FORM-Q	Expenditure under different packages up to SCOD and up to Actual COD	NA
FORM-R	Actual cash expenditure	NA
FORM-S	Statement of Liability flow	√
FORM-T	Summary of issues involved in the petition	√



List of supporting documents for tariff filing for Thermal Stations		
S. No.	**Information / Document**	**Tick**
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Station setup by a company making tariff application for the first time to CERC)	NA
2	A. Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures on COD of the Station for the new station & for the relevant years.	NA
	B. Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the existing station for relevant years.	✓
3	Copies of relevant loan Agreements	NA
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	✓
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	NA
6	Copies of the BPSA/PPA with the beneficiaries, if any	NA
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted: a. Detailed Project Report b. CPM Analysis c. PERT Chart and Bar Chart d. Justification for cost and time Overrun	NA
8	Generating Company shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the Generating Unit wise /stage wise/Station wise/ and subsequently consolidated at Company level as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021-22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	NA
9	Any other relevant information, (Please specify)	NA
10	Reconciliation with Balance sheet of any actual additional capitalization and amongst stages of a generating station	NA
11	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify the formats suitably as per available information to them for submission of required information for tariff purpose.	NA



PART-I
FORM- 1

Summary of Tariff

Name of the Petitioner:	**Maithon Power Limited**
Name of the Generating Station:	**1050 Maithon Project**
Place (Region/District/State):	**Dhanbad District, Jharkhand**

Amount in Rs. Lakhs

S. No.	Particulars	Unit	Approved 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8	9
1.1	Depreciation	Rs Lakh		23,564.71	23,678.33	25,256.89	27,271.52	27,773.39
1.2	Interest on Loan	Rs Lakh		13,292.43	11,086.83	10,855.94	11,535.36	10,450.13
1.3	Return on Equity	Rs Lakh		27,064.28	27,175.33	29,346.67	31,543.12	31,689.17
1.4	Interest on Working Capital	Rs Lakh		8,964.43	7,999.84	7,225.41	7,831.82	9,131.21
1.5	O&M Expenses	Rs Lakh		29224.98	31407.51	32679.97	35496.78	37451.36
1.6	Special Allowance (If applicable)	Rs Lakh						
1.7	Compensation Allowance (If applicable – relevant for column 4 only)	Rs. Lakh						
	Total	Rs Lakh	**0.00**	**102110.83**	**101347.86**	**105364.88**	**113678.60**	**116495.25**
2.1	Landed Fuel Cost (coal/gas/RLNG/ liquid) as per FSA approved by beneficiaries	Rs/Ton	4458.82					
	(%) of Fuel Quantity	(%)						
2.2	Landed Fuel Cost Imported Coal as per FSA approved by beneficiaries		NA					
	(%) of Fuel Quantity							
2.3	Landed Fuel Cost (coal/gas /RLNG/liquid) other than FSA	Rs/Ton	NA					
	(%) of Fuel Quantity	(%)						
2.4	Landed Fuel Cost Imported Coal other than FSA.		NA					
	(%) of Fuel Quantity							
2.5	Secondary fuel oil cost (Ex-bus)	Rs/Unit	0.025					
	Energy Charge Rate ex-bus (Paise/kWh) 2A, 2B, 2C, 2D	Rs/Unit	2.853					

(Petitioner)

MAITHON POWER LIMITED

PART-I

FORM- 1(I)

	Name of the Petitioner:	**Maithon Power Limited**
	Name of the Generating Station:	**1050 Maithon Project**

Amount in Rs. Lakhs

Statement showing claimed capital cost – (A+B)

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
1	Opening Capital Cost	4,79,376.83	4,81,467.64	4,83,906.52	5,59,419.75	5,62,538.93
2	Add: Addition during the year/period	2,151.03	2,441.37	68,424.86	3,154.32	9,440.28
3	Less: De-capitalisation during the year/period	47.39	17.01	67.07	657.31	1,509.63
4	Add: Undischarge Liability as on 1st April of each year	-	97.26	138.37	2,002.28	1,396.28
5	Less: Undischarge Liability as on end of each year	97.26	138.37	2,002.28	1,396.28	6,624.68
6	Less: Reversal during the year / period	-	-	-	-	-
7	Add: Normative IDC on Excess Equity excluding Railways	84.43	55.62	12.44	16.18	37.51
8	Add: Normative IDC on Excess Equity Railways			9,006.91		
9	Closing Capital Cost	4,81,467.64	4,83,906.52	5,59,419.75	5,62,538.93	5,65,278.70
10	**Average Capital Cost**	**4,80,422.24**	**4,82,687.08**	**5,21,663.13**	**5,60,979.34**	**5,63,908.81**

Statement showing claimed capital cost eligible for RoE at normal rate (A)

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
1	Opening Capital Cost	479376.83	481039.15	482699.26	557305.57	559743.91
2	Add: Addition during the year / period*	1681.28	1629.94	67490.74	2547.50	7728.82
3	Less: De-capitalisation during the year / period	47.39	17.01	67.07	657.31	1509.63
4	Add: Undischarge Liability as on 1st April of each year	0.00	37.57	27.51	1860.63	1325.50
5	Less: Undischarge Liability as on end of each year	37.57	27.51	1860.63	1325.50	6344.44
6	Less: Reversal during the year / period					
7	Add: Normative IDC on Excess Equity excluding Railways	65.99	37.14	8.86	13.02	30.71
8	Add: Normative IDC on Excess Equity Railways			9006.91		
9	Closing Capital Cost	481039.15	482699.26	557305.57	559743.91	560974.88
10	**Average Capital Cost**	**480207.99**	**481869.21**	**520002.42**	**558524.74**	**560359.40**
	**Includes Actual IDC of Rs. 9384.70 Lakh as per books.*					

Statement showing claimed capital cost eligible for RoE at weighted average rate of interest on actual loan portfolio (B)

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
1	Opening Capital Cost	0.00	428.50	1207.25	2114.17	2795.02
2	Add: Addition during the year / period	469.75	811.43	934.12	606.81	1711.46
3	Less: De-capitalisation during the year / period					
4	Add: Undischarge Liability as on 1st April of each year	0.00	59.69	110.86	141.65	70.78
5	Less: Undischarge Liability as on end of each year	59.69	110.86	141.65	70.78	280.25
6	Less: Reversal during the year / period					
7	Add: Normative IDC on Excess Equity excluding Railways	18.44	18.49	3.59	3.17	6.80
8	Closing Capital Cost	428.50	1207.25	2114.17	2795.02	4303.82
9	**Average Capital Cost**	**214.25**	**817.87**	**1660.71**	**2454.60**	**3549.42**

(Petitioner)

MAITHON POWER LIMITED

PART-I

FORM- 1(IIA)

	Name of the Petitioner:	**Maithon Power Limited**					
	Name of the Generating Station:	**1050 Maithon Project**					
	Statement showing Return on Equity at Normal Rate						
							Amount in Rs. Lakhs
S. No.	**Particulars**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	
1	**2**	**3**	**4**	**5**	**6**	**7**	
	Return on Equity						
1	Gross Opening Equity (Normal)						
2	Less: Adjustment in Opening Equity						
3	Adjustment during the year						
4	Net Opening Equity (Normal)	143813.05	144311.74	144809.78	167191.67	167923.17	
5	Add: Increase in equity due to addition during the year / period	512.91	503.14	22402.01	928.70	822.18	
6	Less: Decrease due to De-capitalisation during the year / period	14.22	5.10	20.12	197.19	452.89	
7	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00	
8	Net closing Equity (Normal)	144311.74	144809.78	167191.67	167923.17	168292.46	
9	Average Equity (Normal)	144062.40	144560.76	156000.73	167557.42	168107.82	
10	Rate of ROE (%)	18.78%	18.78%	18.78%	18.78%	18.78%	
11	Total ROE	**27057.80**	**27151.40**	**29300.06**	**31470.64**	**31574.01**	

(Petitioner)

MAITHON POWER LIMITED

PART-I

FORM- 1(IIA)

	Name of the Petitioner:	**Maithon Power Limited**
	Name of the Generating Station:	**1050 Maithon Project**

RoE at weighted average rate of interest on actual loan portfolio (B)

Amount in Rs. Lakhs

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
	Return on Equity (beyond the original scope of work excluding additional capitalization due to Change in Law)					
1	Gross Opening Equity (Normal)					
2	Less: Adjustment in Opening Equity					
3	Adjustment during the year					
4	Net Opening Equity (Normal)	-	128.55	362.18	634.25	838.51
5	Add: Increase in equity due to addition during the year / period	128.55	233.63	272.08	204.25	452.64
6	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
7	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
8	Net closing Equity (Normal)	128.55	362.18	634.25	838.51	1,291.15
9	Average Equity (Normal)	64.27	245.36	498.21	736.38	1,064.83
10	Rate of ROE (%)	10.08%	9.75%	9.36%	9.84%	10.82%
11	Total ROE	**6.48**	**23.93**	**46.62**	**72.48**	**115.16**

(Petitioner)

MAITHON POWER LIMITED

Plant Characteristics		PART-I FORM-2
Name of the Petitioner	**Maithon Power Limited**	
Name of the Generating Station	**1050 MW Maithon Project**	
Unit(s)/Block(s)/Parameters	**Unit 1**	**Unit 2**
Installed Capacity (MW)	**525**	**525**
Schedule COD as per Investment Approval	**6.8.2011**	**25.12.2011**
Actual COD /Date of Taken Over (as applicable)	**01.09.2011**	**24.07.2012**
Pit Head or Non Pit Head	**Non-pit Head**	**Non-pit Head**
Name of the Boiler Manufacture	**BHEL**	**BHEL**
Name of Turbine Generator Manufacture	**BHEL**	**BHEL**
Main Steams Pressure at Turbine inlet (kg/Cm^2) abs[1].	172	172
Main Steam Temperature at Turbine inlet (^oC) [1]	537	537
Reheat Steam Pressure at Turbine inlet ($kg/Cm^{2)1}$	40.5	40.5
Reheat Steam Temperature at Turbine inlet (^oC) [1]	537	537
Main Steam flow at Turbine inlet under MCR condition (tons /hr)[2]	1571.017	1571.017
Main Steam flow at Turbine inlet under VWO condition (tons /hr)[2]	1651.66	1651.66
Unit Gross electrical output under MCR /Rated condition (MW)[2]	525.15	525.15
Unit Gross electrical output under VWO condition (MW)[2]	551.154	551.154
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh)3	1945	1945
Conditions on which design turbine cycle heat rate guaranteed		
% MCR	100%	100%
% Makeup Water Consumption	0	0
Design Capacity of Make up Water System	3	3
Design Capacity of Inlet Cooling System	61000	61000
Design Cooling Water Temperature (^0C)	33	33
Back Pressure	0.1047	0.1047
Steam flow at super heater outlet under BMCR condition (tons/hr)	1700	1700

MAITHON POWER LIMITED

Plant Characteristics		PART-I FORM-2
Name of the Petitioner	**Maithon Power Limited**	
Name of the Generating Station	**1050 MW Maithon Project**	
Unit(s)/Block(s)/Parameters	**Unit 1**	**Unit 2**
Steam Pressure at super heater outlet under under BMCR condition (Kg/cm2)	178	178
Steam Temperature at super heater outlet under BMCR condition (0C)	540	540
Steam Temperature at Reheater outlet at BMCR condition (^{0}C)	540	540
Design / Guaranteed Boiler Efficiency (%)[4]	87.8	87.8
Design Fuel with and without Blending of domestic/imported coal	4671 kcal/kg	4671 kcal/kg
Type of Cooling Tower	Induced Draught Type	Induced Draught Type
Type of cooling system[5]	Re-circulation type	Re-circulation type
Type of Boiler Feed Pump[6]	Two Turbine-driven BFP & One Motor-driven BFP	Two Turbine-driven BFP & One Motor-driven BFP
Fuel Details[7]		
-Primary Fuel	Coal	Coal
-Secondary Fuel	Light Diesel Oil & Heavy Furnace Oil	Light Diesel Oil & Heavy Furnace Oil
-Alternate Fuels		
Types of SOX control system		
Types of NOX control system		
Details of SPM control system		
Special Features/Site Specific Features[8]		
Special Technological Features[9]		
Environmental Regulation related features[10]		
Any other special features		

1. At Turbine MCR condition.
2: with 0% (Nil) make up and design Cooling water temperature
3: at TMCR output based on gross generation, 0% (Nil) makeup and design Cooling water temperature.
4: With Performance coal based on Higher Heating Value (HHV) of fuel and at BMCR) out put
5: Closed circuit cooling, once through cooling, sea cooling, natural draft cooling, induced draft cooling etc.
6: Motor driven, Steam turbine driven etc.
7: Coal or natural gas or Naptha or lignite etc.
8: Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake /makeup water systems etc. scrubbers etc. Specify all such features
9: Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc.
10: Environmental Regulation related features like FGD, ESP etc.,
Note 1: In case of deviation from specified conditions in Regulation, correction curve of manufacturer may also be submitted.
Note 2: Heat Balance Diagram has to be submitted along with above information in case of new stations.
Note 3: The Terms – MCR, BMCR, HHV, Performance coal, are as defined in CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations – 2010 notified by the Central Electricity Authority
Note 4: The copy of Certificate shall be submitted in terms of Regulation 4 as per Appendix-VI

Petitioner

MAITHON POWER LIMITED

PART-I
FORM- 3

Normative parameters considered for tariff computations

Name of the Petitioner:	**Mainthon Power Limited**
Name of the Generating Station:	**1050 MW Maithon Project**

(Year Ending March)

Particulars	Unit	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8
Base Rate of Return on Equity $$	%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Base Rate of Return on Equity on Add. Capitalization** $$	%		8.32%	8.05%	7.72%	8.12%	8.93%
Effective Tax Rate	%	17.47%	17.47%	17.47%	17.47%	17.47%	17.47%
Target Availability	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
In High Demand Season	%						
Peak Hours	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Off-Peak Hours	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
In Low Demand Season(Off-Peak)	%						
Peak Hours	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Off-Peak Hours	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Auxiliary Energy Consumption	%	5.75%	6.25%	6.25%	6.25%	6.25%	6.25%
Gross Station Heat Rate*	kCal/kWh	2375	2375	2375	2375	2375	2375
Specific Fuel Oil Consumption	ml/kWh	1.00	0.50	0.50	0.50	0.50	0.50
Cost of Coal/Lignite for WC1	in Days	60	50	50	50	50	50
Cost of Main Secondary Fuel Oil for WC1	in Months	2	2	2	2	2	2
Fuel Cost for WC2	in Months	NA	NA	NA	NA	NA	NA
Liquid Fuel Stock for WC2	in Months	NA	NA	NA	NA	NA	NA
O&M Expenses	Rs lakh/MW	1	1	1	1	1	1
			22.51	23.30	24.12	24.97	25.84
Maintenance Spares for WC	% of O&M	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Receivables for WC	in Days	60	45	45	45	45	45
Storage capacity of Primary fuel	MT	2	2	2	2	2	2
SBI 1 Year MCLR plus 350 basis point3	%	13.50	12.05	11.25	10.50	10.50	12.00
Blending ratio of domestic coal/imported coal		0	0	0	0	0	0

** Rate of Return on Add - cap beyong original scope and excluding Change in Law
$$ Additional RoE due to better ramp rate would be claimed at the time of true-up or as per guidelines to be issued
Storage capacity pertains to entire Station

* Gross Heat Rate has been claimed considering boiler efficiency of 86% instead of design boiler efficiency for reasons as stated in Petition

Petitioner

MAITHON POWER LIMITED

Part-I
FORM-3A
ADDITIONAL FORM

Calculation of O&M Expenses

Name of the Company :	**Maithon Power Limited**
Name of the Power Station :	**1050 Maithon Project**

Amount in Rs. Lakhs

S.No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	7	8
1	**O&M expenses under Reg.35(1) (₹ Lakhs/ MW)**	22.51	23.30	24.12	24.97	25.84
1a	Normative	23635.50	24465.00	25326.00	26218.50	27132.00
2	**O&M expenses under Reg.35(6)**					
2a	Water Charges	1600.66	1773.85	2149.43	2236.33	2537.69
2b	Security expenses	723.82	834.98	918.57	1056.85	1039.65
2c	Capital Spares*	381.60	613.70	1262.40	2647.89	909.73
3	O&M expenses-Ash Disposal	2883.40	3719.98	3023.57	3337.21	5832.29
	Total O&M Expenses	**29224.98**	**31407.51**	**32679.97**	**35496.78**	**37451.36**

** Capital Spares claimed is total cost of capital spares less 10% residual value*

MAITHON POWER LIMITED

PART-I
FORM-3B
Additional Form

Computation of Special Allowance

Name of the Company :				Maithon Power Limited					
Name of the Power Station :				1050 Maithon Project					
Rate of Special allowance @lakh/MW/year				9.5					
									(Rs. Lakh)
Unit No.	Capacity (MW)	Date of COD	Year of completion of useful life of 25 yrs.		Special Allowance as per Clause 28				
				Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1				NOT APPLICABLE					
2									
Year wise Total for the Station				0.00	0.00	0.00	0.00	0.00	0.00

Petitioner

MAITHON POWER LIMITED

Name of the Petitioner	Details of Foreign loans (Details only in respect of loans applicable to the project under petition)	PART 1

Name of the Generating Station: Maithon Power

S. No.	Financial Year (Starting from COD)	Year 1				Year 2				Year 3 and so on			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Date		Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)
Currency11													
A.1	At the date of Drawl or at the beginning to the year of												
2	Scheduled repayment date of principal												
3	Scheduled payment date of interest												
4	At the end of Financial year												
B	In case of Hedging3												
1	At the date of hedging												
2	Period of hedging												
3	Cost of hedging												
Currency21													
A.1	At the date of Drawl2												
2	Scheduled repayment date of principal												
3	Scheduled payment date of interest												
4	At the end of Financial year												

NOT APPLICABLE

14

B	In case of Hedging3		
1	At the date of hedging		
2	Period of hedging		
3	Cost of hedging		
Currency31& so on			
A.1	At the date of Drawl2		
2	Scheduled repayment date of principal		
3	Scheduled payment date of interest		
4	At the end of Financial year		
B	In case of Hedging3		
1	At the date of hedging		
2	Period of hedging		
3	Cost of hedging		

NOT APPLICABLE

1. Name of the currency to be mentioned e.g. US$, DM, etc.

MAITHON POWER LIMITED

PART 1
FORM- 5

Abstract of Admitted Capital Cost for the existing Projects

Name of the Company :	**Maithon Power Limited**
Name of the Power Station :	**1050 Maithon Project**

In Rs Lakh

Last date of order of Commission for the project	**Date (DD-MM-YYYY)**	13-12-2022
Reference of petition no. in which the above order was passed	**Petition no.**	4/RP/2022 in 408/GT/2020
Following details (whether admitted and /or considered) as on the last date of the period for which tariff is approved, in the above order by the Commission: (as on 31.03.2019)		
Capital cost	**(Rs. in lakh)**	479376.83
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)		0
Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)--as on 1.4.2014		0.00
Gross Normative Debt		3,35,563.78
Cumulative Repayment		1,64,902.56
Net Normative Debt		
Normative Equity		1,43,813.05
Cumulative Depreciation		1,64,902.56
Freehold land		17427.23

Note: gross Normative Debt has been derived from Capital Cost @ 70%

(Petitioner)

MAITHON POWER LIMITED

Financial Package upto COD - Form-6

Name of the Company: Maithon Power Limited
Name of the Power Station: 1050 MW Maithon Project
Project Cost as on COD1 (in Rs Crore) 386944.74
Date of Commercial Operation of the Station[2] 24.07.2012

(Rs. lakh)

	Financial Package as Approved		Financial Package as on COD (of Unit 1 & 2)		Financial Package as on COD (after consideration of Interest Income)		Financial Package as on COD (after consideration of Interest Income and apportioning the Normative Loan to other sources)	
	Currency and Amount		Currency and Amount		Currency and Amount		Currency and Amount	
1	2	3	4	5	6	7	8	9
Lenders								
Allahabad Bank	NOT APPLICABLE							
Bank of Baroda								
Canara Bank								
Central Bank of India								
Dena Bank								
Indian Overseas Bank								
Jammu & Kashmir Bank								
Oriental Bank of Commerce								
Punjab & Sindh Bank								
State Bank of Bikaner & Jaipur								
State Bank of Hyderabad								
State Bank of Mysore								
State Bank of Saurashtra								
Tamilnad Mercantile Bank								
UCO Bank								
United Bank of India								
State Bank of India								
Normative Loan								
Total Loan								
Equity								
Foreign		-						
Domestic		0.00		0.00		0.00		0.00
Total Equity		0.00		0.00		0.00		0.00
Project Cost as (in Rs Crore)		0.00		0.00		0.00		0.00
Debt : Equity Ratio		70:30		70:30		70:30		70:30

Petitioner

MAITHON POWER LIMITED

Details of Project Specific Loans - Form-7

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project

(Rs. Crore)

Particulars	Package1	Package2	Package3	Package4	Package5	Package6	Package7	Package8
1	2	3	4	5	6	7	8	9
Source of Loan[1]								
Currency[2]								
Amount of Loan sanctioned								
Amount of Gross Loan drawn upto 31.03.2014								
Interest Type[6]								
Fixed Interest Rate, if applicable								
Base Rate, if Floating Interest[7]								
Margin, if Floating Interest[8]								
Are there any Caps/Floor[9]								
If above is yes,specify caps/floor								
Moratorium Period[10]								
Moratorium effective from								
Repayment Period[11]								
Repayment effective from								
Repayment Frequency[12]								
Repayment Instalment[13,14]								
Base Exchange Rate[16]								
Are Foreign Currency Loan hedged?								
If above is yes, specify details [17]								
Repayment till 02.03.2014								
Outstanding as on 03.03.2014								

Submitted in Form-13

MAITHON POWER LIMITED

Repayment on 03.03.2014 thru 1st Refinancing Loan	



Details of Allocation of corporate loans to various projects						
Name of the Petitioner	**Maithon Power Limited**					**FORM- 8**
Name of the Generating Station	**1050 MW Maithon Project**					
Particulars	Package1	Package2	Package3	Package4	Package5	Remarks
1	2	3	4	5	6	7
Source of Loan1						
Currency2						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03.2019/COD 3,4,5,13,15						
Interest Type6						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest7						
Margin, if Floating Interest8						
Are there any Caps/Floor9						
If above is yes, specify caps/floor						
Moratorium Period10						
Moratorium effective from						
Repayment Period11						
Repayment effective from						
Repayment Frequency12						
Repayment Instalment13,14						
Base Exchange Rate16						
Are foreign currency loan hedged?						
If above is yes, specify details17						
Name of the Projects						
Project 1						
Project 2						
Project 3 and so on						

NOT APPLICABLE

Note:

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.
2. Currency refers to currency of loan such as US$, DM, Yen, Indian Rupee etc.
3. Details are to be submitted as on 31.03.2019 for existing assets and as on COD for the remaining assets.
4. Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.
5. If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.
6. Interest type means whether the interest is fixed or floating.
7. Base rate means the base as PLR, MCLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.
8. Margin means the points over and above the floating rate.
9. At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.
10. Moratorium period refers to the period during which loan servicing liability is not required.
11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

MAITHON POWER LIMITED

Details of Allocation of corporate loans to various projects

Name of the Petitioner	**Maithon Power Limited**	**FORM- 8**
Name of the Generating Station	**1050 MW Maithon Project**	

Particulars	Package1	Package2	Package3	Package4	Package5	Remarks
1	2	3	4	5	6	7

12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half-yearly, annual, etc.

13. Where there is more than one drawl/repayment for a loan, the date & amount of each drawl/repayment may also be given separately

14. If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.

15. In case of Foreign loan, date of each drawl & repayment along with exchange rate at that date may be given.

16. Base Exchange Rate means the exchange rate prevailing as on 31.03.2019 or COD, whichever is later

17. In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.

18. In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

19. At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately

20. At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

Petitioner

MAITHON POWER LIMITED

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
COD	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2019-20**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
1	Cost of Land and site	-						
2	Right of Use Land	-						
3	General Civil works-Boundary wall	163.27						
4	Railway System/Infrastructure Assets	-						
5	Lab instruments	2.30						
6	MAX DCS Version up-gradation(Xp) Unit 2	440.31						
7	Replacement of Battery	-						
8	Upgradation of CHP Main PLC	-						
9	DM Plant & Raw water PLC Upgradation	-						
10	Augmentation of Ash Handling Plant	633.04						
11	RCC Structure	-						
12	Spare GT	-7.74						
13	Infrastructure – Admin	26.95						
14	Infrastructure – IT	37.88						
15	Dust suppression system	38.02						
16	SWAS Silica Analyzer Upgradation	-						
17	Unified PI System	-						
18	Upgradation of AHP PLC	-						
19	Upgradation of Fire PLC	-						
20	End of Life (Decentralised AC System)	3.04			Refer Note-1			
21	Water Supply Township	-						
22	Track Hopper End Wall	-						
23	Flow Meter Installation (Water Meter)	-						
24	Track Hopper Ventilation System	-						
25	Yard Sprinkling System	-2.96						
26	Ceramic Lining of Coal Mill	-						
27	Reheater upgradation	201.30						
28	ESP Internals	-						
29	ESP Wear Resist Pipes	-						
30	Fabric Expansion Bellows	46.92						
31	Fire Hydrant System	-						
32	Distributed Control System (upgradation of LVS	-						
33	Network Equipment	-						
34	Main Turbine & TDBFP TSS	-						
35	DG Set	-						
36	Fire Tender	-						
37	Refurbishment of Economiser Coil	98.93						
	Total (A)	**1,681.28**	-	-	-			
B.	**Works beyond Original scope exluding add-cap due to Change in Law eligble for RoE at Wtd. Average rate of Interest**							
1	Boundary Wall under pass	-						
2	Road along boundary wall (Peripheral Road)	51.30						
3	Implementation of AGC	-						
4	Coal Pit Run-off Mechanized Drainage systems	10.92						
5	Mini-fire tender	-						
6	Economizer platform	-						
7	Soak Pit	-						
8	E-security system	35.64						
9	Safety (Platform in Coal Mill Area)	115.40						
10	Interconnection of Chutes from BCN 4A/B-	-			Refer Note-1			
11	Ash Wharf	-						
12	MVWS System	-						
13	Reliability (Structural strengthening-BTG,CHP)	-						
14	Field Hostel	1.02						
15	Fire door for MCC Room	-						
16	SCADA Upgradation	20.50						
17	Extension of Stores	215.25						
18	Ash Weighbridge (100 MT)	-						
19	Solar Panel	-						
20	Upgradation of protection system	-						
21	Testing Instruments	20.15						
22	Augmentation of Fire detection System	-0.43						
	Total (B)	**469.75**	-	-	-			
Total Add. Cap. Claimed (A+B)		**2,151.03**	-	-	-			

Note-1

* Details of Normative IDC on equity in excess of 30% in respect of Add Cap is separately provided as **ANNEXURE - P/35B & P/36B**

Details of Undischarged liability is provided in Form-S

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
COD	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2020-21**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
1	Cost of Land and site	126.77						
2	Right of Use Land	-						
3	General Civil works-Boundary wall	83.47						
4	Railway System/Infrastructure Assets	-						
5	Lab instruments	-						
6	MAX DCS Version up-gradation(Xp) Unit 2	-						
7	Replacement of Battery	-						
8	Upgradation of CHP Main PLC	-						
9	DM Plant & Raw water PLC Upgradation	-						
10	Augmentation of Ash Handling Plant	285.93						
11	RCC Structure	-						
12	Spare GT	-						
13	Infrastructure – Admin	13.64						
14	Infrastructure – IT	39.76						
15	Dust suppression system	-1.36						
16	SWAS Silica Analyzer Upgradation	-						
17	Unified PI System	47.97						
18	Upgradation of AHP PLC	-						
19	Upgradation of Fire PLC	-			Refer Note-1			
20	End of Life (Decentralised AC System)	6.72						
21	Water Supply Township	-						
22	Track Hopper End Wall	-						
23	Flow Meter Installation (Water Meter)	-						
24	Track Hopper Ventilation System	-						
25	Yard Sprinkling System	-						
26	Ceramic Lining of Coal Mill	-						
27	Reheater upgradation	986.99						
28	ESP Internals	-						
29	ESP Wear Resist Pipes	-						
30	Fabric Expansion Bellows	40.04						
31	Fire Hydrant System	-						
32	Distributed Control System (upgradation of LVS)	-						
33	Network Equipment	-						
34	Main Turbine & TDBFP TSS	-						
35	DG Set	-						
36	Fire Tender	-						
37	Refurbishment of Economiser Coil	-						
	Total (A)	**1,629.94**	**-**	**-**	**-**			
B.	**Works beyond Original scope exluding add-cap due to Change in Law eligble for RoE at Wtd. Average rate of Interest**							
1	Boundary Wall under pass	-						
2	Road along boundary wall (Peripheral Road)	27.66						
3	Implementation of AGC	49.91						
4	Coal Pit Run-off Mechanized Drainage systems	-						
5	Mini-fire tender	-						
6	Economizer platform	530.01						
7	Soak Pit	-						
8	E-security system	51.19						
9	Safety (Platform in Coal Mill Area)	37.60						
10	Interconnection of Chutes from BCN 4A/B-	-						
11	Ash Wharf	-			Refer Note-1			
12	MVWS System	-						
13	Reliability (Structural strengthening-BTG,CHP)	-						



PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
COD	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2020-21**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment		ACE Claimed (Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
14	Field Hostel	89.71						
15	Fire door for MCC Room	-						
16	SCADA Upgradation	-						
17	Extension of Stores	25.31						
18	Ash Weighbridge (100 MT)	-						
19	Solar Panel	-						
20	Upgradation of protection system	0.05						
21	Testing Instruments	-						
22	Augmentation of Fire detection System	-						
	Total (B)	**811.43**	-	-	-			
Total Add. Cap. Claimed (A+B)		**2,441.37**	-	-	-			

* Details of Normative IDC on equity in excess of 30% in respect of Add Cap is separately provided as **ANNEXURE - P/35B & P/36B**
Details of Undischarged liability is provided in Form-S

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
COD	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2021-22**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
1	Cost of Land and site	-			Refer Note-1			
2	Right of Use Land	325.25						
3	General Civil works-Boundary wall	-						
4	Railway System/Infrastructure Assets	65,184.48			9,384.70		*Amount pertain to actual IDC as per books. Normative IDC is claimed as per Note-1*	
5	Lab instruments	-						
6	MAX DCS Version up-gradation(Xp) Unit 2	-						
7	Replacement of Battery	243.95						
8	Upgradation of CHP Main PLC	116.09						
9	DM Plant & Raw water PLC Upgradation	-						
10	Augmentation of Ash Handling Plant	543.64						
11	RCC Structure	-						
12	Spare GT	-						
13	Infrastructure – Admin	8.19						
14	Infrastructure – IT	5.22						
15	Dust suppression system	0.46						
16	SWAS Silica Analyzer Upgradation	-						
17	Unified PI System	8.47						
18	Upgradation of AHP PLC	59.00						
19	Upgradation of Fire PLC	-						
20	End of Life (Decentralised AC System)	-			Refer Note-1			
21	Water Supply Township	-						
22	Track Hopper End Wall	-						
23	Flow Meter Installation (Water Meter)	-						
24	Track Hopper Ventilation System	-						
25	Yard Sprinkling System	-						
26	Ceramic Lining of Coal Mill	-						
27	Reheater upgradation	486.57						
28	ESP Internals	293.42						
29	ESP Wear Resist Pipes	108.93						
30	Fabric Expansion Bellows	-						
31	Fire Hydrant System	87.75						
32	Distributed Control System (upgradation of LVS)	-						
33	Network Equipment	18.36						
34	Main Turbine & TDBFP TSS	-						
35	DG Set	-						
36	Fire Tender	-						
37	Refurbishment of Economiser Coil	0.94						
	Total (A)	**67,490.74**	**-**	**-**	**9,384.70**			
B.	**Works beyond Original scope exluding add-cap due to Change in Law eligble for RoE at Wtd. Average rate of Interest**							
1	Boundary Wall under pass	13.66						
2	Road along boundary wall (Peripheral Road)	-						
3	Implementation of AGC	-						
4	Coal Pit Run-off Mechanized Drainage systems	-						
5	Mini-fire tender	-						
6	Economizer platform	490.99						
7	Soak Pit	-						
8	E-security system	318.35						
9	Safety (Platform in Coal Mill Area)	84.76						
10	Interconnection of Chutes from BCN 4A/B-	-			Refer Note-1			
11	Ash Wharf	-						
12	MVWS System	-						

MAITHON POWER LIMITED

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
COD	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2021-22**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment		ACE Claimed (Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
13	Reliability (Structural strengthening-BTG,CHP)	-						
14	Field Hostel	-						
15	Fire door for MCC Room	-						
16	SCADA Upgradation	-						
17	Extension of Stores	9.78						
18	Ash Weighbridge (100 MT)	-						
19	Solar Panel	-						
20	Upgradation of protection system	-						
21	Testing Instruments	-						
22	Augmentation of Fire detection System	16.58						
	Total (B)	**934.12**	-	-	-			
Total Add. Cap. Claimed (A+B)		**68,424.86**	-	-	**9,384.70**			

* Details of Normative IDC on equity in excess of 30% in respect of Add Cap is separately provided as **ANNEXURE - P/35B & P/36B**
Details of Undischarged liability is provided in Form-S

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
COD	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2022-23**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
1	Cost of Land and site	-						
2	Right of Use Land	-						
3	General Civil works-Boundary wall	-						
4	Railway System/Infrastructure Assets	52.79						
5	Lab instruments	31.60						
6	MAX DCS Version up-gradation(Xp) Unit 2	-						
7	Replacement of Battery	696.43						
8	Upgradation of CHP Main PLC	7.49						
9	DM Plant & Rawwater PLC Upgradation	68.48						
10	Augmentation of Ash Handling Plant	305.30						
11	RCC Structure	2.36						
12	Spare GT	-						
13	Infrastructure – Admin	45.59						
14	Infrastructure – IT	63.48						
15	Dust suppression system	3.80						
16	SWAS Silica Analyzer Upgradation	28.39						
17	Unified Pl System	4.74						
18	Upgradation of AHP PLC	2.37						
19	Upgradation of Fire PLC	-			Refer			
20	End of Life (Decentralised AC System)	0.46			Note-1			
21	Water Supply Township	-						
22	Track Hopper End Wall	-						
23	Flow Meter Installation (Water Meter)	64.45						
24	Track Hopper Ventilation System	-						
25	Yard Sprinkling System	-						
26	Ceramic Lining of Coal Mill	70.24						
27	Reheater upgradation	500.37						
28	ESP Internals	342.33						
29	ESP Wear Resist Pipes	38.41						
30	Fabric Expansion Bellows	-						
31	Fire Hydrant System	115.44						
32	Distributed Control System (upgradation of LVS)	-						
33	Network Equipment	4.21						
34	Main Turbine & TDBFP TSS	98.76						
35	DG Set	-						
36	Fire Tender	-						
37	Refurbishment of Economiser Coil	-						
	Total (A)	**2,547.50**	-	-	-			
B.	**Works beyond Original scope exluding add-cap due to Change in Law eligble for RoE at Wtd. Average rate of Interest**							
1	Boundary Wall under pass	104.51						
2	Road along boundary wall (Peripheral Road)	98.62						
3	Implementation of AGC	0.00						
4	Coal Pit Run-off Mechanized Drainage systems	0.00						
5	Mini-fire tender	24.97						
6	Economizer platform	159.29						
7	Soak Pit	0.00						
8	E-security system	132.44						
9	Safety (Platform in Coal Mill Area)	17.62						
10	Interconnection of Chutes from BCN 4A/B-	49.98						
11	Ash Wharf	11.81			Refer			
12	MVWS System	0.00			Note-1			
13	Reliability (Structural strengthening-BTG,CHP)	0.00						
14	Field Hostel	0.00						
15	Fire door for MCC Room	0.00						
16	SCADA Upgradation	0.00						
17	Extension of Stores	0.00						
18	Ash Weighbridge (100 MT)	0.00						
19	Solar Panel	0.00						
20	Upgradation of protection system	0.00						
21	Testing Instruments	0.00						
22	Augmentation of Fire detection System	7.57						
	Total (B)	**606.81**	-	-	-			

MAITHON POWER LIMITED

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
COD	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2022-23**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
Total Add. Cap. Claimed (A+B)		**3,154.32**	-	-	-			

* Details of Normative IDC on equity in excess of 30% in respect of Add Cap is separately provided as **ANNEXURE - P/35B & P/36B**
Details of Undischarged liability is provided in Form-S

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2023-24

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**							
1	Cost of Land and site	-						
2	Right of Use Land	4,869.00						
3	General Civil works-Boundary wall	-						
4	Railway System/Infrastructure Assets	-						
5	Lab instruments	121.93						
6	MAX DCS Version up-gradation(Xp) Unit 2	-						
7	Replacement of Battery	412.44						
8	Upgradation of CHP Main PLC	-						
9	DM Plant & Raw water PLC Upgradation	7.66						
10	Augmentation of Ash Handling Plant	125.66						
11	RCC Structure	48.43						
12	Spare GT	-						
13	Infrastructure – Admin	52.94						
14	Infrastructure – IT	42.89						
15	Dust suppression system	-						
16	SWAS Silica Analyzer Upgradation	21.59						
17	Unified PI System	-						
18	Upgradation of AHP PLC	-			Refer			
19	Upgradation of Fire PLC	59.47			Note-1			
20	End of Life (Decentralised AC System)	70.94						
21	Water Supply Township	66.41						
22	Track Hopper End Wall	98.93						
23	Flow Meter Installation (Water Meter)	5.32						
24	Track Hopper Ventilation System	204.39						
25	Yard Sprinkling System	-						
26	Ceramic Lining of Coal Mill	249.72						
27	Reheater upgradation	505.47						
28	ESP Internals	170.61						
29	ESP Wear Resist Pipes	2.52						
30	Fabric Expansion Bellows	-						
31	Fire Hydrant System	99.34						
32	Distributed Control System (upgradation of LVS)	160.03						
33	Network Equipment	51.87						
34	Main Turbine & TDBFP TSS	141.20						
35	DG Set	38.71						
36	Fire Tender	101.36						
37	Refurbishment of Economiser Coil	-						
	Total (A)	**7,728.82**	-	-	-			
B.	**Works beyond Original scope exluding add-cap due to Change in Law eligble for RoE at Wtd. Average rate of Interest**							
1	Boundary Wall under pass	-						
2	Road along boundary wall (Peripheral Road)	344.49						
3	Implementation of AGC	30.00						

MAITHON POWER LIMITED

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
COD	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2023-24**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment		ACE Claimed (Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	**2**	**3**	**4**	**5= (3-4)**	**6**	**7**	**8**	**9**
4	Coal Pit Run-off Mechanized Drainage systems	-			Refer Note-1			
5	Mini-fire tender	-						
6	Economizer platform	280.98						
7	Soak Pit	15.00						
8	E-security system	90.92						
9	Safety (Platform in Coal Mill Area)	5.86						
10	Interconnection of Chutes from BCN 4A/B-	-						
11	Ash Wharf	190.01						
12	MVWS System	97.28						
13	Reliability (Structural strengthening-BTG,CHP)	443.92						
14	Field Hostel	-						
15	Fire door for MCC Room	19.84						
16	SCADA Upgradation	-						
17	Extension of Stores	90.72						
18	Ash Weighbridge (100 MT)	64.03						
19	Solar Panel	38.40						
20	Upgradation of protection system	-						
21	Testing Instruments	-						
22	Augmentation of Fire detection System	-						
	Total (B)	**1,711.46**	**-**	**-**	**-**			
Total Add. Cap. Claimed (A+B)		**9,440.28**	**-**	**-**	**-**			

* Details of Normative IDC on equity in excess of 30% in respect of Add Cap is separately provided as **ANNEXURE - P/35B & P/36B**
Details of Undischarged liability is provided in Form-S

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- 9A
Additional Form

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner: Maithon Power Limited	Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project	1050 Maithon Project
COD:	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2019-24 (Summary)

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual) Excluding Normative IDC						Regulation	Regulation under which claimed/Justification	Admitted Cost by the Commission, if any
		2019-20	2020-21	2021-22	2022-23	2023-24	Total			
1	2	3	4	5	6	7			8	9
A.	**Works under Original scope, Change in Law etc. eligble for RoE at Normal Rate**									
1	Cost of Land and site	-	126.77	-	-	-	**126.77**	25(1)(a) and 25(1)(e)		3881.64
2	Right of Use Land	-	-	325.25	-	4,869.00	**5,194.25**	25(1)(a) and 25(1)(e) & 76		
3	General Civil works-Boundary wall	163.27	83.47	-	-	-	**246.74**	25(1)(a) & 76		160.00
4	Railway System/Infrastructure Assets	-	-	65,184.48	52.79	-	**65,237.27**	25(1)(a) and 25(1)(e)		71367.55
5	Lab instruments	2.30	-	-	31.60	121.93	**155.83**	25(2)(c)		154.03
7	MAX DCS Version up-gradation(Xp) Unit 2	440.31	-	-	-	-	**440.31**	25(2)(c) and 25(2)(d)		450.00
8	Replacement of Battery	-	-	243.95	696.43	412.44	**1,352.83**	25(2)(c)		250.00
9	Upgradation of CHP Main PLC	-	-	116.09	7.49	-	**123.59**	25(2)(c)		60.00
10	DM Plant & Raw water PLC Upgradation	-	-	-	68.48	7.66	**76.14**	25(2)(c)		100.00
11	Augmentation of Ash Handling Plant	633.04	285.93	543.64	305.30	125.66	**1,893.57**	25(1)(a) & 25(2)(b)		1916.80
12	RCC Structure	-	-	-	2.36	48.43	**50.79**	25(2)(b)		
13	Spare GT	- 7.74	-	-	-	-	**- 7.74**	25(2)(a)		0.00
14	Infrastructure – Admin	26.95	13.64	8.19	45.59	52.94	**147.30**	25(2)(a) & 76		
15	Infrastructure – IT	37.88	39.76	5.22	63.48	42.89	**189.24**	25(2)(a) & 76		
16	Dust suppression system	38.02	- 1.36	0.46	3.80	-	**40.92**	25(1)(b)		
17	SWAS Silica Analyzer Upgradation	-	-	-	28.39	21.59	**49.98**	25(2)(c)		
18	Unified PI System	-	47.97	8.47	4.74	-	**61.18**	25(1)(b)		
19	Upgradation of AHP PLC	-	-	59.00	2.37	-	**61.37**	25(2)(c)		
20	Upgradation of Fire PLC	-	-	-	-	59.47	**59.47**	25(2)(c)		
21	End of Life (Decentralised AC System)	3.04	6.72	-	0.46	70.94	**81.16**	25(2)(a) and 25(2)(c)	Pl refer Form-9 of respective Financial Years	
22	Water Supply Township	-	-	-	-	66.41	**66.41**	25(1)(b)		
23	Track Hopper End Wall	-	-	-	-	98.93	**98.93**	25(1)(b)&(e)		
24	Flow Meter Installation (Water Meter)	-	-	-	64.45	5.32	**69.77**	25(1)(b)		
25	Track Hopper Ventilation System	-	-	-	-	204.39	**204.39**	25(1)(b)&(e)		
26	Yard Sprinkling System	- 2.96	-	-	-	-	**- 2.96**	25(1)(b)		
27	Ceramic Lining of Coal Mill	-	-	-	70.24	249.72	**319.96**	25(2)(a)&(b)		
28	Reheater upgradation	201.30	986.99	486.57	500.37	505.47	**2,680.69**	25(2)(a)&(b)		
29	ESP Internals	-	-	293.42	342.33	170.61	**806.36**	25(1)(b) and 25(2)(a)		
30	ESP Wear Resist Pipes	-	-	108.93	38.41	2.52	**149.87**	25(1)(b) and 25(2)(a)		
31	Fabric Expansion Bellows	46.92	40.04	-	-	-	**86.96**	25(2)(a)&(b),76		
32	Fire Hydrant System	-	-	87.75	115.44	99.34	**302.52**	25(1)(b) & 26(1)(d)		
33	Distributed Control System (upgradation of LVS)	-	-	-	-	160.03	**160.03**	25(2)(a)&(c)		
34	Network Equipment	-	-	18.36	4.21	51.87	**74.45**	25(2)(c)		
35	Main Turbine & TDBFP TSS	-	-	-	98.76	141.20	**239.96**	25(2)(c)		
36	DG Set	-	-	-	-	38.71	**38.71**	25(1)(b) & 25(2)(c)		
37	Fire Tender	-	-	-	-	101.36	**101.36**	25(1)(b)		
38	Refurbishment of Economiser Coil	98.93	-	0.94	-	-	**99.87**	25(2)(a) and 25(2)(b)		
	Approved*	1,231.19	496.17	66,413.42	1,164.46	5,585.11	**74,890.36**			
	New Expenditure*	450.09	1,133.77	1,077.31	1,383.04	2,143.70	**6,187.92**			
	Total(A)	**1,681.28**	**1,629.94**	**67,490.74**	**2,547.50**	**7,728.82**	**81,078.27**			**78,340.02**
B.	**Works beyond Original scope exluding add-cap due to Change in Law eligble for RoE at Wtd. Average rate of Interest**									
1	Boundary Wall under pass	-	-	13.66	104.51	-	**118.17**	26(1)(d)		100.00

MAITHON POWER LIMITED

PART-I
FORM- 9A
Additional Form

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner: Maithon Power Limited	**Maithon Power Limited**
Name of the Generating Station: 1050 MW Maithon Project	**1050 Maithon Project**
COD:	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2019-24 (Summary)**

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual) Excluding Normative IDC						Regulation	Regulation under which claimed/Justification	Admitted Cost by the Commission, if any
		2019-20	2020-21	2021-22	2022-23	2023-24	Total			
1	2	3	4	5	6	7			8	9
2	Road along boundary wall (Peripheral Road)	51.30	27.66	-	98.62	344.49	**522.08**	26(1)(d)		450.00
3	Implementation of AGC	-	49.91	-	-	30.00	**79.91**	26(1)(a)		80.00
4	Coal Pit Run-off Mechanized Drainage systems	10.92	-	-	-	-	**10.92**	26(1)(c)		399.53
5	Mini-fire tender	-	-	-	24.97	-	**24.97**	26(1)(d)		25.00
6	Economizer platform	-	530.01	490.99	159.29	280.98	**1,461.26**	26(1)(d)		350.00
7	Soak Pit	-	-	-	-	15.00	**15.00**	26(1)(a) & 26(1)(b)		40.00
8	E-security system	35.64	51.19	318.35	132.44	90.92	**628.55**	26(1)(d)		919.69
9	Safety (Platform in Coal Mill Area)	115.40	37.60	84.76	17.62	5.86	**261.24**	26(1)(d)		
10	Interconnection of Chutes from BCN 4A/B-	-	-	-	49.98	-	**49.98**	26(1)(c)&76		
11	Ash Wharf	-	-	-	11.81	190.01	**201.82**	26(1)(b) & 26(1)(e)		
12	MVWS System	-	-	-	-	97.28	**97.28**	26(1)(b) & 26(1)(d)		
13	Reliability (Structural strengthening-BTG,CHP)	-	-	-	-	443.92	**443.92**	26(1)(d)		
14	Field Hostel	1.02	89.71	-	-	-	**90.73**	25(1)(b) & 26(1)(c)		
15	Fire door for MCC Room	-	-	-	-	19.84	**19.84**	26(1)(b)		
16	SCADA Upgradation	20.50	-	-	-	-	**20.50**	26(1)(b)		
17	Extension of Stores	215.25	25.31	9.78	-	90.72	**341.06**	26(1)(b) and 26(1)(d)		
18	Ash Weighbridge (100 MT)	-	-	-	-	64.03	**64.03**	26(1)(e)		
19	Solar Panel	-	-	-	-	38.40	**38.40**	26(1)(b)		
20	Upgradation of protection system	-	0.05	-	-	-	**0.05**	26(1)(b)		
21	Testing Instruments	20.15	-	-	-	-	**20.15**	26(1)(b)		
22	Augmentation of Fire detection System	0.43	-	16.58	7.57	-	**23.72**	26(1)(b) and 26(1)(d)		
	Approved*	97.87	658.77	823.00	519.83	761.39	**2,860.85**			
	New Expenditure*	371.89	152.67	111.13	86.98	950.07	**1,672.73**			
	Total (B)	**469.75**	**811.43**	**934.12**	**606.81**	**1,711.46**	**4,533.59**			**2,364.22**
Total Add. Cap. Claimed (A+B)		**2,151.03**	**2,441.37**	**68,424.86**	**3,154.32**	**9,440.28**	**85,611.86**			**80,704.24**
		-	-	9,006.91	-	-	9,006.91			
	* *Excluding Normative IDC*	1681.28	1629.94	76497.64	2547.50	7728.82	90085.18			
		2,151.03	2,441.37	77,431.76	3,154.32	9,440.28	94,618.77			

(Petitioner)

Sr. No	ACE	Capitalisation (Accrual Basis)					Closing Undischarged Liability-Capitalisation				
		2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24
B. Additional Capital Expenditure within original scope after Cut-off Date											
1	Cost of Land and site	-	126.77	-	-	-	-	-	-	-	-
2	Right of Use Land	-	-	325.25	-	4,869.00	-	-	1.18	-	4,648.45
3	General Civil works-Boundary wall	163.27	83.47	-	-	-	20.42	-	-	-	-
4	Railway package with IDC	-	-	65,184.48	52.79	-	-	-	1,680.24	1,122.59	1,115.18
5	Laboratory Instruments	2.30	-	-	31.60	121.93	-	-	0.13	-	8.09
6	Refurbishment of Economiser Coil	98.93	-	0.94	-	-	-	-	-	-	-
7	Spare GT	-7.74	-	-	-	-	-	-	- .	-	-
8	MAX DCS Version up-gradation(Xp) Unit 2	440.31	-	-	-	-	-	-	-	-	-3.96
9	Replacement of Battery	-	-	243.95	696.43	412.44	-	-	61.18	-	33.59
10	Upgradation of CHP Main PLC	-	-	116.09	7.49	-	-	-	67.02	-	-
11	UP-gradation of DMP PLC & Raw water PLC Upgradation	-	-	-	68.48	7.66	-	-	-	-	-
12	Augmentation of Ash Handling Plant	633.04	285.93	543.64	305.30	125.66	10.53	18.17	13.76	59.23	6.38
13	RCC Structure	-	-	-	2.36	48.43	-	-	-	-	-
14	Infrastructure – Admin	26.95	13.64	8.19	45.59	52.94	6.61	5.54	2.64	-	2.56
15	Infrastructure – IT	37.88	39.76	5.22	63.48	42.89	-	-	-	-	-
16	Ash pond area dust suppression system	38.02	-1.36	0.46	3.80	-	-	3.80	3.78	-	-
17	SWAS Silica Analyzer Upgradation	-	-	-	28.39	21.59	-	-	-	-	-
18	Unified PI System	-	47.97	8.47	4.74	-	-	-	-	-	-
19	Upgradation of AHP PLC	-	-	59.00	2.37	-	-	-	-	-	-
20	Upgradation of Fire PLC	-	-	-	-	59.47	-	-	-	-	0.77
21	Replacement of Air Conditioners	3.04	6.72	-	0.46	70.94	-	-	-	-	-
22	Water Supply Township	-	-	-	-	66.41	-	-	-	-	6.09
23	Track Hopper End Wall	-	-	-	-	98.93	-	-	-	-	-
24	Water Meter Installation	-	-	-	64.45	5.32	-	-	-	-	-
25	Track Hopper Ventilation System	-	-	-	-	204.39	-	-	-	-	18.97
26	Yard Sprinkling System	-2.96	-	-	-	-	-	-	-	-	-
27	Ceramic Lining of Coal Mill	-	-	-	70.24	249.72	-	-	-	-	60.75
28	Reheater upgradation	201.30	986.99	486.57	500.37	505.47	-	-	1.84	140.91	174.39
29	ESP Internals	-	-	293.42	342.33	170.61	-	-	28.86	0.29	65.19
30	ESP Wear Resist Pipes	-	-	108.93	38.41	2.52	-	-	-	-	0.01
31	Fabric Expansion Bellows	46.92	40.04	-	-	-	-	-	-	-	-
32	Fire Hydrant System	-	-	87.75	115.44	99.34	-	-	-	-	67.65
33	LVS for DCS	-	-	-	-	160.03	-	-	-	-	9.30
34	Network Equipment	-	-	18.36	4.21	51.87	-	-	-	-	-
35	Main Turbine & TDBFP TSS	-	-	-	98.76	141.20	-	-	-	2.48	67.95
36	DG Set	-	-	-	-	38.71	-	-	-	-	-
37	Fire Tender	-	-	-	-	101.36	-	-	-	-	63.09
C. Additional Capital Expenditure beyond original scope											
1	Boundary Wall under pass	-	-	13.66	104.51	-	-	-	-	-	-
2	Road along boundary wall	51.30	27.66	-	98.62	344.49	2.49	-	-	6.44	13.73
3	Implementation of AGC	-	49.91	-	-	30.00	-	4.23	-	-	26.79
4	Coal Pit Run-off Mechanized Drainage systems	10.92	-	-	-	-	-	-	-	-	-
5	Mini-fire tender	-	-	-	24.97	-	-	-	-	24.95	-
6	Safety (Platform in Coal Mill Area)	115.40	37.60	84.76	17.62	5.86	-	2.86	19.71	-	-
7	Economizer platform	-	530.01	490.99	159.29	280.98	-	95.13	71.91	23.45	23.13



		Capitalisation (Accrual Basis)					Closing Undischarged Liability-Capitalisation				
Sr. No	ACE	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24
8	Soak Pit	-	-	-	-	15.00	-	-	-	-	-
9	Interconnection of Chutes from BCN 4A/B-	-	-	-	49.98	-	-	-	-	-	-
10	Ash Wharf	-	-	-	11.81	190.01	-	-	-	7.20	85.31
11	HVWS System	-	-	-	-	97.28	-	-	-	-	7.98
12	Structural Strengthening of BTG, crusher house and CHP	-	-	-	-	443.92	-	-	-	-	105.94
13	Field Hostel	1.02	89.71	-	-	-	-	-	-	-	-
14	Fire door for MCC Room	-	-	-	-	19.84	-	-	-	-	5.76
15	SCADA Upgradation	20.50	-	-	-	-	-	-	-	-	-
16	Store Renovation	215.25	25.31	9.78	-	90.72	36.50	6.53	-	1.17	-
17	Ash Weigh Bridge	-	-	-	-	64.03	-	-	-	-	-
18	Solar Panel	-	-	-	-	38.40	-	-	-	-	-
19	Upgradation of protection system	-	0.05	-	-	-	-	-	-	-	-
20	Testing Instrument	20.15	-	-	-	-	-	-	-	-	-
21	Augmentation of Fire detection System	-0.43	-	16.58	7.57	-	-	-	8.47	-	-
22	E-security system	35.64	51.19	318.35	132.44	90.92	20.71	2.12	41.56	7.57	11.61
		2,151.03	2,441.37	68,424.86	3,154.32	9,440.28	97.26	138.37	2,002.28	1,396.28	6,624.68



PART-I
FORM- 10

Name of the Petitioner				**Maithon Power Limited**						
Name of the Generating Station				**1050 Maithon Project**						
Date of Commercial Operation				**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**						
							Amount in Rs Lakh			
Financial Year (Starting from COD)1	**Actual**					**Admitted**				
	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
1		3	4	5	6	7	8	9	10	11
Amount capitalised in Work/	2151.03	2441.37	68424.86	3154.32	9440.28	6387.97	71068.18	1437.08	992.90	822.11
Financing Details										
Loan-1	1505.72	1708.96	47897.40	2208.02	6608.20	4471.58	49747.73	1005.96	695.03	575.48
Loan-2										
Loan-3 and so on										
Total Loan	1505.72	1708.96	47897.40	2208.02	6608.20	4471.58	49747.73	1005.96	695.03	575.48
Equity	645.31	732.41	20527.46	946.29	2832.08	1916.39	21320.45	431.12	297.87	246.63
Internal Resources										
Others (Pl. specify)										
Total	2151.03	2441.37	68424.86	3154.32	9440.28	6387.97	71068.18	1437.08	992.90	822.11

(Petitioner)

MAITHON POWER LIMITED

Calculation of Depreciation Rate

Name of the Petitioner: Malthon Power Limited
Name of the Generating Station: 1050 MW Maithon Project

Part-1
Form 11

(Rs. In Lakhs)

S.NO.	Name of Asset	Gross Block as on 31.03.2019	Gross Block as on 31.03.2020	Gross Block as on 31.03.2021	Gross Block as on 31.03.2022	Gross Block as on 31.03.2023	Gross Block as on 31.03.2024	CERC Dep. Rate	Depreciation as on 31.03.2020	Cumulative Depreciation as on 31.03.2021	Cumulative Depreciation as on 31.03.2022	Cumulative Depreciation as on 31.03.2023	Cumulative Depreciation as on 31.03.2024
1	2	3	4	5	6	7	8	9	10 = 9x(Col3+Col4)/2	11 = 9x(Col4+Col5)/2	12 = 9x(Col5+Col6)/2	13 = 9x(Col6+Col7)/2	14 = 9x(Col7+Col8)/2
A	**Land under full ownership**	17,513.13	17,513.13	17,639.91	17,639.91	17,639.91	17,639.91	0.00%	-	-	-	-	-
B	**Land under lease**												
(a)*	forinvestment in the land	9,877.83	9,877.83	9,877.83	10,529.94	10,529.94	15,399.00	3.34%	329.92	329.92	340.81	351.70	433.01
(b)	For cost ofclearingthe site	-	-	-	-	-	-	3.34%	-	-	-	-	-
(c)	Land forreservoirin case of hydro generating station	-	-	-	-	-	-	3.34%	-	-	-	-	-
C	**Assets purchased new**												
a.	Pl & Machineryin generatingstations												
(i)	Hydro electric	-	-	-	-	-	-	5.28%	-	-	-	-	-
(ii)	Steam electric NHRB & waste heat recovery boilers	3,95,327.87	3,97,325.22	3,99,973.59	4,03,524.07	4,56,059.89	4,63,078.90	5.28%	20,926.04	21,048.69	21,212.34	22,693.02	24,265.26
(iii)	Dieselelectric andgas plant	-	-	-	-	-	-	5.28%	-	-	-	-	-
b.	Cooling towers & circulating water systems	10,070.52	10,070.52	10,070.52	10,075.26	10,075.26	10,865.42	5.28%	531.72	531.72	531.85	531.97	552.83
c.	Hydraulic works forming part of the Hydro-generating stations												
(i)	Dams, Spillways, Weirs, Canals, Reinforced concrete flumesand siphons	-	-	-	-	-	-	5.28%	-	-	-	-	-
(ii)	Reinforced concrete pipelinesand surge tanks,steel pipielines, sluice gates, steel surge tanks, hydraulic control valves and hydraulic works	-	-	-	-	-	-	5.28%	-	-	-	-	-
d.	Building & Civil Engineering works												
(i)*	Officesand showrooms	14,933.09	14,996.17	15,083.20	15,085.12	17,121.66	17,463.26	3.34%	499.82	502.33	503.81	537.85	577.57
(ii)	Containing thermo-electric generating plant	24,344.76	24,342.83	24,342.83	24,396.99	24,398.96	27,918.96	3.34%	813.08	813.05	813.96	814.89	873.71
(iii)	Containinghydro-electric generatingplant	-	-	-	-	-	-	3.34%	-	-	-	-	-
(iv)*	Temporaryerections such as wooden structures	-	-	-	-	-	-	100.00%	-	-	-	-	-
(v)	Roads other than Kutcha roads	18.37	25.36	25.36	25.36	25.36	-	3.34%	0.73	0.85	0.85	0.85	0.42
(vi)	Others	766.10	1,042.98	1,179.51	54,145.74	8,441.06	5,340.19	3.34%	30.21	37.12	923.93	1,045.20	230.15
e.	Transformers, Kiosk, sub-station equipment & other fixed apparatus (including plant												
(i)*	Transformers including foundations having rating of 100 KVA and over	5,709.26	5,725.25	5,725.25	8,195.13	8,195.13	6,546.62	5.28%	301.87	302.29	367.50	432.70	389.18
(ii)	Others	-	-	-	-	-	-	5.28%	-	-	-	-	-
f.*	Switchgear includingcable connections	13,544.66	13,579.40	13,579.40	13,656.23	13,656.23	15,641.63	5.28%	716.08	716.99	719.02	721.05	773.46
g.	Lightning arrestor												
(i)	Station type	-	-	-	-	-	-	5.28%	-	-	-	-	-
(ii)	Pole type	-	-	-	-	-	-	5.28%	-	-	-	-	-
(iii)	Synchronous condenser	-	-	-	-	-	-	5.28%	-	-	-	-	-
h.	Batteries			-	230.66	925.10	1,016.45	5.28%	-	-	6.09	30.51	51.26
(i)*	Undergroundcableincludingjointboxesand disconnected boxes	-	-	-	3.79	3.79	-	5.28%	-	-	0.10	0.20	0.10
(ii)	Cableduct system	-	-	-	-	-	-	5.28%	-	-	-	-	-
i.	Overhead linesincludingcable support												
(i)*	Lineson fabricated steeloperatingat terminal voltageshigher than66 KV	-	-	-	45.75	45.75	-	5.28%	-	-	1.21	2.42	1.21
(ii)*	Lines on steel supports operating at terminal voltages higher than 13.2 KV but not exceeding 66 KV	-	-	-	4,739.09	-	-	5.28%	-	-	125.11	125.11	-
(iii)	Lines on steel on reinforced concrete support	-	-	-	-	-	-	5.28%	-	-	-	-	-
(iv)	Lineson treated wood support	-	-	-	-	-	-	5.28%	-	-	-	-	-
j.	Meters	-	-	-	-	-	-	5.28%	-	-	-	-	-
k.	Selfpropelled vehicles	288.38	272.03	267.24	267.24	339.54	518.88	9.50%	26.62	25.62	25.39	28.82	40.78
l.	Air Conditioning Plants				-	-	-						
(i)	Static	-	-	-	-	-	-	5.28%	-	-	-	-	-
(ii)	Portable	5.84	10.13	23.95	23.95	26.80	93.53	9.50%	0.76	1.62	2.28	2.41	5.72
m.(i)	Office furniture and furnishing	778.10	810.32	827.40	775.91	803.68	776.99	6.33%	50.27	51.83	50.74	49.99	50.03
(ii)	Officeequipment	684.37	693.61	712.25	713.07	738.87	659.47	6.33%	43.61	44.50	45.11	45.95	44.26
(iii)	Internal wiring including fittings and apparatus	579.64	579.64	580.64	579.64	579.64	579.64	6.33%	36.69	36.72	36.72	36.69	36.69
(iv)	Strret Lightfiitings	-	-	-	-	-	-	5.28%	-	-	-	-	-
n.	Apparatus let on hire				-	-	-						
(i)	Other than motors	-	-	-	-	-	-	9.50%	-	-	-	-	-



Calculation of Depreciation Rate:

Name of the Petitioner: Malthon Power Limited
Name of the Generating Station: 1050 MW Malthon Project

Part-1
Form 11

(Rs.In Lakhs)

S.NO.	Name of Asset	Gross Block as on 31.03.2019	Gross Block as on 31.03.2020	Gross Block as on 31.03.2021	Gross Block as on 31.03.2022	Gross Block as on 31.03.2023	Gross Block as on 31.03.2024	CERC Dep. Rate	Depreciation as on 31.03.2020	Cumulative Depreciation as on 31.03.2021	Cumulative Depreciation as on 31.03.2022	Cumulative Depreciation as on 31.03.2023	Cumulative Depreciation as on 31.03.2024
1	2	3	4	5	6	7	8	9	10 = 9x(Col3+Col4)/2	11 = 9x(Col4+Col5)/2	12 = 9x(Col5+Col6)/2	13 = 9x(Col6+Col7)/2	14 = 9x(Col7+Col8)/2
(ii)	Motors	-	-	-	-	-	-	6.33%	-	-	-	-	-
o.	Communication equipment		-	-	-	-	-						
(i)	Radio and high frequency carrier system	-	-	-	-	-	-	6.33%	-	-	-	-	-
(ii)*	Telephone lines and telephones	10.19	10.19	10.19	5,981.13	6,047.31	474.91	6.33%	0.64	0.64	189.63	380.70	206.43
(iii)	Fibre Optic	-	-	-	-	-	-	6.33%	-	-	-	-	-
p.	I, T Equipment including software	324.54	314.36	357.18	469.19	504.29	493.86	15.00%	47.92	50.37	61.98	73.01	74.86
q.	Any other assets not covered above	396.97	491.86	502.19	508.68	617.47	908.99	5.28%	23.47	26.24	26.69	29.73	40.30
	Total	**4,95,173.61**	**4,97,680.83**	**5,00,778.44**	**5,71,611.85**	**5,76,775.65**	**5,85,416.62**		**24,379.46**	**24,520.50**	**25,985.10**	**27,934.79**	**28,647.23**
	GFA Excluding Freehold Land and Railway	4,77,660.48	4,80,167.70	4,83,138.53	5,53,971.94	5,59,135.74	5,67,776.72						
	Weighted Average Rate of Depreciation (%)								**5.09%**	**5.09%**	**5.01%**	**5.02%**	**5.08%**

Land under full ownership excludes addition of Rs.12351.21312 to arrive at the fair value as per Ind As and same has not been considered for the purpose of GFA as per GAAP

*** Excluded Railway Assets since Capitalisation is Claimed in FY 22 once it is put to use regardless of Capitalisation in Books**

Railway Asset		**2,860.92**	**5,385.60**	**66,267.36**
B(a)	Land under lease			326.86
C(i)(i)	Lines on fabricated steel operating at terminal voltages higher than 66 KV		45.75	45.75
C i(ii)	Lineson steelsupportsoperatingat terminalvoltages higherthan 13.2 KVbutnot exceeding66 KV			4,739.09
C(d)(vi)	Building & Civil Engineering works (Others)	2,860.92	2,860.92	52,951.26
C(e)(i)	Transformers including foundations having rating of 100 KV Aand over		2,466.67	2,466.67
C(f)	Switchgear including cable connections		8.48	8.48
C(h)(i)	Underground cableincludingjoint boxes and disconnected boxes		3.79	3.79
C(o)(ii)	Communication equipment (Telephone lines and telephones)		-	5,725.46

Note: 1.Name of the Assets should conform to the description of the assets mentioned in Depreciation Schedule appended to the Notification.

(Petitioner)

MALTHON POWER LIMITED

PART-I
FORM- 12

Statement of Depreciation

Name of the Petitioner		**Maithon Power Limited**					
Name of the Generating Station		**1050 MW Maithon Project**					
							(Rs. Lakh)
Sl. No.	**Particulars**	**2018-19***	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	Opening Capital Cost	475895.66	479376.83	481467.64	483906.52	559419.75	562538.93
2	Closing Capital Cost	479376.83	481467.64	483906.52	559419.75	562538.93	565278.70
3	**Average Capital Cost**	**477636.25**	**480422.24**	**482687.08**	**521663.13**	**560979.34**	**563908.81**
4	Freehold land	17427.23	17513.13	17576.52	17639.91	17639.91	17639.91
5	Depreciable value @ 90%	414188.11	416618.19	418599.50	453620.90	489005.49	491642.02
6	Rate of depreciation*	5.0600%	5.09%	5.09%	5.01%	5.02%	5.0842%
7	Balance useful life at the beginning of the period	18.42	17.42	16.42	15.42	14.42	13.42
7	Balance depreciable value	273459.77	251864.18	230299.36	241649.90	251808.09	227482.98
8	**Depreciation for the period**	**24174.21**	**23564.71**	**23678.33**	**25256.89**	**27271.52**	**27773.39**
9	**Depreciation annualised**	**24174.21**	**23564.71**	**23678.33**	**25256.89**	**27271.52**	**27773.39**
10	Cumulative depreciation at the end of the period(without adjustment)	164902.56	188318.72	211978.47	237227.90	264468.92	291932.43
11	Less: Cumulative depreciation adjustment on account of undischarged liabilities deducted as on 1.4.2009/ Station COD						
12	Add: Cumulative depreciation adjustment on account of liab. disc. *	-					
13	Deletion during the year		47.39	17.01	67.07	657.31	1,509.63
14	Less: Cumulative depreciation adjustment on account of de-capitalisation	148.55	18.58	7.47	30.50	309.88	781.53
15	Net Cumulative depreciation at the end of the period after adjustments	1,64,754.01	1,88,300.14	2,11,971.00	2,37,197.40	2,64,159.04	2,91,150.90

1. In case of details of FERV and AAD, give information for the applicable period.
* Depreciation rate based on assets as on 31.03.2014

* Additional Data

Petitioner

MAITHON POWER LIMITED

Calculation of Weighted Average Rate of Interest on Actual Loans					
Name of the Petitioner	Maithon Power Limited			**PART 1 FORM- 13**	
Name of the Generating Station	1050 Maithon Project				
					(Amount in Rs. lakh)
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
NCD I issued in 2015 (2nd Refinancing)					
Gross loan - Opening	50000.00	50000.00	50000.00	50000.00	50000.00
Cumulative repayments of Loans upto previous year	-	-	-	16500.00	33000.00
Net loan - Opening	50000.00	50000.00	50000.00	33500.00	17000.00
Add: Drawl(s) during the Year	-	-	-	-	-
Less: Repayment (s) of Loans during the year	-	-	16500.00	16500.00	17000.00
Net loan - Closing	50000.00	50000.00	33500.00	17000.00	-
Average Net Loan	50000.00	50000.00	41750.00	25250.00	8500.00
Rate of Interest on Loan on annual basis					
Interest on loan	4660.95	3971.94	3370.09	2323.10	1057.86
NCD II issued in 2017 (3rd Refinancing)					
Gross loan - Opening	50000.00	50000.00	50000.00	50000.00	50000.00
Cumulative repayments of Loans upto previous year	-	-	-	-	10000.00
Net loan - Opening	50000.00	50000.00	50000.00	50000.00	40000.00
Add: Drawl(s) during the Year	-	-	-	-	-
Less: Repayment (s) of Loans during the year	-	-	-	10000.00	10000.00
Net loan - Closing	50000.00	50000.00	50000.00	40000.00	30000.00
Average Net Loan	50000.00	50000.00	50000.00	45000.00	35000.00
Rate of Interest on Loan on annual basis					
Interest on loan	4010.96	3989.04	4000.00	3888.22	3094.79
SBI - ₹ 1304 Cr - (4th Refinancing)					
Gross loan - Opening	114238.00	114238.00	-	-	-
Cumulative repayments of Loans upto previous year	18814.00	32924.50	-	-	-
Net loan - Opening	95424.00	81313.50	-	-	-
Add: Drawl(s) during the Year	-	-	-	-	-
Less: Repayment (s) of Loans during the year	14110.50	81313.50	-	-	-
Net loan - Closing	81313.50	-	-	-	-
Average Net Loan	88368.75	40656.75	-	-	-
Rate of Interest on Loan on annual basis					
Interest on loan	7843.22	4227.67	-	-	-
Axis - ₹ 225 Cr (5th Refinancing)					
Gross loan - Opening	-	-	22500.00	22500.00	22500.00
Cumulative repayments of Loans upto previous year	-	-	478.72	2393.62	4308.51
Net loan - Opening	-	-	22021.28	20106.38	18191.49
Add: Drawl(s) during the Year	-	22500.00	-	-	-
Less: Repayment (s) of Loans during the year	-	478.72	1914.89	1914.89	1914.89
Net loan - Closing	-	22021.28	20106.38	18191.49	16276.60
Average Net Loan	-	11010.64	21063.83	19148.94	17234.04
Rate of Interest on Loan on annual basis					
Interest on loan	-	425.24	1592.30	1500.35	1562.76

MAITHON POWER LIMITED

Calculation of Weighted Average Rate of Interest on Actual Loans					
Name of the Petitioner	Maithon Power Limited			**PART 1 FORM- 13**	
Name of the Generating Station	1050 Maithon Project				
					(Amount in Rs. lakh)
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
NCD III issued in 2020 (5th Refinancing)					
Gross loan - Opening	-	-	19900.00	19900.00	19900.00
Cumulative repayments of Loans upto previous year	-	-	-	-	-
Net loan - Opening	-	-	19900.00	19900.00	19900.00
Add: Drawl(s) during the Year	-	19900.00	-	-	-
Less: Repayment (s) of Loans during the year	-	-	-	-	3980.00
Net loan - Closing	-	19900.00	19900.00	19900.00	15920.00
Average Net Loan	-	9950.00	19900.00	19900.00	17910.00
Rate of Interest on Loan on annual basis					
Interest on loan	-	333.94	1243.75	1243.75	1179.69
Railway Loan - Axis ₹ 350 Cr					
Gross loan - Opening	-	25000.00	35000.00	41000.00	41000.00
Cumulative repayments of Loans upto previous year	-	-	9750.00	11170.45	14011.33
Net loan - Opening	-	25000.00	25250.00	29829.55	26988.67
Add: Drawl(s) during the Year	25000.00	10000.00	6000.00	-	-
Less: Repayment (s) of Loans during the year	-	9750.00	1420.45	2840.88	2840.88
Net loan - Closing	25000.00	25250.00	29829.55	26988.67	24147.79
Average Net Loan	12500.00	25125.00	27539.78	28409.11	25568.23
Rate of Interest on Loan on annual basis					
Interest on loan	196.77	2296.74	2154.27	2253.89	2371.06
Railway Loan - UBI ₹ 150 Cr					
Gross loan - Opening	-	-	9750.00	13750.00	13750.00
Cumulative repayments of Loans upto previous year	-	-	-	625.00	1875.00
Net loan - Opening	-	-	9750.00	13125.00	11875.00
Add: Drawl(s) during the Year	-	9750.00	4000.00	-	-
Less: Repayment (s) of Loans during the year	-	-	625.00	1250.00	1250.00
Net loan - Closing	-	9750.00	13125.00	11875.00	10625.00
Average Net Loan	-	4875.00	11437.50	12500.00	11250.00
Rate of Interest on Loan on annual basis					
Interest on loan	-	178.30	898.00	992.20	1039.47

Total Loan	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Gross loan - Opening	214238.00	239238.00	187150.00	197150.00	197150.00
Cumulative repayments of Loans upto previous year	18814.00	32924.50	10228.72	30689.06	63194.84
Net loan - Opening	195424.00	206313.50	176921.28	166460.94	133955.16
Add: Drawl(s) during the Year	25000.00	62150.00	10000.00	-	-
Less: Repayment (s) of Loans during the year	14110.50	91542.22	20460.34	32505.78	36985.78
Net loan - Closing	206313.50	176921.28	166460.94	133955.16	96969.38
Average Net Loan	200868.75	191617.39	171691.11	150208.05	115462.27
Interest on loan at average	8.32%	8.05%	7.72%	8.12%	8.93%
Total Interest Paid	16711.89	15422.88	13258.41	12201.51	10305.63

Petitioner

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-Coal

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2018			Nov-2018			Oct-2018		
			Domestic Coal	E-Auction Coal	Imported Coal	Domestic Coal	E-Auction Coal	Imported Coal	Domestic Coal	E-Auction Coal	Imported Coal
A)	OPENING QUANTITY										
1	Opening Quantity of Coal/Lignite	(MMT)		0.26	0.01		0.112	0.014		0.077	
2	Value of Stock	(MMT)			1,18,63,11,183			55,35,16,665			31,30,72,500
B)	QUANTITY										
3	Coal supplied by Coal/Lignite Company (1+2)	(MMT)	0.340	0.153	0.036	0.38	0.11	0.01	0.292	0.06	0.05
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)									
5	Coal supplied by Coal/Lignite Company (3+4)	(MMT)	0.3397	0.1533	0.0355	0.3779	0.1059	0.0107	0.2916	0.0630	0.0524
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(MMT)	0.0027	0.0012	0.0001	0.0030	0.0008	0.00002	0.0023	0.0005	0.0001
7	Net coal / Lignite Supplied (3-4)	(MMT)	0.3370	0.1521	0.0354	0.3748	0.1050	0.0107	0.2893	0.0625	0.0523
C)	PRICE										
8	Amount charged by the Coal/Lignite Company	(Rs.)	1,00,20,02,665	82,85,79,693	23,93,96,072	1,09,08,15,621	51,40,25,910	7,29,31,403	84,60,89,247	30,68,74,005	35,10,44,342
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)	(1,82,09,124.11)								
10	Handling, Sampling and such other similar charges	(Rs.)			3,72,29,737			3,46,00,247			3,29,17,405.84
11	**Total amount Charged (8+9+10)**	**(Rs.)**			**2,08,89,99,042.94**			**1,71,23,73,180.12**			**1,53,69,24,999.19**
D)	TRANSPORATION										
12	Transportation charges by rail/ship/road transport	(Rs.)			42,32,52,564			41,02,11,400			25,80,15,834
	By Rail				4,98,71,133			5,76,46,407			3,29,50,982
	By Road				37,33,81,430			35,25,64,993			22,50,64,852
	By Ship										
	Total										

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-Coal

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2018			Nov-2018			Oct-2018		
			Domestic Coal	E-Auction Coal	Imported Coal	Domestic Coal	E-Auction Coal	Imported Coal	Domestic Coal	E-Auction Coal	Imported Coal
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)									
14	Demurrage Charges, if any	(Rs.)									
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs/Ton									
16	**Total Transportation Charges (12+13+14+15)**		**42,32,52,563.73**			**41,02,11,399.79**			**25,80,15,834.14**		
17	**Total amount Charged for coal/lignite supplied including Transportation (11+16)**	**(MT)**	**2,51,22,51,606.67**			**2,12,25,84,579.91**			**1,79,49,40,833.32**		
E)	TOTAL COST										
18	**Landed cost of coal/ Lignite (2+17)/(1+7)**	**(Rs./Ton)**	**4,634.65**			**4,338.22**			**4,376.96**		
19	Blending Ratio (Domestic/Imported)	Domestic(%)/Imported (%)	94%		6%	96%		4%	88%		12%
20	Weighted average cost of coal/ Lignite for preceding three months										
F)	QUALITY										
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	5,062			5,096			5,104		
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	5,057			5,062			5,096		
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			4,200			4,200			
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			4,200			4,200			4,200
25	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)	**5,008**			**5,033**			**5,001**		
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	4,118.36			3,962.68			3,893.45		

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-Coal

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2018			Nov-2018			Oct-2018		
			Domestic Coal	E-Auction Coal	Imported Coal	Domestic Coal	E-Auction Coal	Imported Coal	Domestic Coal	E-Auction Coal	Imported Coal
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)		4,078.93			4,154.66			3,977.92	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			4,133.82			4,153.48			
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			4,147.25			4,106.94			4,153.48
30	**Weighted average GCV of coal/ Lignite as received**	**(kCal/Kg)**	**4,095.62**			**4,119.20**			**3,983.42**		

Petitioner

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2019		Nov-2019		Oct-2019	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
A)	OPENING QUANTITY							
1	Opening Quantity of Coal/Lignite	(MMT)	0.248	-	0.189	-	0.29	-
2	Value of Stock	(MMT)	1,00,47,64,402		76,13,63,414		1,17,62,76,353	
B)	QUANTITY							
3	Coal supplied by Coal/Lignite Company (1+2)	(MMT)	0.353	-	0.39	-	0.244	-
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)						
5	Coal supplied by Coal/Lignite Company (3+4)	(MMT)	0.3534	-	0.3918	-	0.2436	-
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(MMT)	0.0028	-	0.0031	-	0.0019	-
7	Net coal / Lignite Supplied (3-4)	(MMT)	0.3505	-	0.3887	-	0.2417	-
C)	PRICE							
8	Amount charged by the Coal/Lignite Company	(Rs.)	1,05,09,65,823	-	1,17,18,78,768	-	74,00,46,273	-
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)	-	-	-	-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)	2,95,77,058.12		2,55,84,975		2,48,42,808	
11	**Total amount Charged (8+9+10)**	**(Rs.)**	**1,08,05,42,881.29**		**1,19,74,63,743.71**		**76,48,89,081.07**	
D)	TRANSPORATION							
12	Transportation charges by rail/ship/road transport	(Rs.)		33,73,34,671		38,02,92,851		18,82,01,707
	By Rail		10,69,20,019		13,40,71,524		6,09,82,455	

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2019		Nov-2019		Oct-2019	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
	By Road		23,04,14,652		24,62,21,326		12,72,19,253	
	By Ship							-
	Total			**33,73,34,671**		**38,02,92,851**		**18,82,01,707**
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-	-	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs/Ton	-	-	-	-	-	-
16	**Total Transportation Charges (12+13+14+15)**			**33,73,34,671**		**38,02,92,851**		**18,82,01,707**
17	**Total amount Charged for coal/lignite supplied including Transportation (11+16)**	**(MT)**		**1,41,78,77,552.34**		**1,57,77,56,594.21**		**95,30,90,788.46**
E)	TOTAL COST							
18	**Landed cost of coal/ Lignite (2+17)/(1+7)**	**(Rs./Ton)**	**4,047.36**		**4,050.81**		**4,033.02**	
19	Blending Ratio (Domestic/Imported)	Domestic(%)/Imported (%)	100%	0%	100%	0%	100%	0%
20	Weighted average cost of coal/ Lignite for preceding three months		4,065.86		**4,100.48**		**4,166.63**	
F)	QUALITY							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	4,886		4,749		4,818	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	4,710		4,886		4,749	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)		-				

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2019		Nov-2019		Oct-2019	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)		-				
25	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)		**4,782**		**4,841**		**4,786**
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	3,943.42		3,946		3,989.64	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	3,993.83		3,942		3,893.67	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)	-	-	-	-	-	-
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)		-		-		-
30	**Weighted average GCV of coal/ Lignite as received**	**(kCal/ Kg)**	**3,973.04**		**3,943.41**		**3,945.52**	

Petitioner

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2020		Nov-2020		Oct-2020	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
A)	OPENING QUANTITY							
1	Opening Quantity of Coal/Lignite	(MMT)	0.183	-	0.200	-	0.22	-
2	Value of Stock	(MMT)	66,57,42,663		73,26,80,730		84,16,65,942	
B)	QUANTITY							
3	Coal supplied by Coal/Lignite Company (1+2)	(MMT)	0.383	-	0.37	-	0.322	-
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)	-	-	-	-	-	-
5	Coal supplied by Coal/Lignite Company (3+4)	(MMT)	0.3827	-	0.3705	-	0.3221	-
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(MMT)	0.0031	-	0.0030	-	0.0026	-
7	Net coal / Lignite Supplied (3-4)	(MMT)	0.3796	-	0.3675	-	0.3195	-
C)	PRICE							
8	Amount charged by the Coal/Lignite Company	(Rs.)	97,88,99,952		93,01,64,431		77,67,93,511	
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)		-	76,40,826.00	-	(1,06,13,657.00)	-
10	Handling, Sampling and such other similar charges	(Rs.)	3,27,39,367.02		3,20,62,383		2,88,87,332	
11	**Total amount Charged (8+9+10)**	**(Rs.)**	**1,01,16,39,318.92**		**96,98,67,639.60**		**79,50,67,185.75**	
D)	TRANSPORATION							
12	Transportation charges by rail/ship/road transport	(Rs.)	39,88,45,053		36,44,57,899		33,96,18,055	
	By Rail		19,60,21,000		20,35,29,386		21,29,09,800	

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2020		Nov-2020		Oct-2020	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
	By Road		20,28,24,053		16,09,28,513		12,67,08,256	
	By Ship							-
	Total			**39,88,45,053**		**36,44,57,899**		**33,96,18,055**
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-	-	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs/Ton	-	-	-	-	-	-
16	**Total Transportation Charges (12+13+14+15)**			**39,88,45,053**		**36,44,57,899**		**33,96,18,055**
17	**Total amount Charged for coal/lignite supplied including Transportation (11+16)**	**(MT)**		**1,41,04,84,372.02**		**1,33,43,25,538.77**		**1,13,46,85,240.97**
E)	TOTAL COST							
18	**Landed cost of coal/ Lignite (2+17)/(1+7)**	**(Rs./Ton)**	**3,691.15**		**3,640.16**		**3,657.55**	
19	Blending Ratio (Domestic/Imported)	Domestic(%)/Imported (%)	100%	0%	100%	0%	100%	0%
20	Weighted average cost of coal/ Lignite for preceding three months		3,703.62		3,798.62		3,912.34	
F)	QUALITY							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	4,634		4,587		4,705	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	4,758		4,634		4,587	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)		-				

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2020		Nov-2020		Oct-2020	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)		-				
25	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)	**4,718**		**4,618**		**4,635**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	3,792.62		3,767		3,801.18	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	3,925.62		3,807		3,742.72	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)	-	-	-	-	-	-
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)		-		-		-
30	**Weighted average GCV of coal/ Lignite as received**	**(kCal/ Kg)**	**3,882.61**		**3,792.69**		**3,766.50**	

Petitioner

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2021		Nov-2021		Oct-2021	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
A)	OPENING QUANTITY							
1	Opening Quantity of Coal/Lignite	(MMT)	0.086	-	0.057	-	0.02	-
2	Value of Stock	(MMT)	37,38,52,376		24,83,08,678		9,52,03,071	
B)	QUANTITY							
3	Coal supplied by Coal/Lignite Company (1+2)	(MMT)	0.388	-	0.38	-	0.420	-
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)	-	-	-	-	-	-
5	Coal supplied by Coal/Lignite Company (3+4)	(MMT)	0.3881	-	0.3837	-	0.4202	-
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(MMT)	0.0031	-	0.0031	-	0.0034	-
7	Net coal / Lignite Supplied (3-4)	(MMT)	0.3850	-	0.3806	-	0.4169	-
C)	PRICE							
8	Amount charged by the Coal/Lignite Company	(Rs.)	1,22,19,54,135		1,22,84,10,830		1,38,67,73,923	
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)		-	-	-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)	4,07,18,018.21		3,56,90,312		3,67,80,651	
11	**Total amount Charged (8+9+10)**	**(Rs.)**	**1,26,26,72,152.74**		**1,26,41,01,142.16**		**1,42,35,54,574.41**	
D)	TRANSPORATION							
12	Transportation charges by rail/ship/road transport	(Rs.)	34,09,41,068		38,89,40,492		40,27,86,307	
	By Rail		67,87,142		14,61,590		45,34,056	
	By Road		33,41,53,926		38,74,78,902		39,82,52,251	

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2021		Nov-2021		Oct-2021	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
	By Ship							-
	Total			34,09,41,068		38,89,40,492		40,27,86,307
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-	-	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs/Ton	-	-	-	-	-	-
16	**Total Transportation Charges (12+13+14+15)**			**34,09,41,068**		**38,89,40,492**		**40,27,86,307**
17	**Total amount Charged for coal/lignite supplied including Transportation (11+16)**	**(MT)**		**1,60,36,13,220.95**		**1,65,30,41,634.09**		**1,82,63,40,881.60**
E)	TOTAL COST							
18	**Landed cost of coal/ Lignite (2+17)/(1+7)**	**(Rs./Ton)**	**4,198.20**		**4,346.80**		**4,370.87**	
19	Blending Ratio (Domestic/Imported)	Domestic(%)/Imported (%)	100%	0%	100%	0%	100%	0%
20	Weighted average cost of coal/ Lignite for preceding three months		4,301.73		4,134.09		3,855.10	
F)	QUALITY							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	4,969		5,020		4,970	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	4,933		4,969		5,020	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)		-				
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)		-				

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2021		Nov-2021		Oct-2021	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
25	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)	**4,939**		**4,976**		**5,018**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	4,148.31		4,034		3,944.54	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	4,133.49		4,165		4,038.90	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)	-	-	-	-	-	-
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)		-		-		-
30	**Weighted average GCV of coal/ Lignite as received**	**(kCal/Kg)**	**4,136.18**		**4,148.43**		**4,034.05**	

Petitioner

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2022		Nov-2022		Oct-2022	
			Domestic Coal	Imported Coa	Domestic Coal	Imported Coa	Domestic Coal	Imported Coal
A)	OPENING QUANTITY							
1	Opening Quantity of Coal/Lignite	(MMT)	0.189	-	0.159	-	0.20	-
2	Value of Stock	(MMT)	83,86,85,864		70,36,72,910		90,30,43,189	
B)	QUANTITY							
3	Coal supplied by Coal/Lignite Company (1+2)	(MMT)	0.439	-	0.43	-	0.316	-
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)	-	-	-	-	-	-
5	Coal supplied by Coal/Lignite Company (3+4)	(MMT)	0.4390	-	0.4341	-	0.3160	-
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(MMT)	0.0035	-	0.0035	-	0.0025	-
7	Net coal / Lignite Supplied (3-4)	(MMT)	0.4355	-	0.4306	-	0.3135	-
C)	PRICE							
8	Amount charged by the Coal/Lignite Company	(Rs.)	1,61,12,04,100		1,53,35,14,094		1,09,40,02,496	
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)	-	-	(79,06,422.20)	-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)	4,85,09,636.55		4,05,86,802		3,59,33,896	
11	**Total amount Charged (8+9+10)**	**(Rs.)**	**1,65,97,13,736.59**		**1,56,61,94,474.59**		**1,12,99,36,392.26**	
D)	TRANSPORATION							

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2022		Nov-2022		Oct-2022	
			Domestic Coal	Imported Coa	Domestic Coal	Imported Coa	Domestic Coal	Imported Coal
12	Transportation charges by rail/ship/road transport	(Rs.)	31,55,95,972		32,82,98,897		24,95,84,549	
	By Rail		13,21,62,453		12,99,95,892		13,04,66,538	
	By Road		18,34,33,519		19,83,03,005		11,91,18,012	
	By Ship							-
	Total		**31,55,95,972**		**32,82,98,897**		**24,95,84,549**	
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-	-	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs/Ton	-	-	-	-	-	-
16	**Total Transportation Charges (12+13+14+15)**		**31,55,95,972**		**32,82,98,897**		**24,95,84,549**	
17	**Total amount Charged for coal/lignite supplied including Transportation (11+16)**	**(MT)**	**1,97,53,09,708.57**		**1,89,44,93,371.45**		**1,37,95,20,941.66**	
E)	TOTAL COST							
18	**Landed cost of coal/ Lignite (2+17)/(1+7)**	**(Rs./Ton)**	**4,504.21**		**4,408.46**		**4,433.64**	
19	Blending Ratio (Domestic/Imported)	Domestic(%)/Imported (%)	100%	0%	100%	0%	100%	0%
20	Weighted average cost of coal/ Lignite for preceding three months		4,442.37		4,477.54		4,449.14	
F)	QUALITY							
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	4,878		4,947		5,016	

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2022		Nov-2022		Oct-2022	
			Domestic Coal	Imported Coa	Domestic Coal	Imported Coa	Domestic Coal	mported Coal
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	5,032		4,878		4,947	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)		-				
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)		-				
25	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)		**4,986**		**4,897**		**4,974**
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	4,173.90		4,192		4,126.50	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	4,207.99		4,167		4,234.23	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)	-	-	-	-	-	-
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)		-		-		-
30	**Weighted average GCV of coal/ Lignite as received**	**(kCal/Kg)**	**4,197.72**		**4,173.86**		**4,192.30**	

Petitioner

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company **Maithon Power Limited**

Name of the Power Station **1050 MW Maithon Project**

Sl. No.	Month	Unit	Dec-2018	Nov-2018	Oct-2018
			LDO	LDO	LDO
A)	OPENING QUANTITY				
1	Opening Quantity of Oil	(KL)	**943.40**	**942.65**	**960.20**
2	Value of Stock	(Rs.)	**4,45,38,881**	**4,26,25,754**	**4,25,66,613**
B)	QUANTITY				
3	Quantity of Oil supplied by Oil Company	(KL)	158.62	294.51	135.29
4	Adjustment (+/-) in quantity supplied made by Oil Company	(KL)	-	-	-
5	Oil supplied by Oil Company (3+4)	(KL)	158.62	294.51	135.29
6	Normative Transit & Handling Losses (For Oil based Projects)	(KL)			
7	Net Oil Supplied (3-4)	(KL)	**158.62**	**294.51**	**135.29**
C)	PRICE				
8	Amount charged by the Oil Company	(Rs.)	72,92,295	1,65,63,800	70,91,479
9	Adjustment (+/-) in amount charged made by Oil Company	(Rs.)	-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)			
11	**Total amount Charged (8+9+10)**	**(Rs.)**	**72,92,295**	**1,65,63,800**	**70,91,479**
D)	TRANSPORATION				
12	Transportation charges by rail/ship/road transport	(Rs.)	3,06,944.73	5,48,946.55	2,57,388.49
	By Rail				
	By Road				
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs.)	-	-	-
16	Total Transportation Charges (12+13+14+15)	(Rs.)	3,06,945	5,48,947	2,57,388

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2018	Nov-2018	Oct-2018
			LDO	LDO	LDO
17	**Total amount Charged for Oil supplied including Transportation (11+16)**	**(Rs.)**	**75,99,240**	**1,71,12,746**	**73,48,868**
E)	TOTAL COST				
18	**Landed cost of Oil (2+17)/(1+7)**	**(Rs./ml)**	**0.047000**	**0.048000**	**0.046000**
19	Blending Ratio (Domestic/Imported)	Rs/Ton			
20	Weighted average cost of Oil/ Lignite for preceding three months				
F)	QUALITY				
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	(kCal/L)	9,100	9,100	9,100
22	GCV of Domestic Oil supplied as per bill of Oil Company	(kCal/L)	9,100	9,100	9,100
23	GCV of Imported Oil of the opening stock as per bill Oil Company	(kCal/L)			
24	GCV of Imported Oil supplied as per bill Oil Company	(kCal/L)			
25	Weighted average GCV of Oil as Billed	(kCal/L)	**9,100**	**9,100**	**9,100**
26	GCV of Domestic Oil of the opening stock as received at Station	(kCal/L)	**9,100**	**9,100**	**9,100**
27	GCV of Domestic Oil supplied as received at Station	(kCal/L)	**9,100**	**9,100**	**9,100**
28	GCV of Imported Oil of opening stock as received at Station	(kCal/L)			
29	GCV of Imported Oil supplied as received at Station	(kCal/L)			
30	**Weighted average GCV of Oil as Received Station**	**(kCal/L)**	**9,100**	**9,100**	**9,100**



Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company **Maithon Power Limited**
Name of the Power Station **1050 MW Maithon Project**

Sl. No.	Month	Unit	Dec-2019	Nov-2019	Oct-2019
			LDO	LDO	LDO
A)	OPENING QUANTITY				
1	Opening Quantity of Oil	(KL)	**960.60**	**972.16**	**1,026.59**
2	Value of Stock	(Rs.)	**4,36,38,076**	**4,46,12,262**	**4,74,46,547**
B)	QUANTITY				
3	Quantity of Oil supplied by Oil Company	(KL)	123.73	76.62	152.74
4	Adjustment (+/-) in quantity supplied made by Oil Company	(KL)	-	-	-
5	Oil supplied by Oil Company (3+4)	(KL)	123.73	76.62	152.74
6	Normative Transit & Handling Losses (For Oil based Projects)	(KL)			
7	Net Oil Supplied (3-4)	(KL)	**123.73**	**76.62**	**152.74**
C)	PRICE				
8	Amount charged by the Oil Company	(Rs.)	43,80,463	31,44,018	72,70,363
9	Adjustment (+/-) in amount charged made by Oil Company	(Rs.)	-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)			
11	**Total amount Charged (8+9+10)**	**(Rs.)**	**43,80,463**	**31,44,018**	**72,70,363**
D)	TRANSPORATION				
12	Transportation charges by rail/ship/road transport	(Rs.)	1,67,943	1,44,844	3,08,550
	By Rail				
	By Road				
	By Ship				
	Total				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs.)	-	-	-
16	Total Transportation Charges (12+13+14+15)	(Rs.)	1,67,943	1,44,844	3,08,550
17	**Total amount Charged for Oil supplied including Transportation (11+16)**	**(Rs.)**	**45,48,406**	**32,88,862**	**75,78,913**
E)	TOTAL COST				

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of

Name of the Company **Maithon Power Limited**

Name of the Power Station **1050 MW Maithon Project**

Sl. No.	Month	Unit	Dec-2019	Nov-2019	Oct-2019
			LDO	LDO	LDO
18	**Landed cost of Oil (2+17)/(1+7)**	**(Rs./ml)**	**0.044439**	**0.045673**	**0.046658**
19	Blending Ratio (Domestic/Imported)	Rs/Ton			
20	Weighted average cost of Oil/ Lignite for preceding three months				
F)	QUALITY				
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	(kCal/L)			
22	GCV of Domestic Oil supplied as per bill of Oil Company	(kCal/L)			
23	GCV of Imported Oil of the opening stock as per bill Oil Company	(kCal/L)			
24	GCV of Imported Oil supplied as per bill Oil Company	(kCal/L)			
25	Weighted average GCV of Oil as Billed	(kCal/L)			
26	GCV of Domestic Oil of the opening stock as received at Station	(kCal/L)			
27	GCV of Domestic Oil supplied as received at Station	(kCal/L)			
28	GCV of Imported Oil of opening stock as received at Station	(kCal/L)			
29	GCV of Imported Oil supplied as received at Station	(kCal/L)			
30	**Weighted average GCV of Oil as Received Station**	**(kCal/L)**	**9,100**	**9,100**	**9,100**

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-SFO

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2020	Nov-2020	Oct-2020
			LDO	LDO	LDO
A)	OPENING QUANTITY				
1	Opening Quantity of Oil	(KL)	**914.89**	**965.95**	**1,058.51**
2	Value of Stock	(Rs.)	**3,39,04,387**	**3,59,09,210**	**3,96,09,308**
B)	QUANTITY				
3	Quantity of Oil supplied by Oil Company	(KL)	-	24.00	159.54
4	Adjustment (+/-) in quantity supplied made by Oil Company	(KL)	-	-	-
5	Oil supplied by Oil Company (3+4)	(KL)	-	24.00	159.54
6	Normative Transit & Handling Losses (For Oil based Projects)	(KL)			
7	Net Oil Supplied (3-4)	(KL)	-	**24.00**	**159.54**
C)	PRICE				
8	Amount charged by the Oil Company	(Rs.)	-	9,22,933	59,85,365
9	Adjustment (+/-) in amount charged made by Oil Company	(Rs.)	-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)			
11	**Total amount Charged (8+9+10)**	**(Rs.)**	-	**9,22,933**	**59,85,365**
D)	TRANSPORATION				
12	Transportation charges by rail/ship/road transport	(Rs.)	-	18,900	1,25,559
	By Rail				
	By Road				
	By Ship				
	Total				

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-SFO

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2020	Nov-2020	Oct-2020
			LDO	LDO	LDO
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs.)	-	-	-
16	Total Transportation Charges (12+13+14+15)	(Rs.)	-	18,900	1,25,559
17	**Total amount Charged for Oil supplied including Transportation (11+16)**	**(Rs.)**	-	**9,41,833**	**61,10,924**
E)	TOTAL COST				
18	**Landed cost of Oil (2+17)/(1+7)**	**(Rs./ml)**	**0.037059**	**0.037225**	**0.037536**
19	Blending Ratio (Domestic/Imported)	Rs/Ton			
20	Weighted average cost of Oil/ Lignite for preceding three months				
F)	QUALITY				
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	(kCal/L)			
22	GCV of Domestic Oil supplied as per bill of Oil Company	(kCal/L)			
23	GCV of Imported Oil of the opening stock as per bill Oil Company	(kCal/L)			
24	GCV of Imported Oil supplied as per bill Oil Company	(kCal/L)			
25	Weighted average GCV of Oil as Billed	(kCal/L)			
26	GCV of Domestic Oil of the opening stock as received at Station	(kCal/L)			
27	GCV of Domestic Oil supplied as received at Station	(kCal/L)			
28	GCV of Imported Oil of opening stock as received at Station	(kCal/L)			
29	GCV of Imported Oil supplied as received at Station	(kCal/L)			

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-SFO

	Name of the Company	Maithon Power Limited			
	Name of the Power Station	1050 MW Maithon Project			
Sl. No.	Month	Unit	Dec-2020	Nov-2020	Oct-2020
			LDO	LDO	LDO
30	Weighted average GCV of Oil as Received Station	(kCal/L)	9,100	9,100	9,100



Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-SFO

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2021	Nov-2021	Oct-2021
			LDO	LDO	LDO
A)	OPENING QUANTITY				
1	Opening Quantity of Oil	(KL)	**937.65**	**886.29**	**955.15**
2	Value of Stock	(Rs.)	**4,31,68,142**	**4,01,86,065**	**4,16,83,973**
B)	QUANTITY				
3	Quantity of Oil supplied by Oil Company	(KL)	-	51.36	-
4	Adjustment (+/-) in quantity supplied made by Oil Company	(KL)	-	-	-
5	Oil supplied by Oil Company (3+4)	(KL)	-	51.36	-
6	Normative Transit & Handling Losses (For Oil based Projects)	(KL)			
7	Net Oil Supplied (3-4)	(KL)	-	**51.36**	-
C)	PRICE				
8	Amount charged by the Oil Company	(Rs.)	-	29,41,710	17,54,984
9	Adjustment (+/-) in amount charged made by Oil Company	(Rs.)	-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)			
11	**Total amount Charged (8+9+10)**	**(Rs.)**	-	**29,41,710**	**17,54,984**
D)	TRANSPORATION				
12	Transportation charges by rail/ship/road transport	(Rs.)	-	40,367	-
	By Rail				
	By Road				
	By Ship				

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-SFO

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2021	Nov-2021	Oct-2021
			LDO	LDO	LDO
	Total				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs.)	-	-	-
16	Total Transportation Charges (12+13+14+15)	(Rs.)	-	40,367	-
17	**Total amount Charged for Oil supplied including Transportation (11+16)**	**(Rs.)**	-	**29,82,077**	**17,54,984**
E)	TOTAL COST				
18	**Landed cost of Oil (2+17)/(1+7)**	**(Rs./ml)**	**0.046039**	**0.046039**	**0.045479**
19	Blending Ratio (Domestic/Imported)	Rs/Ton			
20	Weighted average cost of Oil/ Lignite for preceding three months				
F)	QUALITY				
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	(kCal/L)			
22	GCV of Domestic Oil supplied as per bill of Oil Company	(kCal/L)			
23	GCV of Imported Oil of the opening stock as per bill Oil Company	(kCal/L)			
24	GCV of Imported Oil supplied as per bill Oil Company	(kCal/L)			
25	Weighted average GCV of Oil as Billed	(kCal/L)			
26	GCV of Domestic Oil of the opening stock as received at Station	(kCal/L)			
27	GCV of Domestic Oil supplied as received at Station	(kCal/L)			
28	GCV of Imported Oil of opening stock as received at Station	(kCal/L)			

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-SFO

	Name of the Company	**Maithon Power Limited**			
	Name of the Power Station	**1050 MW Maithon Project**			
Sl. No.	**Month**	**Unit**	**Dec-2021**	**Nov-2021**	**Oct-2021**
			LDO	**LDO**	**LDO**
29	GCV of Imported Oil supplied as received at Station	(kCal/L)			
30	**Weighted average GCV of Oil as Received Station**	**(kCal/L)**	**9,100**	**9,100**	**9,100**



Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-SFO

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2022	Nov-2022	Oct-2022
			LDO	LDO	LDO
A)	OPENING QUANTITY				
1	Opening Quantity of Oil	(KL)	**956.72**	**801.90**	**880.66**
2	Value of Stock	(Rs.)	**6,24,64,715**	**5,13,56,951**	**5,72,65,705**
B)	QUANTITY				
3	Quantity of Oil supplied by Oil Company	(KL)	20.00	154.82	-
4	Adjustment (+/-) in quantity supplied made by Oil Company	(KL)	-	-	-
5	Oil supplied by Oil Company (3+4)	(KL)	20.00	154.82	-
6	Normative Transit & Handling Losses (For Oil based Projects)	(KL)			
7	Net Oil Supplied (3-4)	(KL)	**20.00**	**154.82**	-
C)	PRICE				
8	Amount charged by the Oil Company	(Rs.)	19,32,837	1,09,85,993	-
9	Adjustment (+/-) in amount charged made by Oil Company	(Rs.)	-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)			
11	**Total amount Charged (8+9+ 10)**	**(Rs.)**	**19,32,837**	**1,09,85,993**	-
D)	TRANSPORATION				
12	Transportation charges by rail/ship/road transport	(Rs.)	15,750	1,21,771	-
	By Rail				
	By Road				
	By Ship				
	Total				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-SFO

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Dec-2022	Nov-2022	Oct-2022
			LDO	LDO	LDO
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs.)	-	-	-
16	Total Transportation Charges (12+13+14+15)	(Rs.)	15,750	1,21,771	-
17	**Total amount Charged for Oil supplied including Transportation (11+16)**	**(Rs.)**	**19,48,587**	**1,11,07,764**	**-**
E)	TOTAL COST				
18	**Landed cost of Oil (2+17)/(1+7)**	**(Rs./ml)**	**0.065949**	**0.065291**	**0.065026**
19	Blending Ratio (Domestic/Imported)	Rs/Ton			
20	Weighted average cost of Oil/ Lignite for preceding three months				
F)	QUALITY				
21	GCV of Domestic Oil of the opening Oil stock as per bill of Oil Company	(kCal/L)			
22	GCV of Domestic Oil supplied as per bill of Oil Company	(kCal/L)			
23	GCV of Imported Oil of the opening stock as per bill Oil Company	(kCal/L)			
24	GCV of Imported Oil supplied as per bill Oil Company	(kCal/L)			
25	Weighted average GCV of Oil as Billed	(kCal/L)			
26	GCV of Domestic Oil of the opening stock as received at Station	(kCal/L)			
27	GCV of Domestic Oil supplied as received at Station	(kCal/L)			
28	GCV of Imported Oil of opening stock as received at Station	(kCal/L)			
29	GCV of Imported Oil supplied as received at Station	(kCal/L)			
30	**Weighted average GCV of Oil as Received Station**	**(kCal/L)**	**9,100**	**9,100**	**9,100**

MAITHON POWER LIMITED

Computation of Energy Charges

Form-15B
ADDITIONAL FORM

Name of the Company	Maithon Power Limited
Name of the Power Station	1050 Maithon Project

Computation of Energy Charges

			2019-20	2020-21	2021-22	2022-23	2023-24
1	Rate of Energy Charge from Sec. Fuel Oil/ Alternate Fuel (p/kwh)	$(REC)_s$ = $(Q_s)_n$ X P_s	2.364	2.283	1.875	2.302	3.268
2	Heat Contribution from SFO / Alternate Fuel	(H_s) = $(Qs)_n$ X $(GCV)_s$	4.550	4.550	4.550	4.550	4.550
3	Heat Contribution from coal	$(H_p)_s$ = GHR- H_s	2370.45	2370.45	2370.45	2370.45	2370.45
4	Specific Primary Fuel Consumption	$(Qp)_n$ = H_p/ $(GCV)_p$	0.595	0.613	0.635	0.590	0.578
5	Rate of Energy charge from Primary Fuel (p/kwh)	$(REC)_p$	265.109	247.807	232.705	254.018	257.148
6	Rate of Energy charge ex-bus (p/kWh)	(REC)= ($(REC)_s$ + $(REC)_p$ + (REC)LS) / (1-(AUX))	285.304	266.763	250.218	273.408	277.778

		2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	Days	366	365	365	365	366
Sp. Oil consumption	ml/kwh	0.50	0.50	0.50	0.50	0.50
Auxiliary consumption	%	6.25	6.25	6.25	6.25	6.25
Heat Rate	Kcal/Kwh	2,375	2,375	2,375	2,375	2,375
Sp. Lime Stone Consumption	Kg/Kwh					
Computation of Variable Charges						
Variable Charge (Coal)	p/kwh	282.78	264.33	248.22	270.95	274.29
Variable Charge (Oil)	p/kwh	2.521	2.436	2.000	2.455	3.486
Variable Charge (Lime Stone)	p/kwh					
Total	p/kwh	285.304	266.763	250.219	273.408	277.778
Price of fuel from Form-15/15A						
Coal Cost	(Rs./MT)	4458.82	4045.19	3663.52	4306.90	4450.50
Oil Cost	(Rs./KL)	47270.59	45666.78	37495.03	46038.57	65365.98
Lime Stone Cost	Rs/MT					
Computation of Fuel Expenses for Calculation of IWC:						
ESO in a year	(MUs)	7349.74	7329.66	7329.66	7329.66	7349.74
ESO for 50 Days	(MUs)	1004.063	1004.063	1004.063	1004.063	1004.063
Cost of coal for 50 Days	(Rs. Lakh)	28393.18	26540.08	24922.74	27205.37	27540.63
Cost of oil for 2 months	(Rs. Lakh)	308.81	297.58	244.32	299.91	427.02
Cost of Lime Stone for 50 days	(Rs Lakh)	0.00	0.00	0.00	0.00	0.00
Energy Expenses for 45 days	(Rs. Lakh)	25781.67	24106.21	22611.20	24706.68	25101.58

2018

Coal		**3rd month**	**2nd month**	**1st month**	**Wtd. Avg.**
Price of Coal	Rs./MT	4,634.65	4,338.22	4,376.96	**4458.82**
GCV of Coal as received	kCal/Kg	4095.62	4119.20	3983.42	**4071.82**
Net Quantity of coal received	MT	524596.85	490487.43	404189.79	
Wtd. Avg. GCV of Coal as received after adjustement of 85 kcal/kg					**3986.82**
Sec. Oil					
Price of Secondary Fuel	Rs/KL	47000.00	48000.00	46000.00	**47270.59**
GCV of Secondary Fuel	kCal/L	9100.00	9100.00	9100.00	**9100.00**
Net Quantity of oil received	KL	158.62	294.51	135.29	

2019

Coal		**3rd month**	**2nd month**	**1st month**	**Wtd. Avg.**
Price of Coal	Rs./MT	4,047.36	4,050.81	4,033.02	**4045.19**
GCV of Coal as received	kCal/Kg	3973.04	3943.41	3945.52	**3954.52**
Net Quantity of coal received	MT	350532.25	388662.65	241664.58	
Wtd. Avg. GCV of Coal as received after adjustement of 85 kcal/kg					**3869.52**
Sec. Oil					
Price of Secondary Fuel	Rs/KL	44438.91	45673.04	46658.29	**45666.78**
GCV of Secondary Fuel	kCal/L	9100.00	9100.00	9100.00	**9100.00**
Net Quantity of oil received	KL	123.73	76.62	152.74	

2020

Coal		**3rd month**	**2nd month**	**1st month**	**Wtd. Avg.**
Price of Coal	Rs./MT	3,691.15	3,640.16	3,657.55	**3663.52**
GCV of Coal as received	kCal/Kg	3882.61	3792.69	3766.50	**3816.84**
Net Quantity of coal received	MT	379600.22	367512.97	319544.70	
Wtd. Avg. GCV of Coal as received after adjustement of 85 kcal/kg					**3731.84**
Sec. Oil					
Price of Secondary Fuel	Rs/KL	0.00	37225.20	37535.62	**37495.03**
GCV of Secondary Fuel	kCal/L	9100.00	9100.00	9100.00	**9100.00**
Net Quantity of oil received	KL	0.00	24.00	159.54	

2021

Coal		**3rd month**	**2nd month**	**1st month**	**Wtd. Avg.**
Price of Coal	Rs./MT	4,198.20	4,346.80	4,370.87	**4306.90**
GCV of Coal as received	kCal/Kg	4136.18	4148.43	4034.05	**4104.12**
Net Quantity of coal received	MT	385020.27	380604.13	416879.39	
Wtd. Avg. GCV of Coal as received after adjustement of 85 kcal/kg					**4019.12**
Sec. Oil					

MAITHON POWER LIMITED

Computation of Energy Charges

Form-15B
ADDITIONAL FORM

Name of the Company	**Maithon Power Limited**
Name of the Power Station	**1050 Maithon Project**

Price of Secondary Fuel	Rs/KL	46038.57	46038.57	45478.74	**46038.57**
GCV of Secondary Fuel	kCal/L	9100.00	9100.00	9100.00	**9100.00**
Net Quantity of oil received	KL	0.00	51.36	0.00	

2022

Coal		**3rd month**	**2nd month**	**1st month**	**Wtd. Avg.**
Price of Coal	Rs./MT	4,504.21	4,408.46	4,433.64	**4450.50**
GCV of Coal as received	kCal/Kg	4197.72	4173.86	4192.30	**4187.57**
Net Quantity of coal received	MT	435484.79	430646.84	313481.19	
Wtd. Avg. GCV of Coal as received after adjustement of 85 kcal/kg					**4102.57**
Sec. Oil					
Price of Secondary Fuel	Rs/KL	65948.79	65290.69	0.00	**65365.98**
GCV of Secondary Fuel	kCal/L	9100.00	9100.00	9100.00	**9100.00**
Net Quantity of oil received	KL	20.00	154.82	0.00	

PETITIONER

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2019 -20

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses	2019-20	Claimed as a part of additional Capitalisation	Funded through Compensatory Allowance	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
	Name of Spare	Amount					
1	400KV Circuit Breaker	-	No	No	No		
2	Coal Mill Gearbox	-	No	No	No		
3	Coal Mill Journal Assembly	-	No	No	No		
4	Cooling Tower Internals	-	No	No	No		
5	Crusher Rotor Assembly	-	No	No	No		
6	Economiser Coil	-	No	No	No		
7	Refurbishment of pulversier internals	98.96	No	No	No		
8	Suspended Magnet & Track Hopper	69.70	No	No	No		
9	TDBFP Recirculation Valve	55.37	No	No	No		
10	Vacuum Pump	127.68	No	No	No		
11	Control Valves	-	No	No	No		Provided in Tariff Petition
12	TG bearing set	-	No	No	No		
13	Breaker and Relays	26.72	No	No	No		
14	Refurbishment of DM Plant	45.56	No	No	No		
	Sub-Total	**423.99**					
	Grand Total	**423.99**					

Petitioner

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2020-21

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses	2020-21	Claimed as a part of additional Capitalisation	Funded through Compensatory Allowance	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
	Name of Spare	Amount					
1	400KV Circuit Breaker	-	No	No	No	No	
2	Coal Mill Gearbox	-	No	No	No	No	Provided in Tariff Petition
3	Coal Mill Journal Assembly	-	No	No	No	No	
4	Cooling Tower Internals	-	No	No	No	No	
5	Crusher Rotor Assembly	-	No	No	No	No	
6	Economiser Coil	495.26	No	No	No	No	
7	Refurbishment of pulversier internals	0.34	No	No	No	No	
8	Suspended Magnet & Track Hopper	-	No	No	No	No	
9	TDBFP Recirculation Valve	54.80	No	No	No	No	
10	Vacuum Pump	85.58	No	No	No	No	
11	Control Valves	-	No	No	No	No	
12	TG bearing set	-	No	No	No	No	
13	Breaker and Relays	-	No	No	No	No	
14	Refurbishment of DM Plant	45.91	No	No	No	No	
	Sub-Total	**681.89**					
	Grand Total	**681.89**					

Petitioner

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2021 -22

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses	2021-22	Claimed as a part of additional Capitalisation	Funded through Compensatory Allowance	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
	Name of Spare	Amount					
1	400KV Circuit Breaker	61.65	No	No	No	No	
2	Coal Mill Gearbox	-	No	No	No	No	
3	Coal Mill Journal Assembly	26.49	No	No	No	No	
4	Cooling Tower Internals	88.25	No	No	No	No	
5	Crusher Rotor Assembly	-	No	No	No	No	
6	Economiser Coil	699.87	No	No	No	No	
7	Refurbishment of pulversier internals	0.34	No	No	No	No	
8	Suspended Magnet & Track Hopper	-	No	No	No	No	
9	TDBFP Recirculation Valve	57.75	No	No	No	No	
10	Vacuum Pump	262.80	No	No	No	No	
11	Control Valves	-	No	No	No	No	
12	TG bearing set	-	No	No	No	No	
13	Breaker and Relays	73.14	No	No	No	No	
14	Refurbishment of DM Plant	22.08	No	No	No	No	
15	2000130199_HP BY-PASS (L) VALVE BPV-1 INST POSITION TRANSMITTER, R.SG10=2KΩ333Ω MAKE -BHEL, SL. NO- IY-B24, FOR HP BYPASS PRESSURE CONTROL VALVE."	2.67	No	No	No	No	HP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 10 years. During checking instruments of by-pass system, it was observed that position transmitters are giving erratic valve and need replacement due to ageing. That's why, it was replaced with a spare one in Capital stock
16	2000129612_TDBFP AXIAL SHIFT-1 AXIAL PROBE	0.00	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
17	2000129613_TDBFP KEY PHASOR ZERO SPEED PROBE	0.00	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
18	3000049838_ CBL ELEC,EXTN	0.00	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
19	2000011594_MAIN OIL TANK ITEM NAME: VENTURI ASSEMBLY, TYPE/USED: OUTLET, EQUIPMENT: BOWL MILL	8.58	No	No	No	No	JOURNAL PRESSURE SPRING ASSEMBLY, OUTLET VENTURY ASSEMBLY & JOURNAL SHAFT ASSEMBLY WERE FOUND DAMAGED DURING OVERHAULING OF COA MILL. That's why, these spares were replaced with spare ones in Capital stock.
20	2000118221_CRE-1,2,3 ID-A/FD-A/BCW-A DCS PANEL MODULE; MODEL/MACHINE NO: DPU4F; GENERAL NOTES: PRIMRY WITH IRIG ANDSERIAL, MODULE NO- 69230D406B, TYPE- PDP406 BHEL UNDER COLLABRAT	0.00	No	No	No	No	Without DPU, DCS cannot be operated & it is very difficult to run the plant safely and smoothly. DCS consists of several I/O cards along with DPUs (Distributed processing unit). DPUs are installed for more than 10 years & these DPUs are getting failed due to Ageing and hardware issues. That's why, this DPU was replaced with a spare one.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2021 -22

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses	2021-22	Claimed as a part of additional Capitalisation	Funded through Compensatory Allowance	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
	Name of Spare	Amount					
21	2000118222_CRE-1,2,3 ID-A/FD-A/BCW-A DCS PANEL MODULE; GENERAL NOTES: SECONDRY IRIG AND SERIAL PT AND BACKUP, MODULENO- 69230D408B, TYPE- PDP408 BHEL UNDER COLLABRATION WITH METS	0.00	No	No	No	No	BCW DCS Panel Module are in continuous operation since commissioning of both the units i.e. from last 10 years. It was observed that electronic components of modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
22	2000165642_DC SCANNER AIR FAN MTR MOTOR_ELECTRICDC,SCAN AIR FAN_KSDC160SX,IP55,MAKE-KIRLOSKAR ELECTRIC COLTD,EXC CURRENT=1.20A,EXC VOLTAGE=220V,DC SCANNER AIR FAN_KSD	5.57	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 10 years & winding of motor failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
23	2000026597_BOILER WATER WALLS ITEM NAME: TUBE RIBBED, SIZE: OD: 51 X THK: 5.6 MM, PART NO: 07-988-002, MAKE: BHEL, GENERAL NOTE: MATERIAL STANDARD: SA210, MATERIA	9.98	No	No	No	No	Erosion in water walls are always on higher side due to flue gas erosion. That's why, these tubes were replaced after inspection during last annual overhauling.
24	2000167858_SEAL OIL DIFF PRESSURE REGULATOR DIFFERENTIAL PRESSURE REGULATOR FOR GENERATOR SEAL OIL SYSTEM,160 CM2,25SQ INCH,SIZE-1/2"-4"FPM,PMAX 16 BAR,NO-1378721,SAMSON 2424,D	4.43	No	No	No	No	Seal Oil Pressure Regulators are in continuous operation since commissioning of both the units i.e. from last 10 years. Due to ageing regulator was not working properly. That's why, it was replaced with a spare one in Capital stock.
25	1000017892_SOX ANALYZER AT CHIMNEY ANALYSER,PSU INTERFACE PCB (AWC CARD),PART NO-802.434A,CODE-C4N-802.434A,MAKE- FM CODEL,	1.75	No	No	No	No	SOX and NOX analyzers are in continuous operation. Their display was showing abrupt valve. Analyzer was not working properly due to ageing. That's why, it was replaced with a spare one in Capital stock.
26	1000016699_CONTROL FLUID MOTOR MOTOR,121 KW,50 DEGREE C,FOR CONTROL FLUID PUMP,IP55,SL.NO-0906/056857605,IEC/EN 60034,DUTY-S1,IP55,FRAME-315M,MAKE-SIEMENS,FULL LOA	6.53	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 10 years & winding of motor failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
27	1000013762_U2 STATION PMCC 0DB INCOMER 1 CIRCUITBREAKER_AIR,NO AUX CONTACT : 5NO+5NC,SACE NEW EMAX : E4S/F,SACENEW EMAX : E4S/F,50 HZ,MAKE-ABB,3200A, FRAME SIZE :E4S 3,RATED	3.17	No	No	No	No	Circuit Breakers of Station PMCC are in continuous operation since commissioning of both the units i.e. from last 10 years. During overhauling of these Circuit breakers, interrupter, capacitor, puffer assembly & other spares were found damaged due to ageing. That's why, complete circuit breaker was replaced with a spare one in Capital stock.
28	2000204141_ACW PMP VALVE,ACW DISCHAGE MOV(SIZE: 800MM),MAKE-KIRLOSKAR BROTHERS LIMITED, PUNE INDIA WORKS, BODY PRESSURE:9 KG/CM2, SEAT PRESSURE=6KG/CM2	4.75	No	No	No	No	4 nos of Auxilliary Cooling Water Pump of TG Area are in continuous operation since commissioning of both the units i.e. from last 10 years. During it's overhauling, pitting marks & craks were observed in discharge valve. That's why, it was replaced with a spare one in Capital stock.



PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2021 -22

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses	2021-22	Claimed as a part of additional Capitalisation	Funded through Compensatory Allowance	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
	Name of Spare	Amount					
29	2000206039_CW PUMP HOUSE HOIST MOTOR DRIVE_VARIABLEFREQ,I/P CURREN:57A,O/P:52A,40 KVA,MODEL: CIMR-G7A4022,SERIAL NO:J009Y230310003,APPLICATION: CWPH HOIST,O/P VOLT:AC3P	1.12	No	No	No	No	VFD was in continuous operation since commissioning of the Units i.e for more than 10 years & it failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
30	2000118403_CJJ-41 MAIN TURBINE TSI DCS PANEL MODULE; FUNCTION: POWER SUPPLY, MODEL NO: VM-5Z1	3.33	No	No	No	No	Vibration Monitoring Systems systems are installed over 10 years ago, it was observed that electronic components of power supply modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
31	1000016632_MILL REJECT COMPRESSOR FEEDER CIRCUIT BREAKER _AIR,50KA,1000A ACB,FREQUENCY-50HZ,MAKE-LT,ELECTRICALDRAWOUT WITH SHUNT, ,415V SUPPLY,NO OF POLES-3,SHUNT TRI	3.54	No	No	No	No	Circuit Breakers of Mill Reject Compressor Feeders are in continuous operation since commissioning of both the units i.e. from last 10 years. During overhauling of these Circuit breakers, interrupter, capacitor, puffer assembly & other spares were found damaged due to ageing. That's why, complete circuit breaker was replaced with a spare one in Capital stock.
32	2000146196_MAIN SILO ASH CONDITIONER SHAFT,BE3452D, BE3343D,BE3452D, BE3343D	3.10	No	No	No	No	Main Silo and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 10 years. Due to ash erosion and ageing, shaft was found damaged. That's why, it was replaced with a spare one in Capital stock.
33	2000013771_CLINKER GRINDER ITEM NAME: JET PUMP ASSEMBLY, EQUIPMENT: COMPRESSOR, EQUIPMENT NOTE: FOR BOTTOM ASH HOPPER	1.24	No	No	No	No	Jet Pump complete assebly eroded from inside. That's why, it was replaced with a spare one in Capital stock.
34	1000000513_HP BY-PASS(L) SPRAY CV BPE-1 INST SERVO VALVE ST 10/5, EQUIVALENT TO SULZER/ CCI, FOR HP BYPASS SPRAYCONTROL VALVE.	3.21	No	No	No	No	HP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 10 years. Their servomotors were inspected during their overhauling & 1 servomotor was found damaged due to ageing. That's why, it was replaced with a spare one in Capital Stock.
35	2000000709_SCOOP ACTUATOR MOTOR FOR RING GRANULATOR ACTUATOR, ELECTRICAL; MODEL: PIR-15V, MAKE: PREMIUM ENERGY TRANSMISION; GENERAL NOTE: O/P TORQUE: 15 KGM, O/P SPEED: 0.5 RPM, POWER:	2.42	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock
36	2000129176_ID FAN VFD CHANNEL MDL 660HMPGA DS38000HMPG FOR VFD	5.13	No	No	No	No	Electronic Card of ID fan LCI Drive is most important part of LCI System. We faced back to back failure of electronic cards due to malfuction of internal components like resistor/transistor. Unavailability of Electronic Cards may lead to partial generation loss. So, their immediate replacement was planned to avoid generation loass. Electronic Card was replaced with the spare card available in Capital Stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2021 -22

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses	2021-22	Claimed as a part of additional Capitalisation	Funded through Compensatory Allowance	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
	Name of Spare	Amount					
37	2000129181_ID FAN VFD CHANNEL MDL 660NLIBA DS38000NLIB FOR VFD	6.49	No	No	No	No	Electronic Card of ID fan LCI Drive is most important part of LCI System. We faced back to back failure of electronic cards due to malfuction of internal components like resistor/transistor. Unavailability of Electronic Cards may lead to partial generation loss. So, their immediate replacement was planned to avoid generation loass. Electronic Card was replaced with the spare card available in Capital Stock.
38	2000019219_BTG INSTRUMENT AIR DRYER ITEM NAME: HEAT EXCHANGER UNIT, GENERAL NOTE: CONSISTS OF: ONE PRE-COOLER AND ONE EVAPORATOR, EQUIPMENT: AIR DRYER, EQUIPMENT MODEL:	5.97	No	No	No	No	Summits make Air Dryers of BTG Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 10 years. Air Dryers were tripping on Refrigerant Pressure low. During Inspection,pinhole leaks were observed in Heat Exchanger Assembly due to minute foreign material ingress in air pipeline. So, Heat Exchanger Assembly was replaced with spare Heat Exchanger available in Capital Stock.
39	2000014027_BOTTOM ASH SLURRY PUMP ITEM NAME: CASING, PART NO: EXU6092, MAKE: WEIR MINERALS, EQUIPMENT: BA SLURRY PUMP, EQUIPMENT MODEL: 8/6 EXU, EQUIPMENT NOTE: TYPE:	3.49	No	No	No	No	Pumps of Ash Handling Plant are prone to erosion due to ash content in the water. Pitting marks, erosion and cracks from inside were observed in casing of Bottom Ash Slurry Pump during it's overhauling. That's why, it was replaced with a spare one in Capital stock.
40	1000010082_CW CHLORINATOR ACTUATOR,CHLORINATOR GPRV V/V,120V AC, MTR. FLC-1.4A,HYDRAMOTORACTUATOR,MAKE-ASCO GENERAL CONTROL,POWER STROKE-40-60SEC,OPERA	2.61	No	No	No	No	4 nos of Actuators are installed in CW Chlorinator & Chlorine Evaporator Actuator GPRV Valves. It is in operation since commissioning of units i.e. for more than 10 years. Actautor failure & after inspection it was confirmed that it failed due to failure of CPU card & motor winding failure. Actuator was replaced with the spare one in Capital Stock.
41	2000012084_BTG INSTRUMENT AIR COMPRESSOR MOTOR CLASS: MOTOR_ELECTRIC AC,AMBIENT_TEMPERATURE: 50DEGREES,CONNECTION_TYPE: STAR,COOLING_TYPE: IC611,DEGREE_OF_PROTECTION:IP55,DUTY_CYC	16.62	No	No	No	No	BTG Instrument Air Compressor was in continuous operation since commissioning of the Units i.e for more than 10 years & winding of motor failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
42	1000008464_STACKER RAIL CLAMP MOTOR MOTOR,RAIL CLAMP MOTOR,SQUIRREL CAGE INDUCTION MOTOR,VOLTAGE: 415V,IS335 EHV GRADE,THRUST:225KG,PHASE: THREE PHASE,MAKE: RING SPANN,	4.60	No	No	No	No	STACKER RAIL CLAMP MOTOR was in continuous operation since commissioning of the Units i.e for more than 10 years & winding of motor failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
	Sub-Total	**1,402.66**					
	Grand Total	**1,402.66**					

Petitioner

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
1	400KV Circuit Breaker	-	No	No	No	No	
2	Coal Mill Gearbox	399.48	No	No	No	No	
3	Coal Mill Journal Assembly	340.09	No	No	No	No	
4	Cooling Tower Internals	209.67	No	No	No	No	
5	Crusher Rotor Assembly	83.09	No	No	No	No	
6	Economiser Coil	-	No	No	No	No	
7	Refurbishment of pulversier internals	-	No	No	No	No	
8	Suspended Magnet & Track Hopper	-	No	No	No	No	
9	TDBFP Recirculation Valve	1.24	No	No	No	No	
10	Vacuum Pump	53.43	No	No	No	No	
11	Control Valves	-	No	No	No	No	
12	TG bearing set	-	No	No	No	No	
13	Breaker and Relays	99.34	No	No	No	No	
14	Refurbishment of DM Plant	2.40	No	No	No	No	
15	1000016584_STAGE#1 CONVEYING AIR COMPRESSOR MOTOR FEEDER RELAY,MODEL NO-REM615,ABB MAKE,ORDERING NO-HBMCAEAGNBA1BNN11G,CURRENT INPUT 1/5A,SUPPLY-48-250V DC/100-240V AC,TYPE-REM 615,M	4.10	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
16	2000019477_H2 GENERATOR PNEUMATIC VALVE ACTR ITEM NAME: ACTUATOR, TYPE/USED: TERM STRIP AND COVER, PART NO: AMX24-3TN2S-T, GENERAL NOTE: ITEM MASTER NO.ORIGINAL-ES-105342, EQUIP	1.34	No	No	No	No	MV2 Actuators of H2 Generators are in continuous operation for more than 11 years & due to ageing, one of the actuators failed. It was replaced with a spare actuator available in Capital Stock. That's why, this Actuator was replaced with a spare one.
17	2000118221_CRE-1,2,3 ID-A/FD-A/BCW-A DCS PANEL MODULE; MODEL/MACHINE NO: DPU4F; GENERAL NOTES: PRIMRY WITH IRIG ANDSERIAL, MODULE NO- 69230D406B, TYPE- PDP406 BHEL UNDER COLLABRAT	40.88	No	No	No	No	Without DPU, DCS cannot be operated & it is very difficult to run the plant safely and smoothly. DCS consists of several I/O cards along with DPUs (Distributed processing unit). DPUs are installed for more than 11 years & these DPUs are getting failed due to Ageing and hardware issues. That's why, this DPU was replaced with a spare one.
18	2000118403_CJJ-41 MAIN TURBINE TSI DCS PANEL MODULE; FUNCTION: POWER SUPPLY, MODEL NO: VM-5Z1	13.28	No	No	No	No	Vibration Monitoring Systems systems are installed over 11 years ago, it was observed that electronic components of power supply modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
19	2000000491_GENERATOR RELAY PANEL RELAY; CURRENT RATING: 5 A; MODEL NO: REG 670, MAKE: ABB, GENERAL NOTE: RATED VOLTAGE: 110V, AUXILIARY VOLTAGE: 220VDC, BINARY INPUT	10.15	No	No	No	No	REG 670 relays were installed for more than 11 years & these relays are getting failed frequently due to Ageing. So, their immediate replacement was planned to avoid generation loss. Relay was replaced with the spare relay available in Capital Stock.
20	3000023981_BTG INSTRUMENT AIR COMPRESSOR FDR RELAY; TYPE: MOTOR PROTECTION; MODEL NO: 7SK8041-5EB20-1HE0/BB, MAKE: SIEMENS	25.71	No	No	No	No	Motor Protection relays were installed for more than 11 years & these relays are getting failed frequently due to Ageing. So, their immediate replacement was planned to avoid generation loss. Relay was replaced with the spare relay available in Capital Stock.
21	2000129571_ HP SERVOMOTOR ASSEMBLY	5.12	No	No	No	No	This MCV Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. MCV Servomotor Assembly was malfunctioning & abnormal hunting was also observed during trail. So, this servomotor was replaced with new servomotor assembly in Capital Stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
22	2000129573_ LP SERVOMOTOR ASSEMBLY	3.16	No	No	No	No	This ACV Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. ACV Servomotor Assembly was malfunctioning & abnormal hunting was also observed during trail. So, this servomotor was replaced with new servomotor assembly in Capital Stock.
23	2000019216_BTG INSTRUMENT AIR DRYER ITEM NAME: REFRIGERANT COMPRESSOR ASSY, GENERAL NOTE: HERMETICALLY SEALED SCROLL, EQUIPMENT: AIR DRYER, EQUIPMENT MODEL: SI150DW, EQ	5.81	No	No	No	No	Summits make Air Dryers of BTG Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. Air Dryers were tripping on High Dew Point. During inspection, it was observed that Scroll Compressors are getting overheat & is tripping after few minutes of loading. This confirmed that Compressor needs to be replaced. So, Scroll Compressor was replaced with spare Compressor available in Capital Stock.
24	2000019219_BTG INSTRUMENT AIR DRYER ITEM NAME: HEAT EXCHANGER UNIT, GENERAL NOTE: CONSISTS OF: ONE PRE-COOLER AND ONE EVAPORATOR, EQUIPMENT: AIR DRYER, EQUIPMENT MODEL:	25.23	No	No	No	No	Summits make Air Dryers of BTG Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. Air Dryers were tripping on Refrigerant Pressure low. During Inspection, pinhole leaks were observed in Heat Exchanger Assembly due to minute foreign material ingress in air pipeline. So, Heat Exchanger Assembly was replaced with spare Heat Exchanger available in Capital Stock.
25	2000120770_PA FAN ITEM NAME: BLADE, TYPE/USED: IMPELLER, EQUIPMENT: PRIMARY AIR FAN	39.19	No	No	No	No	PA Fans are operational since commissioning of both the Units i.e for more than 11 years. PA Fans are double stage Fans with 2 sets of blades (each containing 23 blades) at the Motor end and Servo end respectively. During last U#2 AOH, while inspecting PA Fan 2A, it was observed that the blades of both Fan are in damaged condition due to ageing. So, the damaged blades were replaced with new set of blades available in Capital Stock.
26	2000120771_PA FAN ITEM NAME: BLADE, TYPE/USED: IMPELLER, SUB EQUIPMENT: SERVO MOTOR, EQUIPMENT: PRIMARY AIR FAN	39.19	No	No	No	No	PA Fans are operational since commissioning of the Units i.e for more than 11 years. PA Fans are double stage Fans with 2 sets of blades (each containing 23 blades) at the Motor end and Servo end respectively. During last U#1 AOH, while inspecting PA Fan 1A & 1B, it was observed that the blades, bearing housing, rotor shaft & servo of both Fan are in damaged condition due to ageing. So, the damaged blades were replaced with new set of blades available in Capital Stock. That's why, these Impeller blades of PA Fan were procured to replenish the consumed Capital Spare.
27	2000203383_MT HYDRAULIC AMPLIFIER SPRING ASSY FOLLOW UP PISTON FOR HYD AMPLIFIER FOLLOW UP PISTON ITEM 105 DRG 01142305000 TURBINE GOVERNING SYSTEM	2.96	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, it was observed that spring assembly of follow-up piston is damaged due to ageing & needs replacement. That's why, these spares were replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details /Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
28	2000199575_FEED CONTROL SYSTEM INLETL IV, FDV-13-ACTUATOR SPAREPARTS,GEAR SWITCH ASSEMBLY SMV-2,MODEL :LIMITORQUE,SERIAL NO:4271B002,WIRING DIA: 3TME-1-353S- REV-1,VOLTAGE 415V,ACTUATOR RPM,	3.91	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
29	1000017677_SPM ANALYZER ANALYSER DUST/OPACITY MONITOR,TRANSMISSOMETER WITH BUILT IN ZERO ANDSPAN CALIBRATION FILTERS KEYPAD WITH DISPLAY ,MODEL- LAN	4.62	No	No	No	No	Analyser is installed in the SPM Analyser at Stack of the units as a statutory requirement. Analyser started malfunctioning due to it's ageing. Since, it is a statutory requirement. Analyser was replaced with the spare one in Capital Stock.
30	2000185702_HP TURBINE MODULE U_SEAL_RING,MACHINED :ITEM-3,HP CASING ASSLY,BHEL ASLYDRWG:0-10501-09000,INSTALLED IN 525 MW BHEL UNIT	35.12	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
31	2000167749_HP TURBINE MODULE U_SEAL_RING,MACHINED,ITEM6:HP INLET ASLY,BHEL ASSLY DRWG:1-10514-09000,INSTALLED IN 525 MW BHEL UNIT	16.60	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
32	2000128932_FD FAN LUB OIL PUMP WITHOUT MOTOR FOR F.D. FAN	2.33	No	No	No	No	8 nos of Lube Oil Pumps for 4 nos of FD Fans are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling, screw, casing, shaft and bearings were found damaged due to ageing. That's why, LOP assembly replaced with a spare one in Capital stock.
33	2000167685_HP TURBINE MODULE RING,ITEM NO -2: HP SHAFT SEAL REAR,BHEL ASSLY DRWG:0-10506-09000,INSTALLED IN 525 MW BHEL UNIT	1.46	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
34	2000167686_HP TURBINE MODULE RING,ITEM NO -1: HP SHAFT SEAL REAR,BHEL ASSLY DRWG:0-10506-09000,INSTALLED IN 525 MW BHEL UNIT	11.50	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
35	2000205898_CONDENSATE EXTRACTION PUMP CASING,BELL MOUTH ASSY,CEP EN6J40/500,	1.89	No	No	No	No	6 nos of multi stage CEPs are in continuous operation since commissioning of both the units i.e. from last 11 years. During its overhauling, 1st stage casing and muff couplings were found damaged due to ageing. That's why, these spares were replaced with a spare one in Capital stock.
36	2000146196_MAIN SILO ASH CONDITIONER SHAFT,BE3452D, BE3343D,BE3452D, BE3343D	6.19	No	No	No	No	Main Silo and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Due to ash erosion and ageing, shaft was found damaged. That's why, it was replaced with a spare one in Capital stock.
37	2000161451_MAIN SILO INSTRUMENT AIR COMPRESSOR CYLINDER,CP COMP,HP ASSY P.N.-1903909395,	3.47	No	No	No	No	Chicago Pneumatics make Reciproicating Compressor of Main silo Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. These compressors are for conveying & unlaoding ash from main silo. Compressor discharge pressure was low & abnormal sound was also observed from HP side. During inspection, it was observed HP Cylinder linings have eroded. This confirmed that HP Cylinder Assembly needs to be replaced. So, HP Cylinder was replaced with spare one available in Capital Stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
38	2000010745_HP BY-PASS (L) VALVE BPV-1 ITEM NAME: STEM, DW: ARS140A/2, EQUIPMENT: HP BYPASS VALVE, EQUIPMENT MODEL: ARS 140A	9.22	No	No	No	No	We have faced failure of HP Bypass valve Stem & Actuator Stem in running condition resulting partial generation loss. The failure occurred mainly due to Sharp cross-sectional area changes and sharp corners in the valve spindle and actuator stem combined with tensile and bending forces cased high localized stress leading to crack formation and fracture. Stem was replaced with a new one available in capital Stock.
39	2000014246_STAGE#2 CONVEYING AIR COMPRESSOR ITEM NAME: COOLER, PART NO: 1623712100, EQUIPMENT MODEL: ZA6K	1.06	No	No	No	No	There are 6 nos of Stage#2 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. Water was observed to be coming out continuously from drain valve of air cooler. During cooler inspection, it was observed that more than 40% tubes were having leakage.That's why, it was replaced with a spare one in Capital stock.
40	2000161432_MAIN SILO INSTRUMENT AIR COMPRESSOR COOLER,RADIATOR P.N.-1903031311 COMP,	1.08	No	No	No	No	Chicago Pneumatics make Reciproicating Compressor of Main silo Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. These compressors are for conveying & unlaoding ash from main silo. Compressor was tripping on higher air exit temperature. During inspection, it was observed that there is leak from raditor of compressor. Radiator cools down the cooling water of compressor & due to it's internal tube leakage, compressor was not available. This confirmed that radiator needs to be replaced. So, radiator was replaced with spare one available in Capital Stock.
41	2000012579_BUCKET WHEEL HYDRAULIC SYSTEM PUMP, RECIPROCATING; PISTON: AXIAL; MODEL NO: A4VG180, GENERAL NOTE: VARIABLE DISPLACEMENT	16.82	No	No	No	No	During Pump Inspection, pistion & liner assemblies were found damaged. That's why it was replaced with a spare one in stock.
42	2000012611_OPERATOR CABIN HYDRAULIC SYSTEM ITEM NAME: BLOCK ASSEMBLY, TYPE/USED: MANIFOLD, PART NO: 314300923	0.23	No	No	No	No	Manifold block assembly was found damaged & hence was replaced with a spare one in stock.
43	2000012728_PADDLE FEEDER ITEM NAME: DRIVE, TYPE/USED: WHEEL, SIZE: 315, PART NO: M13442/3, MAKE: ELECON, EQUIPMENT MODEL: FOR CARRIAGE TRAVEL	2.19	No	No	No	No	Wheel drive of paddle feeder & paddle arm was found damaged during inspection & hence was replaced with a spare one in stock.
44	2000012735_PADDLE FEEDER ITEM NAME: HUB, TYPE/USED: PADDLE, PART NO: M08456/2, MAKE: ELECON, GENERAL NOTE: W/ARM, EQUIPMENT: PADDLE FEEDER	9.14	No	No	No	No	Wheel drive of paddle feeder & paddle arm was found damaged during inspection & hence was replaced with a spare one in stock.
45	2000012763_HYDRAULIC POWER PACK SYSTEM OF PADDLE FEEDER ITEM NAME: PUMP, TYPE/USED: VARIABLE DISPLACEMENT, PART NO: H44465, MAKE: BRUEININ-GHAUS, GENERAL NOTE: CONSIST OF PUMP MODEL: DCINA	13.86	No	No	No	No	During Pump Inspection, pistion & liner assemblies were found damaged. That's why it was replaced with a spare one in stock.
46	2000146418_DE SYSTEM BUNKER MOTOR_GEARED,GEAR RATIO=20.23,MOTOR=0.55 KW,OUPUT=46,<(>,<)>GEARBOX OFGEAREDMOTOR,ASSEMBLY POSITION:B3,TYPE-M042020BGCJI	0.76	No	No	No	No	Gear teeths of geared motor were found damaged. That's why it was replaced with a spare one in stock.
47	2000165244_HYDRAULIC POWER PACK SYSTEM OF PADDLE FEEDER HYD MOTOR PDF MCR3A255W40Z33A0M1L12SO533	11.16	No	No	No	No	HYDRAULIC MOTOR OF PADDLE FEEDER was found damaged. That's why it was replaced with a spare one in stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
48	2000198014_SLEWING HYDRAULIC SYSTEM MOTOR_HYDRAULIC,SLEWING SYSTEM STACKER DETAILS,OF MOTOR:MRA9000M-D1N1U1C1NX,0100/59804 MAKE: CALZONI,PARKER PR:190 BAR,	31.09	No	No	No	No	Slewing Motor and it's brake of Hydraulic System were found damaged. That's why it was replaced with a spare one in stock.
49	2000198015_SLEWING HYDRAULIC SYSTEM MOTOR_HYDRAULIC,BRAKE SLEWING SYSTEM STACKER,DETAILS OF BRAKE:FREN0B7000M-,F2D1N1X 0100/55690,MAKE: CALZONI PARKER,	17.75	No	No	No	No	Slewing Motor and it's brake of Hydraulic System were found damaged. That's why it was replaced with a spare one in stock.
50	1000002782_COLONY 33 KV BUS BAR ITEM NAME: BUS SPOUT; MANUFACTURER: AREVA; EQUIPMENT NOTE: FOR 33KV CB	2.03	No	No	No	No	Due to ageing, bus spout was replaced with a spare one in stock.
51	1000003205_FLAP GATE (CRUSHER HOUSE) ACTUATOR ACTUATOR,MS/1K/403,50HZ,FLAP GATE ACTUATOR,3 PH,LINEAR,415V AC,SL. NO.-M090445	3.68	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock
52	1000007907_MAIN SILO INSTRUMENT AIR DRYER SENSOR,AHP DEW POINT SENSOR,PROBE SERIAL NO:422218 PR,FREQUENCY 50/60HZ,<(>,<)>VOLTS: 230V AC,SERAIAL NO: 5-16052E,POWER 10 WATTS,G	2.07	No	No	No	No	Dew Point Sensors was showing abrupt value even air dryer was working fine. After checking, it was found damaged and was replaced with spares one in stock.
53	1000007921_STN SERVICE SWITCH GEAR BUS SEC A RELAY,<(>,<)>MODEL: REF-615,MAKE:ABB,4 BI 6 BO,NUMBER OF BO : 6,SUPPLYVOLTAGE: 48-250VDC,LARGE LCD FRONT PANEL,3CT+GROUND CT + 3 VT,	2.57	No	No	No	No	These relays were installed for more than 11 years & these relays are getting failed frequently due to Ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
54	1000008457_COAL SAMPLER (BCN 9A) MOTOR MOTOR,CSU MOTOR FOR CHP,<(>,<)>INTERNATIONL COMBUTION IND LTD,KW:11,S:3/6, VOLTAGE:415V,FREQUENCY:50HZ,BAUER GENERAL MOTOR,PF:0.84,F	3.04	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
55	1000008494_400KVA STACKER TRAFO 6.6KV O/G FEEDER SLIP_RING,MAKE ELECON FOR STACKER,MACHINE NO.HM/451,REFDRG.R03948/3,ORDER CO/1975,REF.NO AB.170.389.3PE400A66KV	2.51	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
56	1000008515_MAIN HYDRANT PUMP MOTOR MOTOR,160KW, 275A, 1485RPM, 415V,DELTA, S1,DE/NDE- 6319,FRAME-D315L,HORIZONTAL FOOT,MAIN FIRE HYDRANT P/P,MAKE-MARATHON ELEC.,	3.85	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
57	1000008523_FIRE BOOSTER PUMP MOTOR MOTOR,45KW, 78A, 1475RPM, 415V,DELTA, S1,DE/NDE-6313,FRAME- D225M,INS.-F,USED IN FIRE BOOSTER P/P,MAKE-MARATHON ELEC.,	1.21	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
58	1000009941_AHP INSTRUMENT AIR DRYER FEEDER HEATER_ELECTRICAL,9KW 415V,AIR DRIER MODEL SBD - 150,U TYPE,HEATER UTYPE,	1.37	No	No	No	No	Coil type heaters are in operation since commissioning of both the units i.e for more than 11 years. It failed due to ageing. That's why, this heater was replaced with a spare one.
59	1000009942_AHP INSTRUMENT AIR DRYER FEEDER HEATER_ELECTRICAL,15KW 415V,U TYPE AIR ITEMCODE 002MO0018,HEATER,DRIERSBD 300,002MO0018 R00	1.24	No	No	No	No	Coil type heaters are in operation since commissioning of both the units i.e for more than 11 years. It failed due to ageing. That's why, this heater was replaced with a spare one.
60	1000011829_BOILER FEEDE PUMP DISCHARGE VALVE (FDV-4) ACTUATOR ACTUATOR_ELECTRICL,MODEL-L120-85,FLC:10.4 AMP,SL NO:4608P001,OPEN TORQUECURRENT:22A-72MKG,TORQUE RANGE:37-116,3 PHASE,KW:4.8,RPM:60,	3.44	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock



PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
61	1000013342_UAT-A NGR RESISTOR,MAKE:RSI SWGR,400A,9.96 OHM+-10% AT 53 DEG.,NEUTRAL GROUNDINGRESISTOR,PSS,6.6KV,	2.36	No	No	No	No	Electrical stress caused due to ageing lead to resistor failure. So, their immediate replacement was planned to avoid generation loss. Resistor was replaced with the spare relay available in Capital Stock.
62	1000013505_ID FAN (SYNCHRONOUS MTR) BEARING,NDE BRG FOR ID FAN MOTOR,SLEEVE BEARING,DIA 250MM X 160MM,	6.85	No	No	No	No	These bearings are in continuous operation since commissioning of the Units i.e for more than 11 years. Due to gaeing, these bearings failed & was immediately replaced with a spare one in stock.
63	1000013506_ID FAN (SYNCHRONOUS MTR) BEARING,DE BRG FOR ID FAN MOTOR,TYPE : SLEEVE BEARING,DIA 250MM X 160MM,<(>,<)>,<(>,<)>,<(>,<)>,<(>,<)>	6.85	No	No	No	No	These bearings are in continuous operation since commissioning of the Units i.e for more than 11 years. Due to gaeing, these bearings failed & was immediately replaced with a spare one in stock.
64	1000015237_VFD TRANSFORMERF [ID FAN-1A CH-1] BUSHING_ELECTRICAL,LV BUSHING FOR 3250KVA TRAFO,RATED VOLT : 3.6KV,RATEDCURRENT : 2000A,PWR FREQ WTDSTD VOLT : 10KV,MAKE: AREVA,POR	2.59	No	No	No	No	These bushes are in continuous operation since commissioning of both the Units i.e for more than 11 years. Bushing leaks started developing over time in operation. So, their immediate replacement was planned to avoid generation loss. Bushing was replaced with the spare relay available in Capital Stock.
65	1000015238_VFD TRANSFORMERF [ID FAN-1A CH-1] BUSHING_ELECTRICAL,HV BUSHING FOR 3250KVA TRAFO,RATED VOLT : 17.5KV,RATED CURRENT : 1000A,PWR FREQ WTDSTD VOLT : 38KV,CREEPAGE DIST	1.55	No	No	No	No	These bushes are in continuous operation since commissioning of both the Units i.e for more than 11 years. Bushing leaks started developing over time in operation. So, their immediate replacement was planned to avoid generation loss. Bushing was replaced with the spare relay available in Capital Stock.
66	1000015621_BCN MOTOR FEEDER RELAY,220VDC,MOTOR PROTECTION RELAY,1A/5A SETTABLE,CONFORMAL COATINGAVAILABLE,7SK8041-5EB20-1HE0/BB,WIDTH:1/6X19",SIEMENS MAKE,	2.28	No	No	No	No	These relays were installed for more than 11 years & these relays are getting failed frequently due to Ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
67	1000016473_AHP INSTRUMENT AIR COMPRESSOR MTR MOTOR_ELECTRICAC,AHP IA COMPRESSOR MOTOR,RATING: 75KW, 2POLE, 125AMPS,FRAME SIZE SE280S,RPM 2970, VOLTAGE: 415V+/-10%,DEGREE OF PROT	2.77	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
68	1000016603_STAGE#2 CONVEYING AIR COMPRESSOR MTR BEARING_HOUSING,NDE SIDE BEARING HOUSING,NDE SIDE BEARING SIZE 6224 C3,RPM 1491, CURRENT 52.5AMPS,PURPOSE OF AHP COMPRESSOR MOTR,SL	1.08	No	No	No	No	There are 6 nos of Stage#2 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. Motor of these compressors and their bearings are also in continuous operation from last 11 years. Due to ageing, these bearings failed & was immediately replaced with a spare one in stock.
69	1000016628_ INSTRUMENT AIR COMPRESSOR MTR HOUSING_BEARING,DE END,MARATHON 340KW MOTOR,	1.19	No	No	No	No	These bearings are in continuous operation since commissioning of the Units i.e for more than 11 years. Due to gaeing, these bearings failed & was immediately replaced with a spare one in stock.
70	1000017838_UNIT #2 ESP SERVICE TRANSFORMER [2DBT01] BUSHING_ELECTRICAL,LV BUSHING FOR 1600KVA TRAFO,MAKER REF NO:680900387,MAKE :AREVA,RATING :415V,	2.92	No	No	No	No	These bushes are in continuous operation since commissioning of both the Units i.e for more than 11 years. Bushing leaks started developing over time in operation. So, their immediate replacement was planned to avoid generation loss. Bushing was replaced with the spare relay available in Capital Stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details /Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
71	1000018390_BOILER ELEVATOR DRIVE_VARIABLEFREQ,TYPE: DRIVE UNIT V3F-10,CLOSED LOOP 400V 30KW,CODE: KM50067286,FOR BOILER ELEVATOR,	3.92	No	No	No	No	VFD was in continuous operation since commissioning of the Units i.e for more than 11 years & it failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
72	2000000305_401 R-PH SF6 BREAKER ITEM NAME: INTERRUPTER ASSEMBLY, MAKE: CROMPTON GREAVES, GENERAL NOTE: VOLTAGE RATING: 400 KV, SUPPORT COLUMN, W/O PIR, SUB EQUIPMEN	14.74	No	No	No	No	SF6 Circuit Breakers of Switchyard are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling of these Circuit breakers, interrupter, capacitor and puffer assembly were found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
73	2000000309_401 R-PH SF6 BREAKER COMPLETE MECHANISM ASSEMBLY FOR 400KV CIRCUIT BREAKER, BRK TYPE:400-SFM-40A, MAKE: CROMPTON GREAVES	2.65	No	No	No	No	SF6 Circuit Breakers of Switchyard are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling of these Circuit breakers, it was observed that 1 no. of breaker needs to be replaced completely as it;s internals are damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
74	2000000350_403 R PH 360KV ZNO SURGE ARRESTER ITEM NAME: POST INSULATOR, TYPE, USED: CYLINDRICAL; GENERAL NOTE: RATING: 420KV, VENDOR: W.S.INDUSTRIES INDIA LIMITED, CHENNAI, HIGH	2.29	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
75	2000000490_GENERATOR RELAY PANEL RELAY; CURRENT RATING: 5 A; MODEL NO: REG 316, MAKE: ABB, GENERAL NOTE: RATED VOLTAGE: 110V, AUXILIARY VOLTAGE: 220VDC, BINARY INPUT	18.69	No	No	No	No	Generator Protection relays were installed for more than 11 years & these relays were getting failed due to Ageing. So, their immediate replacement was planned to avoid generation loss. Relay was replaced with the spare relay available in Capital Stock.
76	2000000504_GENERATOR RELAY PANEL ITEM NAME: RESISTOR, MAKE: ABB/METROSIL, GENERAL NOTE: CURRENT RATING:1A	2.20	No	No	No	No	Electrical stress caused due to ageing lead to resistor failure. So, their immediate replacement was planned to avoid generation loss. Resistor was replaced with the spare relay available in Capital Stock.
77	2000000709_SCOOP ACTUATOR MOTOR FOR RING GRANULATOR ACTUATOR, ELECTRICAL; MODEL: PIR-15V, MAKE: PREMIUM ENERGY TRANSMISION; GENERAL NOTE: O/P TORQUE: 15 KGM, O/P SPEED: 0.5 RPM, POWER:	2.42	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock
78	2000000793_FLY ASH SLURRY PUMP FEEDER DRIVE, VARIABLE FREQUENCY;VOLTAGE RATING: 380-480 V; MODEL/MACHINE NO: ACS 800-04-0205-3-K454, MANUFACTURER: ABB; GENERAL NOTES: MAT	5.90	No	No	No	No	VFD was in continuous operation since commissioning of the Units i.e for more than 11 years & it failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
79	2000000794_BOILER FEEDE PUMP DISCHARGE VALVE (FDV-4) ACTUATOR ITEM NAME: GEAR SWITCH ASSEMBLY, MAKE: LIMITORQUE, EQUIPMENT: MOTORISED ACTUATOR, EQUIPMENT MODEL: SMB-4-200, EQUIPMENT NOTE: 415V,1	3.36	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock
80	2000000795_BOILER FEEDE PUMP DISCHARGE VALVE (FDV-4) ACTUATOR ITEM NAME: TORQUE SWITCH, EQUIPMENT: MOTORISED ACTUATOR, EQUIPMENT MODEL: SMB-4-200, EQUIPMENT NOTE: TYPICAL SR.NO-4921B001, 415V, 1	4.02	No	No	No	No	Torque switch was not working properly and opening & closing position was not getting properly aligned with the indicator and DCS.That's why, it was replaced with a spare one in Capital stock.
81	2000000799_BOILER FEEDE PUMP DISCHARGE VALVE (FDV-4) ACTUATOR ITEM NAME: WHEEL, TYPE/USED: GEAR, MAKE: LIMITORQUE, EQUIPMENT: MOTORISED ACTUATOR, EQUIPMENT MODEL: SMB-4-200, EQUIPMENT NOTE: VOLT	1.38	No	No	No	No	Torque switch was not working properly and opening & closing position was not getting properly aligned with the indicator and DCS. Upon futher inspection, it's worm gear was found damaged. That's why, it was replaced with a spare one in Capital stock.

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
82	2000000819_AS TO DEA PEG CONTOL VALVE BP VLV,ASV-10 ACTUATOR ITEM NAME: SWITCH ASSEMBLY, TYPE/USED: GEAR, SER: 4458A005, MAKE: AUMA/LIMITORQUE, EQUIPMENT: ACTUATOR, EQUIPMENT MODEL: SMB-4-150,E	6.73	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock
83	2000000820_FEED WATER INLET TO ECONOMIZER ACTUATOR, E-2 ITEM NAME: SWITCH, TYPE/USED: LIMIT, MAKE: LIMITORQUE, EQUIPMENT: MOTORISED ACTUATOR, EQUIPMENT MODEL: SMB-4-150, EQUIPMENT NOTE: FO	4.03	No	No	No	No	Torque switch was not working properly and opening & closing position was not getting properly aligned with the indicator and DCS.That's why, it was replaced with a spare one in Capital stock.
84	2000000825_BOILER FEEDE PUMP DISCHARGE VALVE (FDV-4) ACTUATOR ITEM NAME: WORM GEAR, EQUIPMENT: MOTORISED ACTUATOR, EQUIPMENT NOTE: MAKE: LIMITRQUE, TYPE: SMB-4-150, TYPICAL SR.NO.: 4458A005, 415	1.39	No	No	No	No	Torque switch was not working properly and opening & closing position was not getting properly aligned with the indicator and DCS. Upon futher inspection, it's worm gear was found damaged. That's why, it was replaced with a spare one in Capital stock.
85	2000009650_COOLING TOWER FAN MOTOR MOTOR, ELECTRIC; VOLTAGE RATING: 415 V, POWER RATING: 9.3 KW, FULL LOAD CURRENT: 25 A, INSULATION CLASS-F, MOUNTING -VERTICAL FLANGE	2.63	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
86	2000009651_CW MAKEUP PUMP MOTOR MOTOR, ELECTRIC AC; FRAME SIZE: ND315S, VOLTAGE RATING: 415 V, POWER RATING: 90 KW, SPEED: 1485 RPM, EFFICIENCY: 94.5 %, INSULATIONC	3.41	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
87	2000009927_VACUUM PUMP RECIRCULATION PUMP-MOTOR MOTOR, ELECTRIC AC; VOLTAGE RATING: 220-240V DELTA/380-415V STAR, POWER RATING: 1.5/2 KW/HP, SPEED: 2800 RPM, FREQUENCY: 50 HZ, FULL	3.56	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
88	2000010863_LP BY-PASS OIL RECIRCULATION PMP MOTOR MOTOR, ELECTRIC AC; VOLTAGE RATING: 415 V, POWER RATING: 0.37 KW, SPEED: 1410 RPM, FREQUENCY: 50 HZ, FULL LOAD CURRENT: 1.14 A, CONN	4.11	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
89	2000010864_LP BYPASS REGENARATION PUMP MOTOR MOTOR, ELECTRIC AC; VOLTAGE RATING: 415 V, POWER RATING: 0.12 KW, SPEED: 1360 RPM, FREQUENCY: 50 HZ, FULL LOAD CURRENT: 0.41 A, CONN	2.90	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
90	2000010865_LPBP FAN IN COOLING CIRCUIT MOTOR ITEM NAME: FAN,TYPE, USED: COOLING/LP BYPASS, MAKE: OILTECH(MEMBER OFTHE OLEAR GROUP), EQUIPMENT: MOTOR, EQUIPMENT MODEL: SKH-71-4B	4.11	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
91	2000011131_INSTRUMENT AIR COMPRESSOR FEEDER ITEM NAME: VACUUM INTERRUPTER, REF: VS 10007	7.18	No	No	No	No	6 nos of BTG Instrument Air & Service Air Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling of these Circuit breakers, interrupter was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
92	2000012056_INTERMEDIATE CONVEYOR DRIVE MOTOR MOTOR, ELECTRIC AC;FRAME SIZE: ND280M; VOLTAGE RATING: 415 VAC; POWER RATING: 75 KW /100 HP; SPEED: 1480 RPM; FREQUENCY: 50 HZ; FULL	2.36	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
93	2000012073_COOLING WATER PUMP HOUSE TRANSFORMER ITEM NAME: BUSHING, TYPE/USED: LOW VOLTAGE, MAKE: AREVA, DW: D4743544, REV-02, GENERAL NOTE: RATING: 1.0KV/2000A TO IS: 3347, EQUIPM	2.46	No	No	No	No	These bushes are in continuous operation since commissioning of both the Units i.e for more than 11 years. Bushing leaks started developing over time in operation. So, their immediate replacement was planned to avoid generation loss. Bushing was replaced with the spare relay available in Capital Stock.
94	2000012076_CLARIFIER WATER PUMP HOUSE TRANSFORMER ITEM NAME: BUSHING, TYPE/USED: LOW VOLTAGE, MAKE: AREVA, DW: D474533, REV-02, GENERAL NOTE: RATING: 1.1KV/4000A TO IS: 2099, EQUIPME	1.17	No	No	No	No	These bushes are in continuous operation since commissioning of both the Units i.e for more than 11 years. Bushing leaks started developing over time in operation. So, their immediate replacement was planned. Bushing was replaced with the spare relay available in Capital Stock.
95	2000012095_BCN 4A MOTOR MOTOR, ELECTRIC AC; VOLTAGE RATING: 415 V, FREQUENCY: 50 HZ, POWER RATING: 160 KW, FULL LOAD CURRENT: 261 A, SPEED: 1485 RPM, CONNEC	5.33	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
96	2000012102_BCN 1A MOTOR MOTOR, ELECTRIC AC; FRAME SIZE: M2BA315MLB4K, VOLTAGE RATING: 415 V, FREQUENCY: 50 HZ, POWER RATING: 110 KW, FULL LOAD CURRENT: 185A	3.53	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
97	2000012147_STACKER HYDRAULIC SYSTEM MOTOR FOR BOOM LUFFING MOTOR, ELECTRIC AC; FRAME SIZE: ND 225S(HF), VOLTAGE RATING: 415 V, FREQUENCY: 50 HZ, FULL LOAD CURRENT: 52 A, POWER RATING: 30 KW,C	1.55	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
98	2000012169_MAIN SILO BLOWER MOTOR MOTOR, ELECTRIC AC; FRAME SIZE: ND225S(HF), VOLTAGE RATING: 415 V, FREQUENCY: 50 HZ, FULL LOAD CURRENT: 52 A, POWER RATING: 30 KW, C	1.55	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
99	2000012617_BFD MOTOR 1A MOTOR, ELECTRIC AC; TYPE: SQUIRREL CAGE INDUCTION, FRAME SIZE: EHX225SMB4, VOLTAGE RATING: 415V, POWER RATING: 30KW, SPEED: 1470RPM,	1.22	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
100	2000013281_CHP 6.6KV BOARD INCOMER 1 ITEM NAME: SWITCHING POLE ASSEMBLY, MAKE: SIEMENS, EQUIPMENT: BREAKER, EQUIPMENT MODEL: 3AK6533-A; GENERAL NOTE: CURRENT RATING: 160	3.10	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
101	2000013712_STAGE#2 CONVEYING AIR COMPPRESSOR HT FDR ITEM NAME: INTERRUPTER, TYPE, USED: VACUUM, MAKE: AREVA, EQUIPMENT: VACUUM CIRCUIT BREAKER, PART REF: MST10SG400300NA; GENERAL NOTE:	3.33	No	No	No	No	There are 6 nos of Vaccumm Circuit Breaker for Stage#2 Conveying Air Compressors HT Feeders. During overhauling of these Circuit breakers, interrupter was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
102	2000014192_ESP PASS A,B,C,D ECP 1 ITEM NAME: CARD, TYPE/USED: FIRING, MAKE: BHEL, EQUIPMENT: BAPCON PLUS	13.77	No	No	No	No	ESP and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of ESP are getting older day by day & fly as erosion is also increasing day by day. That's why in every overhauling, their thorough inspection is being done. During last overhauling, it was observed that internal components of ECP cards are damaged due to ageing. That's why, these spares were replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
103	2000014548_ESP PASS #A,B,C,D,CERM # 1 ITEM NAME: GEARED MOTOR, EQUIPMENT NOTE: FOR RAPPING MECHANISM	2.21	No	No	No	No	ESP and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of ESP are getting older day by day & fly as erosion is also increasing day by day. That's why in every overhauling, their thorough inspection is being done. During last overhauling, it was observed that geared motor of rapping mechanims needs replacement due to erosion in shaft and abnormal sound from both bearings. That's why, these spares were replaced with a spare one in Capital stock.
104	2000017432_415 V DM PLNAT MCC BUS SEC A RELAY; TYPE: MULTILIN, COIL VOLTAGE: 110-250VDC, POWER RATING: 30VA, MODEL: F650BABF2G1H1, MANUFACTURER: GENERAL ELECTRIC, GENERAL N	6.84	No	No	No	No	These relays were installed for more than 11 years & these relays are getting failed frequently due to Ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
105	2000017433_COOLING WATER PUMP DISCHARGE VALVE ACTUATOR ITEM NAME: ACTUATOR, TYPE, USED: MOTORISED, MAKE: AUMA; MODEL: SA60E180; EQUIPMENT NOTE: COMMISSIONING NO: 904680900101, VERSION 1.1	1.46	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock
106	2000087016_TG BUILDING EOT CRANE ELECTRICAL SYSTEM DRIVE, VARIABLE FREQUENCY; VOLTAGE RATING: 380-480 V, CURRENT RATING: 85-104 A, POWER RATING: 45 KW; MODEL: ATV71HD45N4; GENERAL NOT	2.54	No	No	No	No	VFD was in continuous operation since commissioning of the Units i.e for more than 11 years & it failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
107	2000089177_89-401G ISOLATOR ITEM NAME: INNER CORONA SHIELD, MATERIAL: ALUMINUM, SIZE: 300 MM, MAKE: SIEMENS, DW: 3 G71AZC X0096 Z012, EQUIPMENT: EARTH SWITCH, E	1.18	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
108	2000123622_FW I/L TO ECO IV ACTR, E-2 WARM GEAR FOR LIMITORQUE SMB-4 ACTR	1.48	No	No	No	No	Torque switch was not working properly and opening & closing position was not getting properly aligned with the indicator and DCS. Upon futher inspection, it's worm gear was found damaged. That's why, it was replaced with a spare one in Capital stock.
109	2000123625_FEED WATER INLET TO ECONOMIZER ACTUATOR, E-2 STEM NUT FOR LIMITORQUE MAKE MOTORISED ACTUATOR,TYPE-SMB-4-200,TYPICALSR NO-4921B001,415V,16KW MOTOR,FULL LOAD CURRENT-30A,RPM OF AC	1.46	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
110	2000124526_TG BUILDING EOT CRANE ELECTRICAL SYSTEM MOTOR 61.6KW, FOR EOT	2.69	No	No	No	No	Motor was in continuous operation since commissioning of the Units i.e for more than 11 years & winding of motor failed due to ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
111	2000124732_DIESEL GENERATOR SET CONTROL,GENSET FOR 2MW DG	5.50	No	No	No	No	Controller was not able to give start command to generator. That's why, it was replaced with a spare one in Capital stock.
112	2000124789_COLONY 33 KV INCOMMER SHAFT ASSEMBLY MECHANISM 33KV VCB PIX36	1.51	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.
113	2000124976_INTEGRATED CONTROL UNIT - ICS1 SWITCHING POLE ASSEMBLY 1250 A SIEMENS	5.74	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details /Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
114	2000129176_ID FAN VFD 1 CHANNEL A MDL 660HMPGA DS38000HMPG FOR VFD	5.13	No	No	No	No	Electronic Card of ID fan LCI Drive is most important part of LCI System. We faced back to back failure of electronic cards due to malfuction of internal components like resistor/transistor. Unavailability of Electronic Cards may lead to partial generation loss. So, their immediate replacement was planned to avoid generation loass. Electronic Card was replaced with the spare card available in Capital Stock.
115	2000129186_ID FAN VFD 1 CHANNEL A MDL 660PSFFA DS38000PSFF FOR VFD	7.38	No	No	No	No	Electronic Card of ID fan LCI Drive is most important part of LCI System. We faced back to back failure of electronic cards due to malfuction of internal components like resistor/transistor. Unavailability of Electronic Cards may lead to partial generation loss. So, their immediate replacement was planned to avoid generation loass. Electronic Card was replaced with the spare card available in Capital Stock.
116	2000147417_AMMONIA DOSING PUMP MOTOR ACTUATOR_ELECTRICL,ST-5102-32-S,LINEAR,STROKE,220V AC,	3.37	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock
117	2000157445_GENRATOR TRANSFORMER R-PHASE BUSHING_ELECTRICAL,DRAWING NO: 100-B-2114 REV-03,<(>,<)>CURRENT:800/1250AMP,<(>,<)>MAX ANG OF MOUNT:30DEG MAX VER,TOTAL CREEPAGE DIS	16.50	No	No	No	No	These bushes are in continuous operation since commissioning of both the Units i.e for more than 11 years. Bushing leaks started developing over time in operation. So, their immediate replacement was planned to avoid generation loss. Bushing was replaced with the spare relay available in Capital Stock.
118	2000158142_401 R-PH SF6 BREAKER CAPACITOR,1000 PF,IMPULSE VOLT:950 KVP,GRADING CAPACITOR FOR SF6 BKR,CREEPAGE DIST: 5250MM,OIL IMPREGNATED PAPER,BROWN PORCELEIN BOD	4.71	No	No	No	No	SF6 Circuit Breakers of Switchyard are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling of these Circuit breakers, interrupter, capacitor and puffer assembly were found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
119	2000159118_PA FAN-1A OUTLET GATE,PAD-2A ACTUATOR Make: AUMA Riester GmbH <(>&<)> Co. KGModel No.: SA 25.1-F25Comm. No.: 13141600No.: 1010MD67067T/Close: 630-2000 NmT/Open: 630-2000	9.26	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock
120	2000159119_AIR PRE HEATER PA I/L DMPR,PAD-3A ACTR Make: AUMAModel No.: SA6E90Comm. No.: 9075609009-GB-01Enclosure: IP67Close Torque: 20-60 NmOpen Torque: 20-60 NmLubricant: EP0Versi	1.50	No	No	No	No	Air Pre-Heater are in continuous operation since commissioning of both the units i.e. from last 11 years. Actuators were found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
121	2000190177_401 R-PH SF6 BREAKER SPAREPARTS,PUFFER CYLINDER ASSEMBLY WITH,CONTACT <(>&<)> NOZZLE,400KVCIRCUIT BREAKER,	1.21	No	No	No	No	SF6 Circuit Breakers of Switchyard are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling of these Circuit breakers, interrupter, capacitor and puffer assembly were found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
122	2000190673_GENERATOR RELAY PANEL CAPACITOR,2MICROF K,TEMP:70DEGC XI.08,MAKE : LECLANCHE CAPACITORS,PPM800 - 2.0R,ELECTROLYTIC CAPACITOR,8KVDC/2600VAC,UT:12KVDC,	5.31	No	No	No	No	Capacitors of Generator Protection Relay panel were installed for more than 11 years. They wear out due to aging & continuous use. So, their immediate replacement was planned to avoid generation loss. Capacitor was replaced with the spare relay available in Capital Stock.
123	2000205557_UAT-A BUS DUCT SPAREPARTS,SP BUS DUCT FROM L TO TRAFO,	6.87	No	No	No	No	It failed due to ageing. That's why, it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
124	2000205905_HERO-II HIGH PRESSURE PUMP Motor VFD DRIVE_VARIABLEFREQ,144 AMP,75KW,ABB,HERO-2,ACS850-04-144A-5,	2.19	No	No	No	No	VFD was in continuous operation since commissioning of the Units i.e for more than 11 years & it failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
125	2000206039_CW PUMP HOUSE HOIST MOTOR DRIVE_VARIABLEFREQ,I/P CURREN:57A,O/P:52A,40 KVA,MODEL: CIMR-G7A4022,SERIAL NO:J009Y230310003,APPLICATION: CWPH HOIST,O/P VOLT:AC3P	1.12	No	No	No	No	VFD was in continuous operation since commissioning of the Units i.e for more than 11 years & it failed due to ageing. So, their immediate replacement was planned. Relay was replaced with the spare relay available in Capital Stock.
126	2000206398_GENERATOR GENERATOR,INSULATING PIECE,DRAWING NO: 0642/14,PART NO :PM0A54K86E43,FORSEAL RING HOLDER EE/TE,	1.46	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
127	2000206399_GENERATOR GENERATOR,INSULATING PIECE,DRAWING NO: 0642/15,PART NO :PM0A00C34D77,FORSEAL RING HOLDER EE/TE,	1.46	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
128	2000206404_GENERATOR GENERATOR,INSULATING TUBE 28*1,9*119,DRAWING NO: 0642/13,PART NO:PM0A56H85J01,FOR SEAL RING HOLDER EE/TE,	2.37	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
129	2000206407_GENERATOR DIODE,FOR ROTATING RECTIFIER WHEEL,RR DIODE FOR GENERATOR EXCITER,DRAWING NO: 6531/3,PART NO :PM0A00B09B81,	7.27	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
130	2000206408_GENERATOR DIODE,FOR ROTATING RECTIFIER WHEEL,RR DIODE FOR GENERATOR EXCITER,DRAWING NO: 6531/4,PART NO :PM0A00B09B99,	7.27	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
131	2000206409_GENERATOR FUSE,RR FUSE FOR GENERATOR EXCITER,DRAWING NO: 6531/5,FOR ROTATINGRECTIFIER WHEEL,PART NO :PM0A54K01E18,	5.47	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
132	2000206418_GENERATOR GENERATOR,SLOT WEDGE,PART NO :PM0A54K02B27,DRAWING NO: 0402/0095,	4.11	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
133	2000208960_BUS BAR PROTECTION PANEL CARD,MAKE ABB,CPU MODULE CARD FOR REB500 CU,	10.04	No	No	No	No	BUS BAR PROTECTION PANEL Card failed due to failure of internal components beacuase of ageining. That's why, it was replaced with a spare one in Capital stock.
134	2000208961_BUS BAR PROTECTION PANEL CARD,FIRMWARE 7.05,MAKE ABB,BIO MODULE FOR REB500 CU,	3.47	No	No	No	No	BUS BAR PROTECTION PANEL Card failed due to failure of internal components beacuase of ageining. That's why, it was replaced with a spare one in Capital stock.
135	2000209177_GENERATOR CONNECTOR_HOSE,MATERIAL:PM0A56E96H63,FOR BOTTOM BAR HOSE LINE,HOSE LINEFOR GENERATOR,PRIMARY WATER HEADER SECTION,	3.67	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
136	2000209178_GENERATOR CONNECTOR_HOSE,MATERIAL : PM0A50B28E12,FOR TOP BAR HOSE LINE,HOSE LINEFOR GENERATOR,PRIMARY WATER HEADER SECTION,	3.93	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
137	2000209179_GENERATOR CONNECTOR_HOSE,MATERIAL: PM0A50B41E80,FOR PHASE CONNECTOR HOSE LINE,HOSELINE FOR GENERATOR,PRIMARY WATER HEADER SECTION,	2.11	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
138	2000209949_GENERATOR GENERATOR,MATERIAL: PM0A56G77J67,RING PTFE FOR SEAL RING HOLDER,EE FORGENERATOR,DESIGN GRP NO/PART NO: 0642/16,	3.03	No	No	No	No	During annual overhauling of generator, it was found damaged and replaced with a spare one in Capital stock.
139	1000012942_CWW-01 TSI FOR BFPDT-A & B DCS PANEL MONITOR,VM5E-110122-000-000-113-0/ISO,CASING EXP MONITOR FOR BFP,MAKE-SHINKAWA,	1.76	No	No	No	No	These monitors were installed for than 11 years to monitor TSI FOR BFPDT-A & B DCS PANEI.. Due to ageing, it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
140	1000012943_CWW-01 TSI FOR BFPDT-A & B DCS PANEL MONITOR,VM5C-211112-0-000-000-01/ISO,ECCENTRICITY MONITOR FOR BFP,MAKE-SHINKAWA,	1.87	No	No	No	No	These monitors were installed for than 11 years to monitor TSI FOR BFPDT-A & B DCS PANEL. Due to ageing, it was replaced with a spare one in Capital stock.
141	1000012944_CWW-01 TSI FOR BFPDT-A & B DCS PANEL MONITOR,VM5T-21012-000-000-111-0/ISO,THRUST MONITOR FOR BFP,MAKE-SHINKAWA,	1.46	No	No	No	No	These monitors were installed for than 11 years to monitor TSI FOR BFPDT-A & B DCS PANEL. Due to ageing, it was replaced with a spare one in Capital stock.
142	1000012945_CWW-01 TSI FOR BFPDT-A & B DCS PANEL MONITOR,MAKE- SHINKAWA,VM5S-412-2-111100-00000-00000-000-/ISO,TACHOMETER CARD FOR BFP,	2.23	No	No	No	No	These monitors were installed for than 11 years to monitor TSI FOR BFPDT-A & B DCS PANEL. Due to ageing, it was replaced with a spare one in Capital stock.
143	1000012946_CWW-01 TSI FOR BFPDT-A & B DCS PANEL MONITOR,VM5D-11012-000-000-111-0/ISO,DIFF EXP MONITOR FOR BFP,MAKE-SHINKAWA,	1.76	No	No	No	No	These monitors were installed for than 11 years to monitor TSI FOR BFPDT-A & B DCS PANEL. Due to ageing, it was replaced with a spare one in Capital stock.
144	1000014246_CJJ-41 MAIN TURBINE TSI DCS PANEL RACK,MAKE-SHINKAWA,MODEL NO - VM5W1,19 INCH INSTRUMENT RACK,	3.00	No	No	No	No	MAIN TURBINE TSI DCS PANEL Rake was replaced because of ageing.
145	1000017890_SOX ANALYZER AT CHIMNEY ANALYSER,DDU DISPLAY INTERFACE PCB,FOR MULTI OUTPUT DDU,C4N-GCEMDDUX5-INTERFACEPCB,PART NO- 802.954,MAKE- FM CODEL,	1.21	No	No	No	No	SOX and NOX analyzers are in continuous operation. Their display was showing abrupt valve for all parameters. That's why, it was replaced with a spare one in Capital stock.
146	2000009324_ID FAN IGV ACTUATOR CYLINDER, PNEUMATIC; TYPE: DOUBLE ACTING/POWER, STROKE LENGTH: 550X350 MM; MODEL: PCD 2214, MAKE: INSTRUMENTATION LTD, SERIES: PCD,W	4.22	No	No	No	No	ID Fan IGV Actuators are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling, their cylinder was found damaged because of ageing and replaced with a spare one in Capital stock.
147	2000011348_TDBFP 1A GOV OIL I/H CONVERTER CONVERTER; TYPE: I/H; INPUT: 24 VDC; MODEL/MACHINE NO: DSG-B07112, MANUFACTURER: VOITH; GENERAL NOTES: PERMISSIBLE RANGE- 20-30VDC	7.18	No	No	No	No	4 nos of TDBFPs are in continuous operation since commissioning of both the units i.e. from last 11 years. That's why, their phased wose overhauling was planned. During inspection of TDBFP Drive Turbine, Main Pump & Booster Pump in last Annual Overhauling of Unit#2, converter of Geoverning System was found damaged and also it was malfuncioning due to ageing. That's why, it was replaced with a spare one in Capital stock.
148	2000011443_BHELFEED CCR PANEL FEEDER MODULE; TYPE: INTELLIGENT, FUNCTION: DIGITAL OUTPUT; GENERAL NOTE: NUMBER OF OUTPUTS: 32 W/ PROCESSING CAPABILITIES; EQUIPMENT NOTE:	1.41	No	No	No	No	BHELFEED CCR PANEL FEEDER are in continuous operation since commissioning of both the units i.e. from last 11 years.T t was observed that electronic components of modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
149	2000011446_BHELFEED CCR PANEL FEEDER MODULE; TYPE: INTELLIGENT, FUNCTION: DIGITAL INPUT; GENERAL NOTE: NUMBER OF OUTPUTS: 32 W/ PROCESSING CAPABILITIES; EQUIPMENT NOTE:F	3.22	No	No	No	No	BHELFEED CCR PANEL FEEDER are in continuous operation since commissioning of both the units i.e. from last 11 years.T t was observed that electronic components of modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
150	2000011447_BHELFEED CCR PANEL FEEDER MODULE; TYPE: INTELLIGENT, FUNCTION: ANALOG OUTPUT; MODEL NO: AOM-2000; GENERAL NOTE: WITH PROCESSING CAPABILITIES, NUMBER OF OUTPUT	3.90	No	No	No	No	BHELFEED CCR PANEL FEEDER are in continuous operation since commissioning of both the units i.e. from last 11 years. It was observed that electronic components of modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
151	2000018497_ASH HANDLING PLANT PLC INSTRUMENTS MODULE; FUNCTION: ETHERNET INTERFACE; MODEL NO: IC695ETM001, MAKE: GE FANUC, GENERAL NOTE: DATA RATE: 10/100 MBITS, 2 RJ45 CONNECTIO	2.60	No	No	No	No	AHP PLCs are installed over 11 years ago, it was observed that electronic components of modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
152	2000018502_ASH HANDLING PLANT PLC INSTRUMENTS ITEM NAME: CENTRAL PROCESSING UNIT, PART NO: IC695CRU320, MAKE: GE FANUC, GENERAL NOTE: FREQUENCY: 1 GHZ, W/60 MEG MEMORY, 2 SERIALP	9.83	No	No	No	No	AHP PLCs are installed over 11 years ago, it was observed that CPU needs to be replaced due to ageing. That's why, it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
153	2000121826_ASLD CONTROL PANEL ITEM NAME: MODULE, TYPE/USED: REDUNDANCY MEMORY, PART NO: RX3I	3.96	No	No	No	No	ASLDs of both the boilers are installed over 11 years ago, it was observed that electronic components of modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
154	2000129624_BHELFEED CCR PANEL FEEDER MODULE,ANALOG I/P,MM:AIM-2000,BHEL	5.28	No	No	No	No	BHELFEED CCR PANEL FEEDER are in continuous operation since commissioning of both the units i.e. from last 11 years.T t was observed that electronic components of modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
155	2000130199_HP BY-PASS (L) VALVE BPV-1 INSTRUMENTS POSITION TRANSMITTER, R.SG10=2KΩ333Ω MAKE -BHEL, SL. NO- IY-B24, FOR HP BYPASS PRESSURE CONTROL VALVE."	2.67	No	No	No	No	HP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. During checking instruments of by-pass system, it was observed that position transmitters are giving erratic valve and need replacement due to ageing. That's why, it was replaced with a spare one in Capital stock
156	2000130200_HP BY-PASS(L) SPRAY CV BPE-1 INSTRUMENTS RELIEF VALVE - V/V ASSY SIZE 1" NB -BCWP CLASS 1500 (DESIGN PR 22,DESIGN TEMP 50, BODY MATERIAL F316, END CONN SW, AUTOMATIC OPERAT	2.03	No	No	No	No	HP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. During checking instruments of by-pass system, it was observed that position transmitters are giving erratic valve and need replacement due to ageing. That's why, it was replaced with a spare one in Capital stock
157	2000146430_ASH HANDLING PLANT PLC INSTRUMENTS CARD,RX3I REDUNDANCY MEMORY XCHANGE,MODEL-IC695RMX128-CG,HARDWAREREVISION-2.0,PRIMARY FIRMWARE-2.0,USER SHARED MEMORY-128MB,MAKE- GE	5.20	No	No	No	No	AHP PLCs are installed over 11 years ago, it was observed that internal components of cards are getting failed due to ageing. Replacement of failed cards with existing spare modules done.
158	2000146630_SPEEDER GEAR POS F/B TRANSMITTER TRNSMTR_POSITION,FOR MAIN TURBINE,STARTING DEVICE POSITION F/B,MAKE-CURTISS WRIGHT(COLLINS),MODEL -SS 207,	3.24	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, it was observed that Speeder Gear positioning transmitter are damaged due to ageing and it was also giving erratic value during testing. That's why, it was replaced with a spare one in Capital stock.
159	2000155713_ASH HANDLING PLANT PLC INSTRUMENTS MODULE,MAKE- GE FANUC,16UNIV MOD SLOT BASE,CAT.NO.-IC695CHS016,	2.32	No	No	No	No	AHP PLCs are installed over 11 years ago, it was observed that electronic components of modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
160	2000187284_RAW WATER PMP HOUSE PLC INSTRUMENTS MODULE,MAKE: ALLEN-BRADLEY,REDUNDANT BRIDGE MODULE,CAT: 1756-CNBR,TYPE/USED: CONTROL NET,	1.29	No	No	No	No	Raw Water PLCs are installed over 11 years ago, it was observed that electronic components of modules are getting failed due to ageing. Replacement of failed modules with existing spare modules done.
161	2000188061_FIRE PLC PANNEL PROCESSOR,IC695CPE310,RX3I 1.1 GHZ CPU,10 MB FLASH MEMORY,MAKE: GE FANUC,FOR FIRE PLC,	5.19	No	No	No	No	Fire PLCs are installed over 11 years ago, it was observed that CPU needs to be replaced due to ageing. That's why, it was replaced with a spare one in Capital stock.
162	2000195761_VACUUM BREAKER ACTUATOR ACTUATOR, TURBINE VACCUM BREAKER VALVE,<(>,<)>AFR-SHAVO/11-4SN-201M-M6KA-EN,ASCO SOLINOID VALVE-WPB307B35F,LIMIT SWITCH-SZLWBA20H,<(	7.88	No	No	No	No	Due to ageing & erosion of internal components, actuator was replaced with a spare one in stock



PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
163	2000001776_IDCT FAN GEAR BOX ITEM NAME: SHAFT, TYPE/USED: OUTPUT, GENERAL NOTE: PREMIUM, EQUIPMENT NOTE: GEARBOX IDCT	7.04	No	No	No	No	IDCT Gearbox are in continuous operation since commissioning of both the units i.e. from last 11 years. It's overhauling was planned in phased manner. During overhauling, output shaft of Gearbox was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
164	2000006141_BOILER WATER WALLS ITEM NAME: PANEL, TYPE, USED: FRONT; GENERAL NOTE: WITH WALL SLEEVE BEND TUBE, RIFLED, PASS I	6.33	No	No	No	No	Erosion in water walls are always on higher side due to flue gas erosion. That's why, these panels were replaced after inspection during last annual overhauling.
165	2000009353_AIR PRE HEATER GEAR BOX ITEM NAME: PIN, TYPE/USED: RACK, EQUIPMENT: AIR PREHEATER	4.13	No	No	No	No	Air Pre-Heater are in continuous operation since commissioning of both the units i.e. from last 11 years. Pin rack was dound damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
166	2000009561_FD FAN LUBE OIL PUMP ITEM NAME: VALVE, TYPE/USED: PRESSURE RELIEF, EQUIPMENT: FORCED DRAFT FAN	1.13	No	No	No	No	FD Fan Pressure Relief Valve are installed for more than 11 years. During overhauling, it was tested and it was not working properly. Since, it's a risk to plant, machinery and manpower.That's why, it was replaced with a spare one in Capital stock.
167	2000010004_MDBFP VOITH COUPLING ITEM NAME: BEARING, PART NO: 0071/0010, SUB EQUIPMENT: HYDRAULIC COUPLING, MODEL: R18KGS	2.93	No	No	No	No	These bearings are in continuous operation since commissioning of the Units i.e for more than 11 years. Due to gaeing, these bearings failed & was immediately replaced with a spare one in stock.
168	2000010005_MDBFP VOITH COUPLING ITEM NAME: BEARING, TYPE/USED: FOUR LOBE, PART NO: 0071/0020, EQUIPMENT: HYDRAULIC COUPLING, EQUIPMENT MODEL: R18KGS	3.69	No	No	No	No	MDBFP and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. MDBFP Voith Coupling overhauling was done for the first time. During inspection, it was obserbed that lobes, thrust bearing assembly & it's pump assembly need to be replaced due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
169	2000010009_MDBFP VOITH COUPLING ITEM NAME: BEARING, TYPE/USED: FOUR LOBE, PART NO: 0071/0030, EQUIPMENT: HYDRAULIC COUPLING, EQUIPMENT MODEL: R18KGS	3.02	No	No	No	No	MDBFP and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. MDBFP Voith Coupling overhauling was done for the first time. During inspection, it was obserbed that lobes, thrust bearing assembly & it's pump assembly need to be replaced due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
170	2000010010_MDBFP VOITH COUPLING ITEM NAME: SHELL BEARING, PART NO: 0071/0040, EQUIPMENT: HYDRAULIC COUPLING, EQUIPMENT MODEL: R18KGS	2.87	No	No	No	No	These bearings are in continuous operation since commissioning of the Units i.e for more than 11 years. Due to gaeing, these bearings failed & was immediately replaced with a spare one in stock.
171	2000010011_MDBFP VOITH COUPLING ITEM NAME: BEARING, TYPE/USED: THRUST, PART NO: 0071/0050, EQUIPMENT: HYDRAULIC COUPLING, EQUIPMENT MODEL: R18KGS	4.32	No	No	No	No	MDBFP and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. MDBFP Voith Coupling overhauling was done for the first time. During inspection, it was obserbed that lobes, thrust bearing assembly & it's pump assembly need to be replaced due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
172	2000010099_MDBFP VOITH COUPLING ITEM NAME: PUMP, TYPE/USED: START LUBE, PART NO: 500/0010, EQUIPMENT: HYDRAULIC COUPLING, EQUIPMENT MODEL: R18KGS	8.49	No	No	No	No	MDBFP and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. MDBFP Voith Coupling overhauling was done for the first time. During inspection, it was obserbed that lobes, thrust bearing assembly & it's pump assembly need to be replaced due to ageing. That's why, these spares were replaced with spare ones in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
173	2000010236_DMCW PUMP ITEM NAME: NON RETURN VALVE, TYPE/USED: SWING CHECK, SIZE: 450 NB, GENERAL NOTE: CS, EQUIPMENT: DMCW PUMP, EQUIPMENT NOTE: FACE TO F	5.51	No	No	No	No	Passing was observed from NRV of DMCW Pump discharge line. Disc of NRV was found damaged & replaced with new one available in capital stock.
174	2000010414_TDBFP BOOSTER PMP ITEM NAME: SHAFT, MAKE: BHEL, DRAWING NO, POS: HY-DG-1-1890056463, EQUIPMENT: BOILER FEED BOOSTER PUMP; EQUIPMENT NOTE: TURBINE DRIV	4.24	No	No	No	No	4 nos of TDBFPs are in continuous operation since commissioning of both the units i.e. from last 11 years. That's why, their phased wose overhauling was planned. During inspection of TDBFP Drive Turbine, Main Pump & Booster Pump in last Annual Overhauling of Unit#2, shaft of booster pump was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
175	2000010743_HP BY-PASS (L) VALVE BPV-1 JET CAGE FOR HP BYPASS VALVE-TYPE ARS 140ABHEL PART NO: ARS 140A/9MATERIAL OF CAGE: SA182 F22 CI.3INSTALLED IN 525 MW BHEL UNIT-HP B	3.55	No	No	No	No	HP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. During it's overhauling, it was observed that many spares like Cage, Pistion Rod of Actuator, Actuators of Stop avlve as well as spray valve need to be replaced due to erosion and ageing. Cracks were obserbed on cage.That's why, these spares were replaced with spare ones in Capital stock.
176	2000011585_COAL MILL ITEM NAME: SPRING ASSEMBLY, TYPE/USED: JOURNAL PRESSURE, EQUIPMENT: BOWL MILL	14.29	No	No	No	No	JOURNAL PRESSURE SPRING ASSEMBLY, OUTLET VENTURY ASSEMBLY & JOURNAL SHAFT ASSEMBLY WERE FOUND DAMAGED DURING OVERHAULING OF COA MILL. That's why, these spares were replaced with spare ones in Capital stock.
177	2000011594_COAL MILL ITEM NAME: VENTURI ASSEMBLY, TYPE/USED: OUTLET, EQUIPMENT: BOWL MILL	2.86	No	No	No	No	JOURNAL PRESSURE SPRING ASSEMBLY, OUTLET VENTURY ASSEMBLY & JOURNAL SHAFT ASSEMBLY WERE FOUND DAMAGED DURING OVERHAULING OF COA MILL. That's why, these spares were replaced with spare ones in Capital stock.
178	2000011613_COAL MILL ITEM NAME: SHAFT ASSEMBLY, TYPE/USED: JOURNAL, GENERAL NOTE: W/O GRINDING ROLL	18.47	No	No	No	No	JOURNAL PRESSURE SPRING ASSEMBLY, OUTLET VENTURY ASSEMBLY & JOURNAL SHAFT ASSEMBLY WERE FOUND DAMAGED DURING OVERHAULING OF COA MILL. That's why, these spares were replaced with spare ones in Capital stock.
179	2000013771_CLINKER GRINDER ITEM NAME: JET PUMP ASSEMBLY, EQUIPMENT: COMPRESSOR, EQUIPMENT NOTE: FOR BOTTOM ASH HOPPER	6.20	No	No	No	No	Jet Pump complete assebly eroded from inside. That's why, it was replaced with a spare one in Capital stock.
180	2000013861_SEAL WATER PUMP ITEM NAME: CASING, TYPE/USED: SUCTION END, MAKE: FLOWMORE, POS: 5, GENERAL NOTE: MATERIAL SPECIFICATION: 2.5 % NI, C.I.(FG260) 340 B	1.27	No	No	No	No	Pitting marks, erosion and internal craks were observed inside pump casing.That's why, it was replaced with a spare one in Capital stock.
181	2000013868_SEAL WATER PUMP ITEM NAME: CASING, TYPE/USED: DISCHARGE END, MAKE: FLOWMORE, POS: 14, GENERAL NOTE: HARDNESS: 340 BHN MIN, 2.5 % NI, C.I.(FG260), EQ	1.46	No	No	No	No	Pitting marks, erosion and internal craks were observed inside pump casing.That's why, it was replaced with a spare one in Capital stock.
182	2000014069_LP WATER PUMP ITEM NAME: CASING, POS: 1, EQUIPMENT: LOW PRESSURE PUMP, EQUIPMENT MODEL: 5625-200X150, EQUIPMENT NOTE: TYPE: HORIZONTAL END SUCTION	14.20	No	No	No	No	Pitting marks, erosion and internal craks were observed inside pump casing.That's why, it was replaced with a spare one in Capital stock.



PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
183	2000014252_STAGE#2 CONVEYING AIR COMPRESSOR ITEM NAME: VALVE, TYPE/USED: SAFETY, PART NO: 0830100578, EQUIPMENT: COMPRESSOR, EQUIPMENT MODEL: ZA6K	1.58	No	No	No	No	There are 6 nos of Stage#2 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. During major overhauling of these compressors which is done every 5 years, it was observed that all valves were damaged due to erosion and ageing. That's why, it was replaced with a spare one in Capital stock.
184	2000017456_RAW WATER PUMP ITEM NAME: BOWL, TYPE/USED: DISCHARGE, PART NO: BO10, MAKE: WORTHINGTON PUMPS, GENERAL NOTE: MATERIAL: FG, 260, EQUIPMENT: RAW WATER	3.88	No	No	No	No	3 nos of Raw Water Pumps are in continuous operation since commissioning of both the units i.e. from last 11 years. Bowl and sole plate were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
185	2000017479_RAW WATER PUMP ITEM NAME: SOLE PLATE, MATERIAL: MILD STEEL, PART NO: D180, MAKE: WORTHINGTON PUMPS, GENERAL NOTE: MATERIAL STANDARD: IS 2062, EQUIP	2.44	No	No	No	No	3 nos of Raw Water Pumps are in continuous operation since commissioning of both the units i.e. from last 11 years. Bowl and sole plate were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
186	2000017519_SERVICE WATER PUMP ITEM NAME: CASING, TYPE/USED: UPPER HALF, MATERIAL: CAST IRON, MAKE: KIRLOSKAR BROTHERS, POS: 122, GENERAL NOTE: MATERIAL STANDARD:I	1.69	No	No	No	No	Pitting marks, erosion and internal craks were observed inside pump casing.That's why, it was replaced with a spare one in Capital stock.
187	2000017520_SERVICE WATER PUMP ITEM NAME: HALF LOWER CASING, MATERIAL: CAST IRON, MAKE: KIRLOSKAR BROTHERS, POS: 123, GENERAL NOTE: STANDARD: IS 210 FG-260, EQUIPM	1.69	No	No	No	No	Pitting marks, erosion and internal craks were observed inside pump casing.That's why, it was replaced with a spare one in Capital stock.
188	2000019080_MAIN HYDRANT PUMP ITEM NAME: BOTTOM HALF CASING, MATERIAL: CAST IRON, PART NO: 1002, EQUIPMENT: MAIN HYDRANT PUMP, EQUIPMENT MODEL: 150/200 DST, EQUIP	1.72	No	No	No	No	Pitting marks, erosion and internal craks were observed inside pump casing.That's why, it was replaced with a spare one in Capital stock.
189	2000019081_MAIN HYDRANT PUMP ITEM NAME: CASING, TYPE/USED: TOP HALF, POS: 1001, EQUIPMENT: SPLIT CASING CENTRIFUGAL PUMP, EQUIPMENT MODEL: 150/200 DST, EQUIPMENT	1.72	No	No	No	No	Pitting marks, erosion and internal craks were observed inside pump casing.That's why, it was replaced with a spare one in Capital stock.
190	2000019210_BTG INSTRUMENT AIR COMPRESSOR ITEM NAME: CAPACITY CONTROL VALVE ASSEMBLY, EQUIPMENT MODEL: NH265-8, EQUIPMENT NOTE: COMPRESSOR, MAKE: ELGI, PN: A410083	2.20	No	No	No	No	6 nos of BTG Instrument Air & Service Air Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Loading & unoading issue of compressor was reported. Upon inspection, it was observed that, CAPACITY CONTROL VALVE ASSEMBLY(CCVA) was malfunctioning. During inspection, it was confirmed that it's shaft and gear teeth have eroded and also the sleeves ID has eroded due to ageing. That's why, it was replaced with a spare one in Capital stock.
191	2000019217_BTG INSTRUMENT AIR DRYER ITEM NAME: CONDENSER ASSEMBLY, GENERAL NOTE: W/WATER COOLED BRAZED PLATE, SUB EQUIPMENT: AIR DRYER, EQUIPMENT: MAIN PLANT COMPRESSOR	1.32	No	No	No	No	Summits make Air Dryers of BTG Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. ryers were tripping on Refrigerant Pressure low. During Inspection & after hydro test of Condenser Assembly, it was confirmed that leakage is from Condenser Assembly & needs to be replaced. That's why, it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
192	2000019229_BTG INSTRUMENT AIR COMPRESSOR ITEM NAME: TUBE, TYPE/USED: BUNDLE, PART NO: B10310403, MAKE: ELGI, EQUIPMENT: COMPRESSOR, EQUIPMENT MODEL: NH265-8	3.79	No	No	No	No	6 nos of BTG Instrument Air & Service Air Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. It was reported that Air was coming out of DMCW system which is a closed loop system. Air Cooler was inspected for any leak & after hydro test, it was confirmed that more than 30% tubes were leaking. 5% of tubes were already blanked earlier. That's why, air cooler tube bundle was replaced with with a spare one in Capital stock.
193	2000019240_BTG INSTRUMENT AIR COMPRESSOR ITEM NAME: PRESSURE RELIEF VALVE, TYPE/USED: PRESSURE RELIEF, PART NO: 41031X007, EQUIPMENT: COMPRESSOR, EQUIPMENT MODEL: NH265-8	1.39	No	No	No	No	6 nos of BTG Instrument Air & Service Air Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling of compressor, its pressure relief valve was checked & it was not working properly. Since it's a safety issue for plant, machinery & manpower. That's why, it was replaced with a spare one in Capital stock.
194	2000019296_MILL REJECT COMPRESSOR ITEM NAME: LUBE OIL, TYPE/USED: COOLER, EQUIPMENT MODEL: NE135-5, EQUIPMENT NOTE: MAKE: ELGI	1.17	No	No	No	No	2 nos of Mill Reject Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. It was reported that water was getting colledted in the oil tank. Cooler was inspected for any leak & after hydro test, it was confirmed that more than 20% tubes were leaking. That's why, oil cooler was replaced with with a spare one in Capital stock.
195	2000019423_MILL REJECT COMPRESSOR ITEM NAME: TUBE BUNDLE ASSEMBLY, PART NO: B10310402, MAKE: ELGI, EQUIPMENT: COMPRESSOR, EQUIPMENT MODEL: NE135-5; GENERAL NOTE: LENG	3.61	No	No	No	No	2 nos of Mill Reject Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Air Cooler was inspected for any leak & after hydro test, it was confirmed that more than 30% tubes were leaking. 5% of tubes were already blanked earlier. That's why, air cooler tube bundle was replaced with with a spare one in Capital stock.
196	2000019515_H2 GENERATION PLANT KOH PUMP ITEM NAME: HOUSING, TYPE, USED: IMPELLER MAGNET, PART NO: ES-551A1400132-001, EQUIPMENT: PUMP, EQUIPMENT MODEL: HMXT	1.58	No	No	No	No	2 nos of H2 Generators with compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Due to ageing,it was replaced with a spare one in Capital stock.
197	2000019520_H2 GENERATION PLANT COMPRESSOR ITEM NAME: DIAPHRAGM SET, PART NO: B0010453/B0010543, EQUIPMENT: H2 COMPRESSOR; GENERAL NOTE: TYPE: A	3.05	No	No	No	No	2 nos of H2 Generators with compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Due to ageing,it was replaced with a spare one in Capital stock.
198	2000019522_H2 GENERATION PLANT COMPRESSOR ITEM NAME: DIAPHRAGM SET, PART NO: B0010482/B0010582, EQUIPMENT: H2 COMPRESSOR; GENERAL NOTE: TYPE: B	3.00	No	No	No	No	2 nos of H2 Generators with compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Due to ageing,it was replaced with a spare one in Capital stock.
199	2000019525_H2 GENERATION PLANT COMPRESSOR ITEM NAME: CHECK VALVE, PART NO: A0027402, MAKE: PDC, EQUIPMENT: H2 COMPRESSOR; GENERAL NOTE: A 2ND STG DISC	3.50	No	No	No	No	2 nos of H2 Generators with compressors are in continuous operation since commissioning of both the units i.e. from last 11 years.Check valves were not closing proper due to ageing. That's why,it was replaced with a spare one in Capital stock.
200	2000019526_H2 GENERATION PLANT COMPRESSOR ITEM NAME: CHECK VALVE, PART NO: A0100030, EQUIPMENT: H2 COMPRESSOR; GENERAL NOTE: B 2ND STG DISC	2.46	No	No	No	No	2 nos of H2 Generators with compressors are in continuous operation since commissioning of both the units i.e. from last 11 years.Check valves were not closing proper due to ageing. That's why,it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
201	2000026597_BOILER WATER WALLS ITEM NAME: TUBE RIBBED, SIZE: OD: 51 X THK: 5.6 MM, PART NO: 07-988-002, MAKE: BHEL, GENERAL NOTE: MATERIAL STANDARD: SA210, MATERIA	16.90	No	No	No	No	Erosion in water walls are always on higher side due to flue gas erosion. That's why, these tubes were replaced after inspection during last annual overhauling.
202	2000029070_HP TURBINE STOP VALVE-LHS ITEM NAME: CONE VALVE, DW: 01120205000, POS: 02, EQUIPMENT NOTE: TURBINE GENERATOR, UNIT-6	15.15	No	No	No	No	During last capital Overhauling of HP turbine Stop valve, Cone, guide, bush & rings were found damaged due to ageing. Linings were observed on valve seat whoch were beyond repair. That's why, these spares were replaced with spare ones in Capital stock.
203	2000123786_SH SPRAY CONT VLV-L SD-6 CAGE S/A, SD 6-9, MODEL: 38-91212	9.27	No	No	No	No	Cage of Control Valve was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
204	2000124070_LP BY-PASS SPRAY VALVE	3.39	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that cylinder, valve seat, valve plug assembly, valve coupling and cage are damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
205	2000124071_LP BY-PASS SPRAY VALVE	4.55	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that cylinder, valve seat, valve plug assembly, valve coupling and cage are damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
206	2000124072_LP BY-PASS SPRAY VALVE	7.86	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that cylinder, valve seat, valve plug assembly, valve coupling and cage are damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
207	2000124073_LP BY-PASS SPRAY VALVE	11.94	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that cylinder, valve seat, valve plug assembly, valve coupling and cage are damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
208	2000124307_DRUM SAFETY VALVE SV2 DRUM SAFETY VALVE, SPINDLE,CONSOL 1750WB	1.92	No	No	No	No	There are 6 nos of Drum Safety Valves which are inspected in every annual overhauling i.e. at every 2 years. During inspection, spindle of drim safety valve was found damaged. That's why, it was replaced with a spare one in Capital stock.
209	2000124318_DRUM SAFETY VALVE SV5 DRUM SAFETY VALVE, SPINDLE,CONSOL 1740WB	1.99	No	No	No	No	There are 6 nos of Drum Safety Valves which are inspected in every annual overhauling i.e. at every 2 years. During inspection, spindle of drim safety valve was found damaged. That's why, it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
210	2000124522_GENERATOR PRIMARY WATER LINE PIPE BELW,F/PRIMARY WATER LINE	1.10	No	No	No	No	Primary Water pipeline of Generator are in continuous operation since commissioning of both the units i.e. from last 11 years. During inspection, it's bellow was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
211	2000124859_COOLING WATER PUMP DISCHARGE VALVE ACTUATOR DRIVE SHAFT CW DISC VV 2200NB	3.31	No	No	No	No	6 nos of Cooling Water Pump & it's discharge valves are in continuous operation since commissioning of both the units i.e. from last 11 years. During last annual overhauling, main shaft of discharge valve was dound damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
212	2000125135_STAGE#2 CONVEYING AIR COMPRESSOR	4.17	No	No	No	No	There are 6 nos of Stage#2 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. During major overhauling of these compressors which is done every 5 years, it was observed that all valves were damaged due to erosion and ageing. That's why, it was replaced with a spare one in Capital stock.
213	2000125136_STAGE#2 CONVEYING AIR COMPRESSOR	3.66	No	No	No	No	There are 6 nos of Stage#2 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. During major overhauling of these compressors which is done every 5 years, it was observed that all valves were damaged due to erosion and ageing. That's why, it was replaced with a spare one in Capital stock.
214	2000125137_AHP INSTUMENT AIR COMPRESSOR THROTTLE VALVE ASSY,ZR55	1.03	No	No	No	No	There are 2 nos of AHP Instrument Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. During major overhauling of these compressors which is done every 5 years, it was observed that throttle valve internals were damaged due to ash erosion. That's why, it was replaced with a spare one in Capital stock.
215	2000125562_H2 GENERATION PLANT COMPRESSOR CHECK VALVE 1ST STG SUCTN,H2 COMPRESSOR	3.50	No	No	No	No	2 nos of H2 Generators with compressors are in continuous operation since commissioning of both the units i.e. from last 11 years.Check valves were not closing proper due to ageing. That's why,it was replaced with a spare one in Capital stock.
216	2000128833_MAIN STEAM ERV SV9 MAIN SPRING FOR SH ERV	4.37	No	No	No	No	Main Steam Emergenvy Relief Valves (ERV) are installed from last 11 years. During annual overhauling, it was observed all springs were damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
217	2000147474_HP TURBINE MODULE U_SEAL_RING, MACHINED, PART NO : 07, HP CASING ASSEMBLY, BHELASSEMBLY DRAWING NO: 0-10501-09000, INSTALLED IN 525 MW BHEL UNIT.	9.89	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
218	2000147475_HP TURBINE MODULE U_SEAL_RING, UNFINISHED, PART NO : 03, DRAWING NO: 01050109000,	50.15	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
219	2000147476_HP TURBINE MODULE U_SEAL_RING, MACHINED, PART NO : 05, HP CASING ASSLY, BHEL ASSEMBLY DRAWING NO: 0-10501-09000, INSTALLED IN 525 MW BHEL UNIT.	10.87	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.



PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
220	2000156287_HP TURBINE STOP VALVE-LHS BUSH,ESV,ITEM NO:10,DRW:01120205000,	1.42	No	No	No	No	During last capital Overhauling of HP turbine Stop valve, Cone, guide, bush & rings were found damaged due to ageing. Linings were observed on valve seat whoch were beyond repair. That's why, these spares were replaced with spare ones in Capital stock.
221	2000156289_HP TURBINE STOP VALVE-LHS THREADED_RING,ESV,ITEM NO:08,DRW:01120205000,	1.10	No	No	No	No	During last capital Overhauling of HP turbine Stop valve, Cone, guide, bush & rings were found damaged due to ageing. Linings were observed on valve seat whoch were beyond repair. That's why, these spares were replaced with spare ones in Capital stock.
222	2000156290_HP TURBINE STOP VALVE-LHS THREADED_RING,ESV,ITEM NO:07,DRW:01120205000,	1.25	No	No	No	No	During last capital Overhauling of HP turbine Stop valve, Cone, guide, bush & rings were found damaged due to ageing. Linings were observed on valve seat whoch were beyond repair. That's why, these spares were replaced with spare ones in Capital stock.
223	2000156291_HP TURBINE STOP VALVE-LHS GUIDE_BUSH,ESV,ITEM NO:06,DRW:01120205000,	3.09	No	No	No	No	During last capital Overhauling of HP turbine Stop valve, Cone, guide, bush & rings were found damaged due to ageing. Linings were observed on valve seat whoch were beyond repair. That's why, these spares were replaced with spare ones in Capital stock.
224	2000156294_HP TURBINE STOP VALVE-LHS VALVE_SEAT,ESV,ITEM NO:03,DRW NO:01120205000,	1.54	No	No	No	No	During last capital Overhauling of HP turbine Stop valve, Cone, guide, bush & rings were found damaged due to ageing. Linings were observed on valve seat whoch were beyond repair. That's why, these spares were replaced with spare ones in Capital stock.
225	2000157340_LP BY-PASS OIL RECIRCULATION PUMP PUMP,LPBP RECIRCULATION UNIT, KOM-0410-1-0674/00-02,Model-2010,Type-GFA-GRP-K-15, V171/0330-R-003BN/HC,Emotor-0.37 kw, rpm-1390,PART	5.47	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that it's recirculation pump needs replacement due to ageing. That's why, it was replaced with a spare one in Capital stock.
226	2000157353_HP TURBINE MODULE ANGLE_RING, FOR HP CASING ASSEMBLY, DRAWING NO: 0-10501 -09000, ITEMNO: 10.	1.31	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
227	2000158214_BTG INSTRUMENT AIR COMPRESSOR COOLER_OIL,ELGI,NH265-5,P.N.-410331027,	1.04	No	No	No	No	6 nos of BTG Instrument Air & Service Air Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. It was reported that water was getting colledted in the oil tank. Cooler was inspected for any leak & after hydro test, it was confirmed that more than 20% tubes were leaking. That's why, oil cooler was replaced with with a spare one in Capital stock.
228	2000159861_AIR PRE HEATER GEAR BOX GEAR_PINION,47 TEETH, 1.5 INCH PINS,FOR APH(31.5VIMT),	3.48	No	No	No	No	Air Pre-Heater are in continuous operation since commissioning of both the units i.e. from last 11 years. Pinion gear were not aligning properly due to damage of Gear Teeth. That's why, it was replaced with a spare one in Capital stock.



PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
229	2000160040_STAGE#1 CONVEYING AIR COMPRESSOR AIR SCREW ASSEMBLY,KAESER COMPRESSOR_1.6927E0,ESD 361	32.98	No	No	No	No	There are 5 nos of Stage#1 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. During major overhauling of these oil injected type screw compressors which is done every 5 years, it was observed that bearings of screw assemblies were damaged and screw as well as casing were also needs to be replaced due to erosion and ageing. That's why, it was replaced with a spare one in Capital stock.
230	2000161435_MAIN SILO IA COMPRESSOR#1 COOLER,AIR P.N.-1903618311, CP COMP,	1.64	No	No	No	No	Chicago Pneumatics make Reciproicating Compressor of Main silo Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. These compressors are for conveying & unlaoding ash from main silo. Compressor was tripping on higher air exit temperature. During inspection, it was observed that there is leak from air cooler of compressor. Air cooler cools down the compressed air & due to it's internal tube leakage, compressor was not available. This confirmed that air cooler needs to be replaced. So, air cooler was replaced with spare one available in Capital Stock. That's why, this cooler was procured to replenish the consumed Capital Spare.
231	2000161442_MAIN SILO INSTRUMENT AIR COMPRESSOR COMPRESSOR,CROSS SLIDE P.N.-1903007395,	1.85	No	No	No	No	Chicago Pneumatics make Reciproicating Compressor of Main silo Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. These compressors are for conveying & unlaoding ash from main silo. Compressor discharge pressure was low & abnormal sound was also observed from HP & LP side. During inspection, it was observed LP Cylinder linings, HP Cylinder Linings & Cross Slide have eroded. This confirmed that these spares need to be replaced. So, this spare was replaced with spare one available in Capital Stock.
232	2000161448_MAIN SILO INSTRUMENT AIR COMPRESSOR CYLINDER,LP ASSY CP, P.N.-1903909295,	1.67	No	No	No	No	Chicago Pneumatics make Reciproicating Compressor of Main silo Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. These compressors are for conveying & unlaoding ash from main silo. Compressor discharge pressure was low & abnormal sound was also observed from LP side. During inspection, it was observed LP Cylinder linings have eroded. This confirmed that LP Cylinder Assembly needs to be replaced. So, LP Cylinder was replaced with spare one available in Capital Stock.
233	2000162296_HP BY-PASS (L) VALVE BPV-1 ACTUATOR PISTON ROD FOR HPBP VALVE (TYPE ARS 140A) ACTUATOR TYPE ASM 259-10/6084.INSTALLED IN 525 MW BHEL UNIT-HP BYPASS SYSTEM.MATERIAL TEST	1.72	No	No	No	No	HP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. During it's overhauling, it was observed that many spares like Cage, Pistion Rod of Actuator, Actuators of Stop avlve as well as spray valve need to be replaced due to erosion and ageing. Cracks were obserbed on cage.That's why, these spares were replaced with spare ones in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
234	2000162330_STAGE#2 CONVEYING AIR COMPRESSOR COOLER,AFTER 2ND STAGE COMPRESSOR,	13.64	No	No	No	No	There are 6 nos of Stage#2 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. Water was observed to be coming out continuously from drain valve of air cooler. During cooler inspection, it was observed that more than 40% tubes were having leakage.That's why, it was replaced with a spare one in Capital stock.
235	2000163203_DEWATERING BIN CYLINDER,DEWATERING BIN,FEEDGATE,	2.36	No	No	No	No	De-Watering Bin and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Due to ash erosion and ageing, cylinder of DBW feedgate was found damaged. That's why, it was replaced with a spare one in Capital stock.
236	2000163415_STARTING DEVICE BELLOW,BELLOW ASSLY,FOR HYD SPEED GOVERNOR,BHEL ASSLY DRWGNO:01142105000,PART NO-149,INSTALLED IN 525 MW-BHEL HYD GOVERNOR,PARTDRG-3	1.43	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, it was observed that bellow and gear of Starting Device is damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
237	2000167637_H2 LINE H2 FILLING PRESS REGULATING VALVE REGULATOR,H2 GAS VAR 1,ORIFICE DIA -3MM,RMG REGEL MESSTECHNIK GMBH,RMG213-3-H-F3, PEMAX-150 BAR,YEAR-2009,RANGE-1-20 BAR,SR NO-09054	5.07	No	No	No	No	2 nos of H2 Generators with compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Due to ageing regulator was not working properly. That's why, it was replaced with a spare one in Capital stock.
238	2000167667_HP TURBINE MODULE SEALING_RING,ITEM-11:HP SHAFT SEAL FRONT,(IN 6 PARTS),BHEL ASSLYDRWG:0-10505-28000,1SET=6 SEGMENT-COMPRISE ITEM11,INSTALLED IN 525 M	1.46	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
239	2000167668_HP TURBINE MODULE SEALING_RING,ITEM-10:HP SHAFT SEAL FRONT,(IN 6 PARTS),BHEL ASSLYDRWG:0-10505-28000,1SET=6 SEGMENT-COMPRISE ITEM10,INSTALLED IN 525 M	1.46	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
240	2000167669_HP TURBINE MODULE SEALING_RING,ITEM-9:HP SHAFT SEAL FRONT,(IN 6 PARTS),BHEL ASSLYDRWG:0-10505-28000,1 SET=6 SEGMENT-COMPRISE ITEM9,INSTALLED IN 525 MW	1.46	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
241	2000167670_HP TURBINE MODULE SEALING_RING,ITEM-8:HP SHAFT SEAL FRONT,(IN 6 PARTS),BHEL ASSLYDRWG:0-10505-28000,1 SET=6 SEGMENT-COMPRISE ITEM-8,INSTALLED IN 525 M	1.46	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
242	2000167671_HP TURBINE MODULE SEALING_RING,ITEM-7:HP SHAFT SEAL FRONT,(IN 6 PARTS),BHEL ASSLYDRWG:0-10505-28000,1 SET=6 SEGMENT-COMPRISE ITEM-7,INSTALLED IN 525 M	1.46	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
243	2000167672_HP TURBINE MODULE SEALING_RING,ITEM-6:HP SHAFT SEAL FRONT,(IN 8 PARTS),BHEL ASSLYDRWG:0-10505-28000,1 SET=8 SEGMENT-COMPRISE ITEM-6,INSTALLED IN 525 M	1.55	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
244	2000167673_HP TURBINE MODULE SEALING_RING,ITEM-5:HP SHAFT SEAL FRONT,(IN 8 PARTS),BHEL ASSLYDRWG:0-10505-28000,1 SET=8 SEGMENT-COMPRISE ITEM-5,INSTALLED IN 525 M	1.55	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
245	2000167675_HP TURBINE MODULE SEALING_RING,ITEM-4:HP SHAFT SEAL FRONT,(IN 8 PARTS),BHEL ASSLYDRWG:0-10505-28000,1 SET=8 SEGMENT-COMPRISE ITEM-4,INSTALLED IN 525 M	1.55	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
246	2000167676_HP TURBINE MODULE SEALING_RING,ITEM-3:HP SHAFT SEAL FRONT,(IN 8 PARTS),BHEL ASSLYDRWG:0-10505-28000,1 SET=8 SEGMENT-COMPRISE ITEM-3,INSTALLED IN 525 M	1.55	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
247	2000167677_HP TURBINE MODULE SEALING_RING,ITEM-2:HP SHAFT SEAL FRONT,(IN 8 PARTS),BHEL ASSLYDRWG:0-10505-28000,1 SET=8 SEGMENT-COMPRISE ITEM-2,INSTALLED IN 525 M	1.55	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
248	2000167678_HP TURBINE MODULE SEALING_RING,ITEM-1:HP SHAFT SEAL FRONT,(IN 8 PARTS),BHEL ASSLYDRWG:0-10505-28000,1 SET=8 SEGMENT-COMPRISE ITEM-1,INSTALLED IN 525 M	1.55	No	No	No	No	During last capital Overhauling of HP turbine module, U Seal Ring, angle rings, real seal rings and sealing rings were found damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
249	2000167733_HP TURBINE MODULE BOLT,COUPLING BOLT M64,ITEM-16,HP-IP PEDESTAL ARRANGEMENT DRW,BHEL ASSLYDRWG:0-11831-41000,INSTALLED IN 525 MW BHEL UNIT	4.67	No	No	No	No	During last capital Overhauling of HP turbine module, Coupling bolts of HP-IP turbine needed to be replaced due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
250	2000167859_IP TURBINE STOP VALVE-LHS GUIDE_BUSH,DRG NO11132027000,FOR IPSV,ITEM NO 10,INSTALLED IN 525 MWBHEL UNIT	5.73	No	No	No	No	IP Turbine Stop Valves are in continuous operation since commissioning of both the units i.e. from last 11 years. During last annual overhauling, guide bush and valve seat were found damaged due to ageing. Linings were observed on the valve sheet which were beyond repair. That's why, these spares were replaced with spare ones in Capital stock.
251	2000167864_IP TURBINE STOP VALVE-LHS VALVE,VALVE SEAT FOR IPSV,ITEM NO 8,DRG NO11132027000,INSTALLED IN 525MW BHEL UNIT	2.70	No	No	No	No	IP Turbine Stop Valves are in continuous operation since commissioning of both the units i.e. from last 11 years. During last annual overhauling, guide bush and valve seat were found damaged due to ageing. Linings were observed on the valve sheet which were beyond repair. That's why, these spares were replaced with spare ones in Capital stock.
252	2000167893_MAIN STEAM LINE STOP VLV(L), S-134 SPINDLE,STEM DO.START-W112,	7.44	No	No	No	No	Main Steam Stop Valves are installed from last 11 years. During annual overhauling, it was observed that spindle and valve disc were damaged due to steam erosion and ageing. That's why, these spares were replaced with spare ones in Capital stock.
253	2000167894_MAIN STEAM LINE STOP VLV(L), S-134 DISC,W080,	15.88	No	No	No	No	Main Steam Stop Valves are installed from last 11 years. During annual overhauling, it was observed that spindle and valve disc were damaged due to steam erosion and ageing. That's why, these spares were replaced with spare ones in Capital stock.
254	2000169741_H2 GENERATION PLANT KOH PUMP CASING,H2 PLANT,KOH PUMP,	1.18	No	No	No	No	2 nos of H2 Generators with compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Pitting and erosion was observed inside casing of KOH Pump. That's why, itwas replaced with a spare one in Capital stock.
255	2000170142_AIR PRE HEATER ELEMENT,HOT END ELEMENT-C,850MM,IS 513 DD,0.63MM,DU,	17.07	No	No	No	No	Air Pre-Heater are in continuous operation since commissioning of both the units i.e. from last 11 years. Flue gas erosion led to replacement of hot end element of AHP during overhauling.

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
256	2000173820_STARTING DEVICE BELLOW,FOR HSG,ITEM 8,DRG 01142105000,PART DRG ST41010003 INSTALLED,INBHEL 525 MW UNIT TURBINE GOVERNING	1.23	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, it was observed that bellow and gear of Starting Device is damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
257	2000184937_STAGE#1 CONVEYING AIR COMPRESSOR COOLER,OIL,KAESER COMPRESSOR-ESD 361,	23.42	No	No	No	No	There are 5 nos of Stage#1 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. During inspection , leaks were observed from oil cooler tubes. More than 30% tubes were having leaks. That's why, it was replaced with a spare one in Capital stock.
258	2000184939_STAGE#1 CONVEYING AIR COMPRESSOR COOLER,KAESER-ESD 361,AIR,P.N.-5.6906E0,	35.53	No	No	No	No	There are 5 nos of Stage#1 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. During inspection , leaks were observed from air cooler tubes. More than 40% tubes were having leaks. That's why, it was replaced with a spare one in Capital stock.
259	2000185177_H2 GENERATION PLANT OXYGEN CONDENSOR HEAT_EXCHANGER,KOH,ES M14006-009,	9.44	No	No	No	No	2 nos of H2 Generators with compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Due to ageing,it was replaced with a spare one in Capital stock.
260	2000185803_CHANGE OVER VALVE VALVE_SOLENOID,TURBINE CHANGE OVER SOV,ID NR-2401784,PR- 0-50 BAR,DCODE-9480009,MAKE: NORGREN, WITH COIL,ID NR.-1344, 24 V-20W,IP	4.62	No	No	No	No	During overhauling, it was observed that Change Over Solenoid Valve was not working properly. It's servicing is also not possible. Since, it's a safety concern for plant, machinery & manpower. That's why, it was replaced with a spare one in Capital stock.
261	2000185804_TDBFP DRIVE TURBINE VALVE_SOLENOID,3/2 WAY TDBFP TRIP SOV, ID.NR. 2432581,PR: 2 - 25 BAR,D-CODE: 8490024,MAKE: NORGREN, WITH COIL, ID NR- 1302,	12.56	No	No	No	No	4 nos of TDBFPs are in continuous operation since commissioning of both the units i.e. from last 11 years. That's why, their phased wose overhauling was planned. During inspection of TDBFP Drive Turbine, Main Pump & Booster Pump in last Annual Overhauling of Unit#2, Trip Valve & Stop Valve was found damaged due to ageing. Spindle of the stop valve was also found damged due to ageing. That's why, these spares were replaced with the sapre ones available in Capital Stock.
262	2000186682_H2 LINE H2 FILLING PRESS REGULATING VLV REGULATOR_PRESSURE,FOR H2 RACK 0 MTR,SR NO-70919,72751,PA RANGE 0.700-7BAR,ORIFICE-5.5 MM,MODEL HON 219,TYPE-RMG 219-5.5-V-F7,VAR 03	4.56	No	No	No	No	During inspection, it was observed that regulators were not working properly. That's why, it was replaced with a spare one in Capital stock.
263	2000186683_PW LINE N2 FILLING PRESS REGULATING VLV REGULATOR_PRESSURE,FOR NITROGEN GASROOM,SR NO-090549249,PA RANGE0.2-1.5 BAR,ORIFICE-3MM,MODEL HON 213,TYPE:RMG 213-3-M-F0,VAR 2,PMA	5.19	No	No	No	No	During inspection, it was observed that regulators were not working properly. That's why, it was replaced with a spare one in Capital stock.
264	2000186684_ VALVE,PRESSURE RELIEF FOR N2,8.5 MTR,PA RANGE 0.005 - 1.0 BAR,ORIFICE-25MM,MAKE-HONEYWLL(RMG),SR NO-090982017,TYPE-RMG 835-1-F6,PMAX	4.22	No	No	No	No	During overhauling, it was observed that Pressure relief valve was not working properly. It's servicing is also not possible. Since, it's a safety concern for plant, machinery & manpower. That's why, it was replaced with a spare one in Capital stock.

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
265	2000187319_BTG INSTRUMENT AIR COMPRESSOR GEAR PINION SET,NH265,P.N.A410077,	3.08	No	No	No	No	6 nos of BTG Instrument Air & Service Air Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling of compressor, it was observed that teeths of gear pinion set are not properly aligning due toi erosion of gear teeth. This happened due to ageing. That's why, it was replaced with a spare one in Capital stock
266	2000187321_MILL REJECT COMPRESSOR GEAR_PINION,SET GROUP,NE 135,P.N.-A990146,	1.86	No	No	No	No	2 nos of Mill Reject Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. During overhauling of compressor, it was observed that teeths of gear pinion set are not properly aligning due toi erosion of gear teeth. This happened due to ageing. That's why, it was replaced with a spare one in Capital stock
267	2000188310_PRIMARY WATER FILTER FILTER ELEMENT FOR PRIMARY WATER SYSTEM,TYPE- 1.53.1.270.750 DN100,FABNO-3884423/4P,MAKE-BOLL <(>&<)> KIRCH FILTERBAU GMBH D50170 KE	11.89	No	No	No	No	Primary Water Filters were getting chocked frequently. After cleaning also, results were not upto the mark. That's why, both PW filters were replaced with a spare ones in Capital stock.
268	2000188311_TDBFP (MAIN PMP) FLEXIBLE COUPLING BETWEEN TURBINE REAR BFP. TYPE-8GBH-200-S,MAKE-EUROFLEX-DRAWING NO: 08287-00, BHEL DRAWING NO: 2-303-02-00	18.68	No	No	No	No	4 nos of TDBFPs are in continuous operation since commissioning of both the units i.e. from last 11 years. That's why, their phased wose overhauling was planned. During inspection of TDBFP Drive Turbine, Main Pump & Booster Pump in last Annual Overhauling of Unit#2, couling between Main Pump & Drive turbine was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
269	2000190288_ESP PASS#A,B,C,D Inlet GD screen-Primary,MOC-IS 2062 (2mm Sheet)	3.45	No	No	No	No	ESP and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of ESP are getting older day by day & fly as erosion is also increasing day by day. That's why in every overhauling, their thorough inspection is being done. During last overhauling, it was observed that Gas Distributor scren have eroded beyond repair and needs replacement due to flue gas erosion. That's why, these spares were replaced with a spare one in Capital stock.
270	2000193554_INTERMEDIATE SILO#2 K PUMP#3 DISPENSING VESSEL TANK,K PUMP,MB8411D,70/110/250	6.70	No	No	No	No	Intermediate Silos are used to store Fly Ash from ESP. Thenafter, through K Pump Fly Ash is transferred from IM Silo to Main silo. Internals of Tranfer Vessel & Dispensing vessel were eroded, that's why these were replaced with new one available in Capital stock due to fly ash erosion.
271	2000193555_INTERMEDIATE SILO#2 K PUMP#3 TRANSFER VESSEL TANK,MB8410D,K PUMP,70/110/250	4.49	No	No	No	No	Intermediate Silos are used to store Fly Ash from ESP. Thenafter, through K Pump Fly Ash is transferred from IM Silo to Main silo. Internals of Tranfer Vessel & Dispensing vessel were eroded, that's why these were replaced with new one available in Capital stock due to fly ash erosion.
272	2000194713_HP Control Fluid Oil Vapour Exhaust Fan CONTROL FLUID VAPOUR EXHAUSTER WITH MOTOR.Make: Air Link Engineering Pvt Ltd. Type: AMSL, Size: 10, Sl. No:01210 024, Mfg. Date:	1.19	No	No	No	No	HP Control Fluid Oil Vapour Exhaust Fan are in continuous operation since commissioning of both the units i.e. from last 11 years. During it's overhauling, it was observed that fan, casing , shaft and bearings are damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
273	2000196144_INTERMEDIATE SILO#2 ROTARY VENT FEEDER SLURRY LINE INLET HEAD,BE 3389D,UNLOADING SPOUT	1.81	No	No	No	No	Intermediate Silos are used to store Fly Ash from ESP. Thenafter, through ROTARY VENT FEEDER, fly ash slurry is transferred from IM Silo to Ash Pond. Erosion in equipment due to fly ash slurry is always on higher side. During overhauling of RVF, it was observed that inlet haed erorded. That's why, it was replaced with a spare one in Capital stock.
274	2000196253_ECO BOOSTER PUMP CASING,UPPER HALF PN-24 CF8M EBP O,	5.70	No	No	No	No	Pumps of Ash Handling Plant are prone to erosion due to ash comtent in the water. Pitting marks, erosion and cracks from inside were observed inb casing of Eco booster Pump during it's overhauling. That's why, it was replaced with a spare one in Capital stock.
275	2000196256_ECO BOOSTER PUMP CASING,LOWER HALF-PN1-ECO BOOST CF8MO,	6.17	No	No	No	No	Pumps of Ash Handling Plant are prone to erosion due to ash comtent in the water. Pitting marks, erosion and cracks from inside were observed inb casing of Eco booster Pump during it's overhauling. That's why, it was replaced with a spare one in Capital stock.
276	2000197612_IP TURBINE MODULE MOVING BLADE TX-40-51 ST 5R FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	11.28	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
277	2000197613_IP TURBINE MODULE LOCKING BLADE TX-45-53ST 1L FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	0.35	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
278	2000197615_IP TURBINE MODULE LOCKING BLADE TX-45-51ST 3L FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	0.35	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
279	2000197616_IP TURBINE MODULE LOCKING BLADE TX-40-51ST 5L FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	0.35	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).



PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
280	2000197617_IP TURBINE MODULE LOCKING BLADE TX-45-53ST 1R FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	0.35	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
281	2000197620_IP TURBINE MODULE LOCKING BLADE TX-40-51ST 4R FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	0.35	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
282	2000197621_IP TURBINE MODULE LOCKING BLADE TX-40-51ST 5R FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	0.35	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
283	2000197622_IP TURBINE MODULE MOVING BLADE TX-45-53 ST 1L FOR IP ROTOR. MODIFIED BLADE:DESIGNED TO BEUSED WITHOUT FULL SPEED BALANCING AND CENTRIFUGING OF ROTOR.I	4.19	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
284	2000197624_IP TURBINE MODULE MOVING BLADE TX-45-51 ST 3L FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	6.98	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
285	2000197625_IP TURBINE MODULE MOVING BLADE TX-40-51 ST 5L FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	7.05	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
286	2000197626_IP TURBINE MODULE MOVING BLADE TX-45-53 ST 1R FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	6.28	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
287	2000197629_IP TURBINE MODULE MOVING BLADE TX-40-51 ST 4R FOR IP ROTOR-INSTALLED IN 525 MW BHEL UNIT.MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEED BALANC	14.10	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
288	2000198850_CONDENSER VACUUM PUMP SHAFT, CONDENSER VACUUM PMP,SHR22500,P.N-09.72.0000.N1F,	22.42	No	No	No	No	4 nos of Condenser Vacuum Pump which are in continuous operation since commissioning of both the units i.e. from last 11 years. During it's overhauling, it was observed that shaft needs to be replaced due to ageing. Shaft run-out was also more than 0.1 mm. That's why, it was replaced with a spare one in Capital stock.
289	2000199978_HP BY-PASS (L) VALVE BPV-1 ACTUATOR HPBP STOP VALVE ACTUATOR,TYPE-ASM-250-10/SK40 COMPLETE SET	7.73	No	No	No	No	HP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. During it's overhauling, it was observed that many spares like Cage, Pistion Rod of Actuator, Actuators of Stop avlve as well as spray valve need to be replaced due to erosion and ageing. Cracks were obserbed on cage.That's why, these spares were replaced with spare ones in Capital stock.
290	2000199985_HP BY-PASS (L) SPRAY CV BPE-1 ACTUATOR HPBP SRAY VALVE ACTUATOR COMPLETE SET ASM-100-10/SK200	4.29	No	No	No	No	HP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. During it's overhauling, it was observed that many spares like Cage, Pistion Rod of Actuator, Actuators of Stop avlve as well as spray valve need to be replaced due to erosion and ageing. Cracks were obserbed on cage.That's why, these spares were replaced with spare ones in Capital stock.
291	2000201259_LP BY-PASS STOP VALVE COUPLING,FOR LPBP STOP VALVE,PART NO-103238730200,INSTALLED IN MAITHON 525 MW BHEL UNIT	11.29	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that coupling of stop valve & control valve need to be replaced due to ageing.That's why, these spares were replaced with spare ones in Capital stock.
292	2000201260_LP BY-PASS CONTROL VALVE COUPLING,FOR LPBP CONTROL VALVE,NB60-600,PART NO-103229993200,INSTALLEDIN MAITHON 525 MW BHEL UNIT	11.29	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that coupling of stop valve & control valve need to be replaced due to ageing.That's why, these spares were replaced with spare ones in Capital stock.

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
293	2000201261_LP BY-PASS SPRAY VALVE COUPLING,FOR LPBP SPRAY VALVE,MODEL-840 H,PART NO-103228407201,	7.98	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that cylinder, valve seat, valve plug assembly, valve coupling and cage are damaged due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
294	2000201371_TDBFP JACKING OIL PUMP PUMP,ASSY,TDBFP JOP,PR -100 KG/CM2,MAKE-TUSHACO,RPM-1450,HDG-2A,SRNO-102209/5580,<(>,<)>	1.28	No	No	No	No	There are 4 nos of Jacking Oil Pump for TDBFPs. These pumps are installed since commissioning of both the units i.e. from last 11 years. During it's overhauling, it was observed that internals of jacking oil pump are damaged due to ageing & erosion. That's why, it was replaced with a spare one in Capital stock.
295	2000202835_LP BY-PASS OIL TANK VALVE,PRESSURE RELIEF VV,LPBP OSU ITEM11,TYPE DVPA-1-10-SNV,HV350AHF-PSPEZ,INSTALLED IN MAITHON POWER 525 MW,PART NO-000003195046	1.28	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that pressure relief valve and pressure reducing valve assemblies needs replacement due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
296	2000202836_LP BY-PASS OIL TANK VALVE,PRESSURE REDUCINGVV,LPBPOSU ITEM12,DRPA-5-16-35-SV-1,HV350AHF-PSPEZ,INSTALLED IN MAITHON POWER 525 MW,PART NO-000101007951	1.97	No	No	No	No	LP By-pass System of Main Turbine is in continuous operation since commissioning of both the units i.e. from last 11 years. Major overhauling of these Tanks are done every 4 years. During last overhauling, it was observed that pressure relief valve and pressure reducing valve assemblies needs replacement due to ageing. That's why, these spares were replaced with spare ones in Capital stock.
297	2000203172_IP TURBINE MODULE RING,SEAL RING ASSLY-ITEM8,IP SHAFT SEAL,BHEL ASSLY DRWG:0-10606 - 27000,1SET=SEALING HOUSING IN 2HALVE,INTEGRATED WITH SEAL STRIPS,I	2.42	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. Seal ring assemblies of IP turbine needed replacement due to ageing. That's why, it was replaced with a spare one in Capital stock.
298	2000203186_IP TURBINE MODULE RING,SEAL RING ASSLY-ITEM6,IP SHAFT SEALING,BHEL ASSLY DRWG:0-10606-27000,1SET=SEALING HOUSING IN 2HALVE,INTEGRATED WITH SEAL STRIPS	6.89	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. Seal ring assemblies of IP turbine needed replacement due to ageing. That's why, it was replaced with a spare one in Capital stock.
299	2000203187_IP TURBINE MODULE RING,SEAL RING ASSLY-ITEM7,IP SHAFT SEAL,BHEL ASSLY DRWG:0-10606 - 27000,1SET=SEALING HOUSING IN 2HALVE,INTEGRATED WITH SEAL STRIPS,I	5.29	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. Seal ring assemblies of IP turbine needed replacement due to ageing. That's why, it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
300	2000203298_FOLLOW UP PISTON SPRING COMPRESSION EHC FOLLOW UP PISTON ITEM 44,DRG 01142711000 TURBINE GOVERNING SYSTEM	7.99	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, it was observed that spring assembly of follow-up piston is damaged due to ageing & needs replacement. That's why, these spares were replaced with a spare one in Capital stock.
301	2000203307_FOLLOW UP PISTON SPRING ASSY FOLLOW UP PISTON EHCITEM 111,DRG 01142711000 TURBINE GOVERNING SYSTEM	2.96	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, it was observed that spring assembly of follow-up piston is damaged due to ageing & needs replacement. That's why, these spares were replaced with a spare one in Capital stock.
302	2000203308_FOLLOW UP PISTON SPRING ASSY FOLLOW UP PISTON EHC ITEM 112,DRG 01142711000 TURBINE GOVERNING SYSTEM	2.12	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, it was observed that spring assembly of follow-up piston is damaged due to ageing & needs replacement. That's why, these spares were replaced with a spare one in Capital stock.
303	2000203309_STARTING DEVICE GEAR FOR START UP DEVICE COMPLETE ASSY DRG 11142101500 TURBINE GOVERNINGSYSTEM WITHOUT MOTOR	4.11	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of boththe units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, it was observed that bellow and gear of Starting Device is damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.
304	2000203316_SPEEDER GEAR GEAR FOR LOADING DEVICE COMPLETE ASSY DRG 11142102600 TURBINE GOVERNING SYSTEM	6.96	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, it was observed that Speeder Gear leading device was damged due to ageing. That's why, it was replaced with a spare one in Capital stock.
305	2000203381_MT HYDRAULIC AMPLIFIER SPRING COMPRESSION HYD AMPLIFIER FOLLOW UP PISTON ITEM 57 DRG 01142305000 TURBINE GOVERNING SYSTEM	7.99	No	No	No	No	Main Turbine Governing System and it's auxiliaries are in continuous operation since commissioning of both the units i.e. from last 11 years. Spares of governing systems are getting older day by day and that's why, in every overhauling their thorough inspection is being done. During last overhauling, compression spring of hydraulic amplifier was found damaged due to ageing. That's why, it was replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
306	2000204126_CONDENSATE EXTRACTION PUMP COUPLING,MUFF COUPLING,CEP EN6J40/500,OEM OF PUMP-BHEL HYD,INSTALLED IN 525 MW BHEL UNIT.	1.83	No	No	No	No	6 nos of multi stage CEPs are in continuous operation since commissioning of both the units i.e. from last 11 years. During its overhauling, 1st stage casing and muff couplings were found damaged due to ageing. That's why, these spares were replaced with a spare one in Capital stock.
307	2000204140_ACW PUMP VALVE,ACW SUCTION MIV(SIZE: 800MM),MAKE-KIRLOSKAR BROTHERS LIMITED, PUNE INDIA WORKS, BODY PRESSURE:9 KG/CM2, SEAT PRESSURE=6KG/CM2,	3.57	No	No	No	No	4 nos of Auxilliary Cooling Water Pump of TG Area are in continuous operation since commissioning of both the units i.e. from last 11 years. During it's overhauling, pitting marks & craks were observed in suction valve. That's why, it was replaced with a spare one in Capital stock.
308	2000204196_IP TURBINE MODULE BLADE,JOINT BLADE10R,FOR IP TURBINE,FXXX-S31.4-HR216/151A2L,INSTALLED IN525 MW BHEL UNIT	1.62	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
309	2000204197_IP TURBINE MODULE BLADE,JOINT BLADE11R,FOR IP TURBINE,FXXX-S31.4-HR232/216A2L,INSTALLED IN525 MW BHEL UNIT	1.62	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
310	2000204198_IP TURBINE MODULE BLADE,MOVING BLADE TX-40-51 ST 4L,FOR IP ROTOR-INSTALLED IN 525 MW BHELUNIT. MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEEDA	3.52	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
311	2000204199_IP TURBINE MODULE BLADE,LOCKING BLADE TX-40-51ST 4L,FOR IP ROTOR-INSTALLED IN 525 MW BHELUNIT. MODIFIED BLADE: DESIGNED TO BE USED WITHOUT FULL SPEEDA	0.35	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
312	2000204200_IP TURBINE MODULE BLADE,STATIONARY BLADE10L,FOR IP TURBINE,FXXX-S31.4-HR216/151A2L,INSTALLED IN 525 MW BHEL UNIT	1.62	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
313	2000204201_IP TURBINE MODULE BLADE,STATIONARY BLADE11L,FOR IP TURBINE,FXXX-S31.4-HR232/216A2L,INSTALLED IN 525 MW BHEL UNIT	1.62	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
314	2000204202_IP TURBINE MODULE BLADE,STATIONARY BLADE10R,FOR IP TURBINE,FXXX-S31.4-HR216/151A2L,INSTALLED IN 525 MW BHEL UNIT	1.62	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
315	2000204203_IP TURBINE MODULE BLADE,STATIONARY BLADE11R,FOR IP TURBINE,FXXX-S31.4-HR232/216A2L,INSTALLED IN 525 MW BHEL UNIT	1.62	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
316	2000204204_IP TURBINE MODULE BLADE,JOINT BLADE10L,FOR IP TURBINE,FXXX-S31.4-HR216/151A2L,INSTALLED IN525 MW BHEL UNIT	1.62	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
317	2000204205_IP TURBINE MODULE BLADE,JOINT BLADE11L,FOR IP TURBINE,FXXX-S31.4-HR232/216A2L,INSTALLED IN525 MW BHEL UNIT	1.62	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
318	2000204582_CONDENSATE EXTRACTION PUMP CASING,1ST STAGE WITH BELL MOUTH BOWL ASSEMBLY,CEP EN6J40/500, OEM OF PUMP-BHEL HYD,INSTALLED IN 525 MW BHEL UNIT.	3.38	No	No	No	No	6 nos of multi stage CEPs are in continuous operation since commissioning of both the units i.e. from last 11 years. During its overhauling, 1st stage casing and muff couplings were found damaged due to ageing. That's why, these spares were replaced with a spare one in Capital stock.
319	2000205349_TDBFP MAIN CONTROL VALVE (TG/17MTS) YOKE, HP VALVE OF GOVERNING SYSTEM,P.N-HY30519031BFPDT,DRIVE TURBINE-K1401-2,	2.03	No	No	No	No	This MCV Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. MCV Servomotor Assembly was malfunctioning & abnormal hunting was also observed during trail. During inspection of MVC, it was also observed that all parts like yoke, cones, diffusers also need to be replaced as these spares are damaged due to erosion & ageing. That's why, these spares were replaced with a spare one in Capital stock.
320	2000205350_TDBFP MAIN CONTROL VALVE (TG/17MTS) CONE III,HP VALVE OF GOVERNING SYSTEM,DIA 110,P.N-HY30519032BFPDT,DRIVETURBINE-K1401-2,	1.40	No	No	No	No	This MCV Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. MCV Servomotor Assembly was malfunctioning & abnormal hunting was also observed during trail. During inspection of MVC, it was also observed that all parts like yoke, cones, diffusers also need to be replaced as these spares are damaged due to erosion & ageing. That's why, these spares were replaced with a spare one in Capital stock.
321	2000205351_TDBFP MAIN CONTROL VALVE (TG/17MTS) CONE I,HP VALVE OF GOVERNING SYSTEM,DIA 60,P.N-HY30519033BFPDT,DRIVE TURBINE-K1401-2,	1.40	No	No	No	No	This MCV Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. MCV Servomotor Assembly was malfunctioning & abnormal hunting was also observed during trail. During inspection of MVC, it was also observed that all parts like yoke, cones, diffusers also need to be replaced as these spares are damaged due to erosion & ageing. That's why, these spares were replaced with a spare one in Capital stock.
322	2000205353_TDBFP MAIN CONTROL VALVE (TG/17MTS) CONE II,HP VALVE OF GOVERNING SYSTEM,DIA 110,P.N-HY30519035BFPDT,DRIVE TURBINE-K1401-2,	1.40	No	No	No	No	This MCV Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. MCV Servomotor Assembly was malfunctioning & abnormal hunting was also observed during trail. During inspection of MVC, it was also observed that all parts like yoke, cones, diffusers also need to be replaced as these spares are damaged due to erosion & ageing. That's why, these spares were replaced with a spare one in Capital stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
323	2000205354_TDBFP MAIN CONTROL VALVE (TG/17MTS) CONE IV,HP VALVE OF GOVERNING SYSTEM,DIA 110,P.N-HY30519036BFPDT,DRIVE TURBINE-K1401-2,	1.40	No	No	No	No	This MCV Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. MCV Servomotor Assembly was malfunctioning & abnormal hunting was also observed during trail. During inspection of MVC, it was also observed that all parts like yoke, cones, diffusers also need to be replaced as these spares are damaged due to erosion & ageing. That's why, these spares were replaced with a spare one in Capital stock.
324	2000205361_TDBFP MAIN CONTROL VALVE (TG/17MTS) DIFFUSER,HP VALVE OF GOVERNING SYSTEM, DIA 140X35,P.N-HY30519024BFPDT,DRIVETURBINE-K1401-2,	1.30	No	No	No	No	This MCV Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. MCV Servomotor Assembly was malfunctioning & abnormal hunting was also observed during trail. During inspection of MVC, it was also observed that all parts like yoke, cones, diffusers also need to be replaced as these spares are damaged due to erosion & ageing. That's why, these spares were replaced with a spare one in Capital stock.
325	2000205363_TDBFP MAIN CONTROL VALVE (TG/17MTS) DIFFUSER,HP VALVE OF GOVERNING SYSTEM, DIA 110X260,DRIVE TURBINE-K1401-2,P.N-HY30519021BFPDT,	4.52	No	No	No	No	This Main Control Valve Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. MCV Servomotor Assembly was malfunctioning & abnormal hunting was also observed during trail. During inspection of MVC, it was also observed that all parts like yoke, cones, diffusers also need to be replaced as these spares are damaged due to erosion & ageing. That's why, these spares were replaced with a spare one in Capital stock.
326	2000206264_IP TURBINE MODULE BLADE,MOVING BLADE TX-45-51 ST 6L,IP ROTOR,INSTALLED IN 525 MW BHELUNIT,	5.24	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
327	2000206265_IP TURBINE MODULE BLADE,LOCKING BLADE TX-45-51 ST6L,IP ROTOR,INSTALLED IN 525 MW BHELUNIT,	0.35	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).



PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
328	2000206266_IP TURBINE MODULE BLADE,MOVING BLADE TX-45-51 ST 6R,IP ROTOR,INSTALLED IN 525 MW BHELUNIT,	5.24	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
329	2000206267_IP TURBINE MODULE BLADE,LOCKING BLADE TX-45-51 ST6R,IP ROTOR,INSTALLED IN 525 MW BHELUNIT,	0.35	No	No	No	No	Unit #2 Major Overhauling was carried out in July-August'2019. It was the first Capital Overhauling since Commissioning of Unit in 2012. Complete Inspection of HP & IP Turbine was scheduled first time after Erection. OES SIEMENS was engaged to carry out the Overhauling Activities. After opening of IP Turbine, severe damage was observed in first 3 Rows Blades of Turbine side of IP Rotor. It was concluded by OES that the above damage was due to hitting of foreign objects (FOD).
330	2000206797_STAGE#2 CONVEYING AIR COMPRESSOR RUBBER COMPNSATOR AIR LINE WITH METALLIC FLANGE,P.N.-1621017703,COMPRESSOR MODEL NO.-ZA6K	10.85	No	No	No	No	There are 6 nos of Stage#2 Conveying Air Compressors of Ash Handling Plant which are in continuous operation since commissioning of both the units i.e. from last 11 years. During major overhauling of these compressors which is done every 5 years, minor hot air leak observed from compensator which connects collector and compressor screw assembly. Open inspection, it was observed that compensator has eroded due to ageing. That's why, it was replaced with a spare one in Capital stock.
331	2000207753_TDBFP DRIVE TURBINE VALVE,STOP VALVE,K1401-2,CONE,P.N-HY30515005BFPDT,P.N-HY30515012BFPDT,	1.37	No	No	No	No	4 nos of TDBFPs are in continuous operation since commissioning of both the units i.e. from last 11 years. That's why, their phased wose overhauling was planned. During inspection of TDBFP Drive Turbine, Main Pump & Booster Pump in last Annual Overhauling of Unit#2,, Trip Valve & Stop Valve was found damaged due to ageing. Spindle of the stop valve was also found damged due to ageing. That's why, these spares were replaced with the sapre ones available in Capital Stock.
332	2000207755_TDBFP DRIVE TURBINE PISTON,SPINDLE,P.N-HY30515026BFPDT,STOP VALVE,K1401-2,	6.12	No	No	No	No	4 nos of TDBFPs are in continuous operation since commissioning of both the units i.e. from last 11 years. That's why, their phased wose overhauling was planned. During inspection of TDBFP Drive Turbine, Main Pump & Booster Pump in last Annual Overhauling of Unit#2,, Trip Valve & Stop Valve was found damaged due to ageing. Spindle of the stop valve was also found damged due to ageing. That's why, these spares were replaced with the sapre ones available in Capital Stock.
333	2000208579_AWRS RECOVERY WATER PUMP BELL,SUCTION PN 5 RWP-AWRS,	1.66	No	No	No	No	During inspection, it was observed that Casing, Impeller and Suction Bell of Recovery Water Pump of Ash Water Recovery System were damaged due to erosion and ageing. That's why, these spares were replaced with a spare one avilable in Capital Stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2022 -23

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2022-23 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
334	2000208583_AWRS RECOVERY WATER PUMP IMPELLER,PN 8 RWP-AWRS,	6.84	No	No	No	No	During inspection, it was observed that Casing, Impeller and Suction Bell of Recovery Water Pump of Ash Water Recovery System were damaged due to erosion and ageing. That's why, these spares were replaced with a spare one avilable in Capital Stock.
335	2000209971_AWRS RECOVERY WATER PUMP CASING (VOLUTE) PART NO. 1 (MOC-ALLOY CAST IRON WITH 2.5% NI (340 BHN) FOR CLEAR WATER PUMP AT ASH WATER RECOVERY SYSTEM, DRAWING NO	5.62	No	No	No	No	During inspection, it was observed that Casing, Impeller and Suction Bell of Recovery Water Pump of Ash Water Recovery System were damaged due to erosion and ageing. That's why, these spares were replaced with a spare one avilable in Capital Stock.
336	2000210581_TDBFP ACV (TG/8,5MTS) VALVE_CONTROL,PILOT ASSY,DIA 32,BHEL P.N-HY30603000BFPDT,	4.31	No	No	No	No	This Auxilliary Control Valve Servomotor Assembly is installed for TDBFP governing system. 4 nos. of MCV and ACV is installed in both units & are operational since commissioning of the Units i.e for more than 11 years. It was malfunctioning & abnormal hunting was also observed during trail. That's why, it was replaced with a spare one avilable in Capital Stock.
337	2000211516_AHP COMPRESSOR HOUSE VENTILATION FAN IMPELLER,VENTILATION SYSTEM,COMP. HOUSE,	2.66	No	No	No	No	Due to erosion & ageing, impeller of AHP Compressor Hpuse Ventilation fan got damaged. That's why, it was replaced with a spare one avilable in Capital Stock.
	Sub-Total	**2,942.10**					
	Grand Total	**2,942.10**					

Petitioner

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2023 -24

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2023-24 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
1	400KV Circuit Breaker	-	No	No	No	No	
2	Coal Mill Gearbox	-	No	No	No	No	
3	Coal Mill Journal Assembly	-	No	No	No	No	
4	Cooling Tower Internals	202.05	No	No	No	No	
5	Crusher Rotor Assembly	66.59	No	No	No	No	
6	Economiser Coil	-	No	No	No	No	
7	Refurbishment of pulversier internals	-	No	No	No	No	
8	Suspended Magnet & Track Hopper	-	No	No	No	No	
9	TDBFP Recirculation Valve	0.45	No	No	No	No	
10	Vacuum Pump	-	No	No	No	No	
11	Control Valves	3.30	No	No	No	No	
12	TG bearing set	51.58	No	No	No	No	
13	Breaker and Relays	40.29	No	No	No	No	
14	2000119766_CARTRIDGE ASSEMBLY FOR HFO PUMP, MODEL NO.:-DH600-1600-3S,S.NO-10065930,PUMP MAKE:- ALEKTON.	31.51	No	No	No	No	While Inspecting HFO Pump during it's overhauling, cartridge was found damaged and needed replacement. That's why, Pump Cartidge was replaced with spare one available in Capital Stock.
15	2000120307_CARTRIDGE ASSEMBLY FOR LDO PUMP, MODEL -DH330-770-3S,MAKE: ALEKTON	10.03	No	No	No	No	While Inspecting LDO Pump during it's overhauling, cartridge was found damaged and needed replacement. That's why, Pump Cartidge was replaced with spare one available in Capital Stock.
16	2000185702_U_SEAL RING HP TURBINE,MACHINED :ITEM- 3,HP TURBINE CASING ASSLY,BHEL ASLY DRWG:0-10501-09000,MAKE-BHEL	53.10	No	No	No	No	While Inspecting HP Turbine Casing during last Annual Overhauling of Unit#1, U Seal Ring was found damaged. That's why, U Seal Ring was replaced with spare one available in Capital Stock.
17	2000129181_ELECTRONIC CARD FOR ID FAN LCI SYSTEM-MDL 660NLIBA DS38000NLIB	11.26	No	No	No	No	Electronic Card of ID fan LCI Drive is most important part of LCI System. We faced back to back failure of electronic cards due to malfuction of internal components like resistor/transistor. Unavailability of Electronic Cards may lead to partial generation loss. So, their immediate replacement was planned to avoid generation loass. Electronic Card was replaced with the spare card available in Capital Stock.
18	2000226941_BTG SERVICE AIR COMPRESSOR FDR TRANSFORMR_CURRENT,RATIO:400/1A,CORE:1 5P20,10VA,RCT LESS THAN 2.5OHM,KNEE POINT:400V,CORE:2 10VA,CLASS: 0.5,BURDEN:10VA	10.09	No	No	No	No	Current Transformer of BTG Service Air Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Excessive buzzing and overheating were observed due to ageing. That's why, it was replaced with a spare one in Capital stock.
19	2000227859_BTG INSTRUMENT AIR COMPRESSOR FDR TRANSFORMR_CURRENT,RATIO:400/1A,CORE:1 5P20,10VA,RCT LESS THAN 2.5OHM,KNEE POINT:400V,CORE:2 10VA,CLASS: 0.5,BURDEN:10VA	7.72	No	No	No	No	Current Transformer of BTG Instrument Air Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Excessive buzzing and overheating were observed due to ageing. That's why, it was replaced with a spare one in Capital stock.
20	2000118650_ROTOR ASSEMBLY OF TDBP,PN:FA1B75	27.61	No	No	No	No	While Inspecting TDBFP Booster Pump Assembly during last Annual Overhauling, heavy erosion & pitting marks were observed in top & bottom half of its casing, erosion in impellers and shaft in both the booster pumps of each unit. That's why, complete rotor assembly was replaced with the spare one.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2023 -24

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2023-24 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
21	3000018372_BTG SERVICE AIR COMPRESSOR FDR CABLE, ARMOURED; MATERIAL, CONDUCTOR: ALUMINIUM, VOLTAGE RATING: 1.1 KV, CORE: 3 C, CORE CROSS SECTION: 240 MM2, MATERIAL, INSUL	9.68	No	No	No	No	BTG Service Air Compressors and their electrical systems are in continuous operation since commissioning of both the units i.e. from last 11 years. 1.1KV cable and auxiliary cable strated failing due to overheat & ageing. That's why, it was replaced with a spare one in Capital stock.
22	3000018376_BTG INSTRUMENT AIR COMPRESSOR FDR CABLE, ARMOURED; MATERIAL, CONDUCTOR: ALUMINIUM, VOLTAGE RATING: 1.1 KV,CORE: 3 C, CORE CROSS SECTION: 35 MM2, MATERIAL, OUTER S	4.38	No	No	No	No	BTG Instrument Air Compressors and their electrical systems are in continuous operation since commissioning of both the units i.e. from last 11 years. 1.1KV cable strated failing due to overheat & ageing. That's why, it was replaced with a spare one in Capital stock.
23	3000018856_BTG SERVICE AIR COMPRESSOR FDR CABLE, ARMOURED; TYPE: INSTRUMENT, MATERIAL, CONDUCTOR: COPPER, CORE: 6 P, CORE CROSS SECTION: 0.5 MM2, MATERIAL, INSULATION: PV	4.13	No	No	No	No	BTG Service Air Compressors and their electrical systems are in continuous operation since commissioning of both the units i.e. from last 11 years. 1.1KV cable and auxiliary cable strated failing due to overheat & ageing. That's why, it was replaced with a spare one in Capital stock.
24	2000122211_IMPELLER OF COOLING WATER PUMP REF. NO.#B060, SL. NO.(PART NO.)# 10, MOC# CF8, DRAWING NO.# SK-7438-C, REV.# 01, WPIL REF. NO.# IBE-3456-61(I)	81.84	No	No	No	No	CW Pumps are in service since commissioning of both the units i.e. for more than 11 years. While inspection CW Pump during it's overhauling, it was observed that impeller & suction bells were having pitting & dents marks. Impeller & suction bell were replaced with the spare ones available in Capital Stock.
25	2000129092_SERVOMOTOR ASSEMBLY FOR PA FAN, MAKE- BHEL	56.23	No	No	No	No	PA Fans are operational since commissioning of both the Units i.e for more than 11 years. Due to ageing, servomotors detoriated. We have also faced generation loss due to PA Fan Servomotor assembly link connecting rod and connecting piece failure. That's why, during last overhauling, servomotors of PA Fan were replaced with spare one available in Capital Stock.
26	2000129177_ELECTRONIC CARD FOR ID FAN LCI SYSTEM-MDL 660HPTKA DS3800HPTK	5.31	No	No	No	No	Electronic Card of ID fan LCI Drive is most important part of LCI System. We faced back to back failure of electronic cards due to malfuction of internal components like resistor/transistor. Unavailability of Electronic Cards may lead to partial generation loss. So, their immediate replacement was planned to avoid generation loass. Electronic Card was replaced with the spare card available in Capital Stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2023 -24

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2023-24 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
27	2000161432_COOLER,RADIATOR FOR MAIN SILO COMPRESSORS, P.N.-1903031311, MAKE-CHICAGO PNEUMATICS	1.90	No	No	No	No	Chicago Pneumatics make Reciproicating Compressor of Main silo Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. These compressors are for conveying & unlaoding ash from main silo. Compressor was tripping on higher air exit temperature. During inspection, it was observed thatthere is leak from raditor of compressor. Radiator cools down the cooling water of compressor & due to it's internal tube leakage, compressor was not available. This confirmed that radiator needs to be replaced. So, radiator was replaced withspare one available in Capital Stock.
28	2000161435_COOLER,AIR FOR MAIN SILO COMPRESSORS, P.N.-1903618311, MAKE-CHICAGO PNEUMATICS	3.07	No	No	No	No	Chicago Pneumatics make Reciproicating Compressor of Main silo Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. These compressors are for conveying & unlaoding ash from main silo. Compressor was tripping on higher air exit temperature. During inspection, it was observed that there is leakfrom air cooler of compressor. Air cooler cools down the compressed air & due to it's internal tube leakage, compressor was not available. This confirmed that air cooler needs to be replaced. So, air cooler was replaced with spare one available in Capital Stock.
29	2000161451_CYLINDER ASSEMBLY, HP SIDE FOR MAIN SILO COMPRESSORS,P.N.-1903909395, MAKE-CHICAGO PNEUMATICS	2.60	No	No	No	No	Chicago Pneumatics make Reciproicating Compressor of Main silo Compressed Air System are in continuous operation since commissioning of the Units i.e for more than 11 years. These compressors are for conveying & unlaoding ash from main silo. Compressor discharge pressure was low & abnormal sound was also observed from HP side. During inspection, it was observed HP Cylinder linings have eroded. This confirmed that HP Cylinder Assembly needs to be replaced. So, HP Cylinder was replaced with spare one available in Capital Stock.
30	2000012763_VARIABLE DISPLACEMENT PUMP FOR PADDLE FEEDER, MAKE: BRUEININ-GHAUS, MODEL: DCINA 4VG56, EP2DM1/32 R-NZC02 F006D	8.35	No	No	No	No	Variable Displacement Pump is that main equipment of Paddle Feeder Hydraulic Power Rack System. Paddle feeder is operational since commissioning of the Units i.e for more than 11 years. Due to the fatigue load of Paddle Feeder, this pump failed & immediate replacement was required or else we would have to bear geneartion loss. So, Pump was replaced with new Pump assembly in Capital Stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2023 -24

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2023-24 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
31	2000120770_IMPELLER BLADES FOR PA FAN ,MAKE- BHEL	42.75	No	No	No	No	PA Fans are operational since commissioning of the Units i.e for more than 11 years. PA Fans are double stage Fans with 2 sets of blades (each containing 23 blades) at the Motor end and Servo end respectively.During last U#1 AOH, while inspecting PA Fan 1A & 1B, it was observed that the blades, bearing housing, rotor shaft & servo of both Fan are in damaged condition due to ageing. So, the damaged blades were replaced with new set of blades available in Capital Stock. That's why, these Impeller blades of PA Fan were procured to replenish the consumed Capital Spare.
32	2000120771_SERVOMOTOR OF IMPELLER BLADES FOR PA FAN , MAKE- BHEL	42.75	No	No	No	No	PA Fans are operational since commissioning of the Units i.e for more than 11 years. PA Fans are double stage Fans with 2 sets of blades (each containing 23 blades) at the Motor end and Servo end respectively.During last U#1 AOH, while inspecting PA Fan 1A & 1B, it was observed that the blades, bearing housing, rotor shaft & servo of both Fan are in damaged condition due to ageing. So, the damaged servo were replaced with new ones available in Capital Stock.
33	2000120778_BEARING HOUSING FOR PA FAN , MAKE- BHEL	11.85	No	No	No	No	PA Fans are operational since commissioning of the Units i.e for more than 11 years. PA Fans are double stage Fans with 2 sets of blades (each containing 23 blades) at the Motor end and Servo end respectively.During last U#1 AOH, while inspecting PA Fan 1A & 1B, it was observed that the blades, bearing housing, rotor shaft & servo of both Fan are in damaged condition due to ageing. So, the damaged bearing housing was replaced with new one available in Capital Stock.
34	2000120824_SHAFT WITH BEARING ASSEMBLY FOR FD FAN, MAKE- BHEL	33.16	No	No	No	No	FD Fans are operational since commissioning of the Units i.e for more than 11 years. During last U#1 AOH, while inspecting FD Fan 1A & 1B, it was observed that the rotor shaft & bearing housing of both Fan are in damaged condition due to ageing. So, the damaged shaft & bearing housing were replaced with new one available in Capital Stock.
35	2000226890_ROTOR SHAFT FOR PA FAN , MAKE- BHEL	15.64	No	No	No	No	PA Fans are operational since commissioning of the Units i.e for more than 11 years. PA Fans are double stage Fans with 2 sets of blades (each containing 23 blades) at the Motor end and Servo end respectively.During last U#1 AOH, while inspecting PA Fan 1A & 1B, it was observed that the blades, bearing housing, rotor shaft & servo of both Fan are in damaged condition due to ageing. So, the damaged shaft was replaced with new one available in Capital Stock.

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2023 -24

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2023-24 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
36	2000012806_BREAKER PLATE,MOC: HARDOX500, HARDNESS: 450-540 HBW YIELD STRENGTH(MPA)- 1250	11.63	No	No	No	No	Bearker Hardox Plates are installed in both ring granulators. Ring Granulators are prone to erosion & failures. During inspection of RG#1, it was observed that breaker plates have erorded & needs replacement. So, Breaker Plate was replaced with new gearbox assembly in Capital Stock.
37	2000001705_SUCTION BELL OF CW PUMP, REF. NO.#B150, SR. NO.(PART NO.)-06,MOC-.CI. FG260, MAKE: WORTHINGTON PUMPS, EQUIPMENT: CW PUMP, EQUIPMENT MODEL: 72HMT, SINGLE STAGE VERTICAL TURBINE PUMP, DRAWING NO.#SK-7438-C, REV.-01, WPIL REF. NO. IBE-3456-61(I)	50.28	No	No	No	No	CW Pumps are in service since commissioning of both the units i.e. for more than 11 years. While inspection CW Pump during it's overhauling, it was observed that impeller & suction bells were having pitting & dents marks. Impeller & suction bell were replaced with the spare ones available in Capital Stock.
38	2000009971_MDBFP SCOOP CONTROLLER, ELECTRONIC; POWER SUPPLY: 50/160 W, MOUNTING: VERTICAL; MODEL: EAS822, MAKE: ABB; GENERAL NOTE: CONTRAC, YEAR2009, ELECTRONIK/ELECTRONICS, VOLTAGE: 94-130 V, FREQUENCY: 50HZ	19.63	No	No	No	No	MDBFP Scoop Controller is very critical in its application, which is used to control the speed of MDBFP motor by regulating scoop tube position in voith tank through scoop actuator. This scoop controller is installed in MDBFP and it is operational since commissioning of both the units. During FY'23 Unit#1 Annual Overhauling, spare electronics unit controller was consumed.
39	1000017677_ANALYSER DUST/OPACITY MONITOR, TRANSMISSOMETER MODEL- LAND 4500 MKIII UK,MAKE- LAND AMETAK,4-20 MA & RS-485 PORT OUTPUT	4.90	No	No	No	No	Analyser is installed in the SPM Analyser at Stack of the units as a statutory requirement. Analyser started malfunctioning due to it's ageing. Since, it is a statutory requirement. Analyser was replaced with the spare one in Capital Stock.
40	2000129607_SOLENOID COILS & VALVES FOR MAIN TURBINE & TDBFP, MAKE:IMI-NORGREN	16.58	No	No	No	No	Critical control circuit like ESV reset and operation, ATT system and protection circuits uses solenoid operation. It is very crucial to ensure the availability of these SOVs for equipment protection and failure of these SOVs will impact equipment safety as well as lead to generation loss. Most of the SOVs which are now in service are in operation since commissioning period and exceeded over 12 years of service. But as per OEM (IMI-Norgren), the service life of these SOVs isforalteast 5 years and recommended to replace them after 5 years to safeguard the equipment and plant operation. The installed SOVs already exceeded double the service life. That's why, it was replaced with new one.
41	3000018738_BTG SERVICE AIR COMPRESSOR FDR CABLE, ELECTRICAL; CONDUCTOR MATERIAL: COPPER, VOLTAGE RATING: 1.1 KV, NUMBER OF CONDUCTORS: 2 C, CROSS SECTION: 4 MM2, INSULATI	4.97	No	No	No	No	BTG Service Air Compressors and their electrical systems are in continuous operation since commissioning of both the units i.e. from last 11 years. 1.1KV cable and auxiliary cable strated failing due to overheat & ageing. That's why, it was replaced with a spare one in Capital stock.
42	2000124601_BTG SERVICE AIR COMPRESSOR FDR TYPE:CBCT.HSV:0.66KV.IL:0.66/3KV.INSUL CL: E.FREQ:50HZ	3.47	No	No	No	No	Transformer of BTG Service Air Compressors are in continuous operation since commissioning of both the units i.e. from last 11 years. Excessive buzzing and overheating were observed due to ageing. That's why, it was replaced with a spare one in Capital stock.



PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2023 -24

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2023-24 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
43	2000121796_IMPELLER FOR ASH HANDLING PLANT WATER PUMP	9.76	No	No	No	No	These impellers are installed in Water Pumps of Ash Handling Plant (AHP). Erosion in AHP equipment remains on higher side due to high ash content. Water Pump discharge pressure was low & vibration was also on higher side. Inspection was done & impeller of pump was found damaged. That's why, impeller was replaced with new one available in Capital Stock.
44	1000003542_GEARBOX ASSEMBLY FOR EXCITER, DUG-32.2 ID NO-310979	9.07	No	No	No	No	4 nos of Exciter Gearboxes are installed in VIBRATING GRIZZLY FEEDER-1 & 2 & they are operational since commissioning of the Units i.e for more than 11 years. VGD tripped & after inspection, it was confimred that Gearbox was damaged due to ageing. So, gearbox was replaced with new gearbox assembly in Capital Stock.
45	3000018164_RAW WATER PMP A MTR FDR CABLE, ARMOURED; TYPE: HIGH TENSION POWER, MATERIAL, CONDUCTOR: ALUMINIUM, VOLTAGE RATING: 6.6 KV, CORE: 3 C, CORE CROSS SECTION	9.64	No	No	No	No	Raw Water Pumps, Auxiliaries and their electrical systems are in continuous operation since commissioning of both the units i.e. from last 11 years. 1.1KV cable and auxiliary cable strated failing due to overheat & ageing. That's why, it was replaced with a spare one in Capital stock.
46	3000018672_BTG SERVICE AIR COMPRESSOR FDR CABLE, ARMOURED; MATERIAL, CONDUCTOR: COPPER, VOLTAGE RATING: 1.1 KV, CORE: 19 C, CORE CROSS SECTION: 2.5 MM2, MATERIAL, OUTER S	10.62	No	No	No	No	BTG Service Air Compressors and their electrical systems are in continuous operation since commissioning of both the units i.e. from last 11 years. 1.1KV cable and auxiliary cable strated failing due to overheat & ageing. That's why, it was replaced with a spare one in Capital stock.
47	2000000492_RELAY; CURRENT RATING: 1/5 A; MODEL NO: RET670, MAKE: ABB, GENERAL NOTE: AUXILIARY VOLTAGE: 220VDC, BINARY INPUT: 16, BINARY OUTPUT: 24	9.22	No	No	No	No	These relays were installed for more than 11 years & these relays are getting failed frequently due to Ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
48	2000000493_RELAY; CURRENT RATING: 1/5 A; MODEL NO: RET670, MAKE: ABB, GENERAL NOTE: BINARY INPUT: 8, BINARY OUTPUT: 12, AUXILIARY VOLTAGE: 220V DC	8.26	No	No	No	No	These relays were installed for more than 11 years & these relays are getting failed frequently due to Ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
49	3000024012_RELAY; TYPE: MULTIPLICATION, CONTACT CONFIGURATION: 3NO; MODEL NO: RXMM1, MAKE: ABB	0.20	No	No	No	No	These relays were installed for more than 11 years & these relays are getting failed frequently due to Ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.
50	3000024013_RELAY; TYPE: MULTIPLICATION, CONTACT CONFIGURATION: 3NO; MODEL NO: RXSF1, MAKE: ABB	0.20	No	No	No	No	These relays were installed for more than 11 years & these relays are getting failed frequently due to Ageing. So, their immediate replacement was planned to avoid generation loass. Relay was replaced with the spare relay available in Capital Stock.

MAITHON POWER LIMITED

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner: Maithon Power Limited
Name of the Generating Station: 1050 MW Maithon Project
For Financial year: 2023 -24

Amount in Rs Lakhs

Sl. No.	Details of Capital Spares and Expenses Name of Spare	2023-24 Amount	Claimed as a part of additional	Funded through Compensatory	Funded through Special Allowance (If Applicable)	Claimed as a part of stores and spares	Justification
51	1000010082_ACTUATOR FOR CHLORINATOR GPRV VALVE, 120V AC, MTR. FLC-1.4A, HYDRAMOTOR ACTUATOR	3.15	No	No	No	No	4 nos of Actuators are installed in CW Chlorinator & Chlorine Evaporator Actuator GPRV Valves. It is in operation since commissioning of units i.e. for more than 11 years. Actautor failure & after inspection it was confirmed that it failed due to failure of CPU card & motor winding failure. Actuator was replaced with the spare one in Capital Stock.
	Sub-Total	**1,010.81**					
	Grand Total	**1,010.81**					

Petitioner

MAITHON POWER LIMITED

Tab: Form-19

Details of Water Charges

Form-19

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Details of Water charges (excluding water cess)		Quantity Allocated	Actual Water Consumption			Normative Consumption at 85% PLF	Rate specified (as per govt. notification or agreement	Spillage of water (in percentage)	Amount Claimed*
	Name of Source and quantity	Amount	Unit	Plant		Total	m3	Rs/m3		Rs Lakhs
FY 20	DVC			1,50,42,680						1,600.66
FY 21	DVC			1,51,55,920						1,773.85
FY 22	DVC			1,69,73,517						2,149.43
FY 23	DVC			1,74,71,776						2,236.33
FY 24	DVC			1,81,14,864						2,537.69

** As per Auditor Certificate*

Note-1: The water charges shall include only the expenditure paid to the third party/Govt. entity for water consumed for the generation of electricity only, exclusive of expenses associated with the owner i.e. manpower, pumping charges etc.

Note-2: The supporting documents with regard to the rate specified by the Govt. entity shall be submitted

MAITHON POWER LIMITED

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2019-20

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
Decapitalisation - Part of Capital Cost					
1	UPS		0.04	2002	0.01
2	UPS		4.24	2002	1.41
3	UPS with Battery		1.45	2008	0.48
4	UPS		4.20	2008	1.39
5	UPS		1.27	2008	0.42
6	UPS		0.30	2008	0.10
7	Laptop- HP 6515b AMD-Ranjan Mishra		0.52	2008	0.17
8	UPS		0.08	2008	0.03
9	UPS		2.62	2009	1.07
10	UPS		1.50	2009	0.61
11	UPS		2.62	2009	1.07
12	UPS		1.87	2009	0.76
13	UPS		2.24	2009	0.91
14	HP Laptop (Model 6535S)		0.34	2009	0.14
15	Computers		0.87	2009	0.36
16	HP Laptop (Model 6535S)		0.80	2010	0.33
17	2KV UPS		1.88	2010	0.77
18	Dell Vostro V3450 Laptop		0.39	2012	0.14
19	Dell Vostro V3450 Direct base		0.78	2012	0.28
20	Fax machine Cannon make		0.17	2012	0.06
21	Client end radio device		0.38	2013	0.11
22	Base station radio device		0.60	2013	0.18
23	Base station radio device		0.42	2013	0.13
24	Hp 240 with win-8 pro Laptop		0.40	2014	0.09
25	Hp 240 with win-8 pro Laptop		0.40	2014	0.09
26	Laptop Dell Latitude 3340-Deeptimayee Sahoo		0.51	2014	0.12
27	Laptop Dell Latitude 3340-Rahul Roychoudhury		0.51	2014	0.12
28	Laptop Dell Latitude 3340-Kajal Singh		0.51	2014	0.12
29	Laptop Dell Latitude 3340-Ashok P Gupta		0.51	2014	0.12
30	Laptop Dell Latitude 3340-Pradyut Bajpayee		0.51	2014	0.12
31	Laptop Dell Latitude 3340-Amit Kumar Chatterjaee		0.51	2014	0.12
32	Laptop Dell Latitude 3340-Hari Shankar Singh		0.51	2014	0.12
33	Laptop Dell Latitude 3340-Shekhar Mishra		0.51	2014	0.12
34	Laptop Dell Latitude 3340-Jhantu Debnath		0.51	2014	0.12
35	Laptop Dell Latitude 3340-Ujjawal Dutta		0.51	2014	0.12
36	Laptop Dell Latitude 3340-Harish Singh		0.49	2014	0.11
37	Laptop Dell Latitude 3340-Mohan Singh		0.49	2014	0.11
38	Laptop Dell Latitude 3340-Swarup Kanti Maji		0.49	2014	0.11
39	Laptop Dell Latitude 3340 - Satish Kumar Soni		0.49	2014	0.11
40	Laptop Dell Latitude 3340 - Sandip Mondal		0.49	2014	0.11
41	Laptop Dell Latitude 3340 - Subhendu Sarkar		0.49	2014	0.11
42	Laptop Dell Latitude 3340 - Kaka Pattnayak		0.49	2014	0.11
43	Laptop Dell Latitude 3340 - Biswajit Bera		0.49	2014	0.11
44	Laptop Dell Latitude 3340 -Jacarias Kandulna		0.49	2014	0.11
45	Laptop Dell Latitude 3340 - Devendra Kumar Chauhan		0.49	2014	0.11
46	Laptop Dell Latitude 3340 - ANIL KUMAR PRADHAN		0.49	2014	0.11
47	Laptop Dell Latitude 3340 - S.N.PATEL		0.49	2014	0.11
48	Laptop Dell Latitude 3340 - SATINDRA NARAYAN GHOSH		0.49	2014	0.11
49	Laptop Dell Latitude 3340 -Partho Bhattacharjee		0.49	2014	0.11
50	Laptop DELL 3450-Rajiv Ranjan		0.50	2015	0.10
51	Laptop DELL 3450-Mukesh Singh Chouhan		0.50	2015	0.10
52	Laptop DELL 3450-HARISH KASWYAP		0.50	2015	0.10
53	Laptop DELL 3450-RASHMI P LAKRA		0.50	2015	0.10
54	Laptop DELL 3450-BHUPENDRA KUMAR		0.50	2015	0.10
55	Laptop DELL 3450-Kartik Kumar Mahato		0.50	2015	0.10
56	Laptop DELL 3450-Shambo Bhattacharya		0.50	2015	0.10
57	Laptop DELL 3450-G SATHPATHY		0.50	2015	0.10
58	Laptop DELL 3450-Shanti Gopal Modok		0.50	2015	0.10
59	Laptop DELL 3450-Arup Mandal		0.50	2015	0.10
	Sub-Total-1		**47.39**		**14.84**
Exclusion from Decapitalisation -1 -(Not Part of Capital Cost)					
1	HP LAPTOP 440 G5 (GAURAV AGARWAL)5CD9303ZHK		0.59	02-09-2019	
2	DELL LATTITUDE 3490(VIKRAM RATHORE)		0.55	10-01-2019	
3	DELL LATTITUDE 3490(DEEPAK SARAN)		0.55	10-01-2019	
4	ACER Laptop (DIVYANSH MURARKA) & bag		0.46	06-12-2017	
5	DELL LATTITUDE E7270 Laptop- PURUSHOTTAM THAKUR		0.78	01-09-2017	
6	DELL LATTITUDE 5480(SHREYOSI SAMANTA) LAPTOP		0.56	20-09-2017	
7	HP 240 G3-Deepak Patra- Laptop		0.46	30-04-2016	

MAITHON POWER LIMITED

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2019-20

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
8	HP 240 G3-Deb Narayan Sarkhel - Laptop		0.46	01-04-2016	
9	Laptop-Toshiba S40BX0412-Amit Gorai		0.33	30-04-2016	
10	Maruti Celerio VXI - Pradip Roy - MH46AP-0533		4.19	30-06-2017	
11	Innova VX 7S Grey Mica Meta - P Thakur- OD02G-2701		12.15	30-06-2017	
	Sub-Total-2		**21.09**		-
Exclusion from Decapitalisation -2 (Claimed under Capital Spares: after deducting 10% Terminal Value)					
1					
2					
3					
4					
5					
	Sub-Total-3		-		
	Decap: Part of capital cost	**Sub-Total-1**	**47.39**		**14.84**
	Decap-Exclusion-1: Not part of capital cost	**Sub-Total-2**	**21.09**		
	Decap-Exclusion-2: Claimed under Capital Spares	**Sub-Total-3**	-		
	Grand Total As per Cerificate		**68.48**		**14.84**

(Petitioner)

MAITHON POWER LIMITED

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2020-21

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
Decapitalisation - Part of Capital Cost					
1	HP 450 laptop		1.15	2013	0.14
2	HP 4440 laptop		0.97	2013	0.14
3	Wooden Furniture-Pradip Roy		0.79	2013	0.14
4	Hp 240 with win-8 pro Laptop		1.19	2013	0.17
5	Laptop DELL Latitude E7240-K.C CEO		0.85	2013	0.17
6	Laptop Dell Latitude 3340-K B Singh		0.51	2013	0.28
7	Laptop Dell Latitude 3340-Sunil Kr Singh		0.51	2014	0.12
8	Laptop Dell Latitude 3340-Abhijit Pandey		0.51	2014	0.12
9	Laptop Dell Latitude 3340-Mirza Sarfraj Baig		0.51	2014	0.26
10	Laptop Dell Latitude 3340-Saiket Ganguly		0.51	2014	0.15
11	Laptop Dell Latitude 3340-Shyamal Mondal		0.51	2014	0.15
12	Laptop Dell Latitude 3340-Santosh RC (ACS)		0.51	2014	0.15
13	Laptop Dell Latitude 3340-Deepak Jaiswal		0.51	2014	0.15
14	Laptop Dell Latitude 3340-Maritunjay Ray		0.51	2014	0.15
15	Laptop Dell Latitude 3340-Ashok Kumar Shah		0.51	2014	0.15
16	Laptop Dell Latitude 3340 - Tuna sahoo		0.49	2014	0.15
17	Laptop Dell Latitude 3340 -Priti payel		0.49	2014	0.15
18	Laptop Dell Latitude 3340-Vinoth Kumar Ganapathy		0.49	2014	0.15
19	Laptop Dell Latitude 3340		0.49	2014	0.15
20	Laptop Dell Latitude 3340 - SANDEEP NANDI		0.49	2014	0.15
21	Laptop Dell Latitude 3340 - VISHAL AGARWAL		0.49	2014	0.15
22	Laptop Dell Latitude 3340 - AJAY KUMAR		0.49	2014	0.15
23	Laptop Dell Latitude 3340 - RAJ KUMAR RAI		0.49	2014	0.15
24	Laptop Dell Latitude 3340 - TUHIN DEY		0.49	2014	0.15
25	Laptop Dell Latitude 3340 - RAHUL PANDEY		0.50	2014	0.15
26	Laptop DELL 3450-Kumar Harsh		0.50	2014	0.15
27	Laptop DELL 3450-Shubhranshu Shekhar Sahu		0.50	2014	0.15
28	Laptop DELL 3450- Pradip Roy		0.50	2014	0.15
29	Laptop DELL 3450-Uttam Ojha		0.50	2014	0.15
	Sub-Total-1		**17.01**		**4.54**
Exclusion from Decapitalisation -1 -(Not Part of Capital Cost)					
1	HP laptop-Anant Satsangi		0.46	31-01-2016	
2	HP LAPTOP-IT G4 RAVI PRAKASH SHARMA		0.46	28-07-2016	
3	HP LAPTOP-IT G4-P K BANDHU		0.48	01-09-2016	
4	HP LAPTOP 240 G4-RAJEEV KUMAR		0.48	24-09-2016	
5	DELL 3340 SHASHIKANT KUNWAR Laptop		0.22	29-03-2017	
6	DELL LATTITUDE E5450 Laptop SOURANGSHU NIYOGI		0.21	30-06-2017	
7	ACER LAPTOP (NEERAJ RAJ)		0.46	01-12-2017	
8	ACER TRAVEL MATE P23-(SAGAR KUMAR BISWAL)		0.45	01-01-2018	
9	ACER TRAVEL MATE P238(BIBEK KR PRADHAN)		0.45	01-09-2018	
10	DELL LATTITUDE 3470 (J P CHOUDHARY) LAPTOP		0.32	12-10-2018	
11	HP LAPTOP 440 G5 (DEB SARKHEL) 5CD9303ZJ3		0.59	02-09-2019	
12	HP LAPTOP 440 G5 (RAJ KISHORE MANDAL)		0.59	10-09-2019	
13	HP LAPTOP 430 G5 (ANOOP PATEL)		0.63	10-09-2019	
14	Maruty Swift Dezire VXI - C B Singh - JH10AZ-2997		4.80	30-06-2017	
	Sub-Tota1-2		**10.61**		-
Exclusion from Decapitalisation -2 (Claimed under Capital Spares: after deducting 10% Terminal Value)					
1					
2					
3					
4					
5					
	Sub-Total-3		-		
	Decap: Part of capital cost	**Sub-Total-1**	**17.01**		**4.54**
	Decap-Exclusion-1: Not part of capital cost	**Sub-Total-2**	**10.61**		
	Decap-Exclusion-2: Claimed under Capital Spares	**Sub-Total-3**	-		-
	Grand Total As per Cerificate		**27.62**		**4.54**

(Petitioner)

MAITHON POWER LIMITED

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2021-22

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
Decapitalisation - Part of Capital Cost					
1	Bed		0.68	2008	0.34
2	TV		0.21	2008	0.11
3	refrigerator		0.18	2008	0.09
4	Washing machine		0.10	2008	0.05
5	TV		0.27	2008	0.13
6	refrigerator		0.17	2008	0.08
7	refrigerator		0.40	2008	0.20
8	TV		0.55	2008	0.28
9	Microwave		0.06	2008	0.03
10	Computer Tables		0.26	2008	0.13
11	Photo Copy table		0.06	2009	0.03
12	TV		0.07	2009	0.03
13	Table		0.12	2009	0.06
14	Table		0.14	2009	0.07
15	Table		0.09	2009	0.05
16	air conditioner- voltas		2.59	2009	1.31
17	Sofa Set		0.24	2009	0.12
18	TV		0.07	2009	0.04
19	Washing machine		0.35	2009	0.18
20	TV		3.45	2009	1.74
21	TV		0.21	2009	0.11
22	Washing machine		0.07	2010	0.03
23	TV		0.21	2010	0.11
24	Godrej Make Sofa Petal 3 seater Model		0.24	2010	0.12
25	Geyser		0.70	2010	0.35
26	Serving Table Granite Top(3'x24'x26')		0.27	2010	0.14
27	Almirah Godrej Make storewel Plain with		2.00	2010	1.01
28	Single Bed		1.48	2010	0.75
29	Godrej Make Sofa Petal 3 seater Model		0.24	2010	0.12
30	Colour TV,21 Flat Screen, 21FC2AB LG		0.28	2010	0.14
31	LG Make Refrigeretor Model 258VT5		0.17	2010	0.08
32	Geyser		0.45	2010	0.23
33	Sofa Set (3+1+1) with Cushion		1.94	2010	0.98
34	L.G Make Fully Automatice washing		0.33	2010	0.17
35	LG Washing Machine ; Model:-8068LDP		0.19	2010	0.09
36	LG TV 21		0.51	2010	0.26
37	Sofa Set With Cushion		0.97	2010	0.49
38	LG 32 LCD (32 LD310)		2.88	2010	1.46
39	2 Tonnes Vertis Split AC(3 Star)		0.84	2010	0.42
40	Magnetic White Board		0.79	2011	0.40
41	Chair		1.39	2011	0.70
42	Table 3'x6'*2'x6' (MC-21)		0.16	2011	0.08
43	Cooler Make : Bajaj or equi. Kenstar		0.57	2011	0.29
44	Sofa 3 Seater		0.79	2011	0.40
45	Installation & placing sofas 3 seater		0.03	2011	0.02
46	GI Ducting for above Hoods		0.81	2011	0.41
47	Gas Pipe Line - ERW - C Class		0.16	2011	0.08
48	Gas Bank Manifold System		0.54	2011	0.27
49	Exhaust Hood for Single Burner Range		0.35	2011	0.18
50	Exhaust Hood for Deep Fat Fryer		0.13	2011	0.07
51	Exhaust Hood for Chapatti Plate		0.21	2011	0.10
52	Exhaust Hood for 5 Burner Gas Range		0.70	2011	0.36
53	Centrifugal Blower for Hot Air Suction		0.89	2011	0.45
54	5 Burner Gas Range		0.98	2011	0.50
55	2 Sink Unit		0.28	2011	0.14
56	Work Table		1.59	2011	0.81

MAITHON POWER LIMITED

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2021-22

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
57	Single Burner Gas Range		0.32	2011	0.16
58	Electric Combi Oven-Imported		2.70	2012	1.22
59	Double Container Deep Fat Frier		0.41	2012	0.18
60	4 Door Vertical Deep Freezer		3.62	2012	1.64
61	Work Table		2.13	2012	0.97
62	Sink for Hand wash		0.16	2012	0.07
63	Single Sink Unit		0.16	2012	0.07
64	Potato Peeler		0.43	2012	0.20
65	Pot Rack		0.62	2012	0.28
66	Lunch Plate Storage Rack - 3 Shelve		0.14	2012	0.06
67	2 Door Refrigerator		1.72	2012	0.78
68	Hand Dryer - Electrically Operated		0.13	2012	0.06
69	GI Ducting for above Hoods		0.15	2012	0.07
70	GN Pan 1/2 x 100 mm H with SS Lid		0.94	2012	0.43
71	Flexible pipe 4 ft L		0.02	2012	0.01
72	Electric Geyser - Haire		0.14	2012	0.06
73	Dough Kneaer - Standard		0.88	2012	0.40
74	Cold Bain Marie with underneath		2.06	2012	0.93
75	Chapatti Plate cum Puffer- LPG Operated		0.39	2012	0.18
76	BottleCooler/VisiCooler-Front Glass Door		0.36	2012	0.16
77	5 Shelve Storage Rack		1.71	2012	0.78
78	Wet Grinder / Masala Grinder		0.42	2012	0.19
79	Water Cooler - SS		0.58	2012	0.27
80	Veg Trolley		0.16	2012	0.07
81	Soiled Dish Receiving Table		0.23	2012	0.11
82	Sandwich Griller - Single Unit Standard		0.19	2012	0.08
83	Salamander		0.25	2012	0.11
84	Pulverizer		0.40	2012	0.18
85	Potato Onion Bin		0.22	2012	0.10
86	Pickup Counter with Tray Slide & 2 Tier		0.72	2012	0.33
87	Needle Control Valve		0.02	2012	0.01
88	Idly Steamer - Electrically operated		0.37	2012	0.17
89	Ice Cream Freezer		0.30	2012	0.14
90	Hot Bain Marie with 6 Nos. Container		1.13	2012	0.51
91	1 Nos. Bracket & 2 Nos. Chain		0.04	2012	0.02
92	TV-Sony Bravia Flat screen		4.51	2013	1.81
93	Table Tennis Board		0.46	2013	0.18
94	Laptop Dell Latitude 3340-Srikant Dash		0.51	2014	0.18
95	Laptop Dell Latitude 3340 - PANKAJ KUMAR		0.49	2014	0.17
96	Laptop Dell Latitude 3340 - Debarati Mandal		0.49	2014	0.17
97	Laptop Dell Latitude 3340-Vikash Kumar		0.49	2014	0.17
98	Laptop DELL 3450-Vishal Kumar Panchal		0.50	2015	0.15
99	Laptop DELL 3450-Ranjan Kr. Das		0.50	2015	0.15
100	Laptop DELL 3450-Priyasish Roy		0.50	2015	0.15
	Sub-Total-1		**67.07**		**31.52**
Exclusion from Decapitalisation -1 -(Not Part of Capital Cost)					
1	HP LAPTOP 440 G5 (PRIYAJIT SAHOO)		0.59	02-09-2019	
2	DELL LATTITUDE 3490(RAHUL PANDEY)		0.55	10-01-2019	
3	ACER TRAVEL MATE P2 (BIPLOB CHATTERJEE)		0.45	15-01-2018	
4	ACER TRAVEL MATE P23-(SHASHIKNAT SALDUR)		0.45	01-01-2018	
5	ACER LAPTOP (GAURAV KUMAR)		0.46	01-12-2017	
6	ACER LAPTOP MATE P23 (SUSHIL CHOUBEY)		0.46	08-12-2017	
7	ACER LAPTOP MATE P23 Mr Sudip Kumar Dash		0.46	08-12-2017	
8	ACER Laptop (KUNTAL MITRA) & bag		0.46	06-12-2017	
9	DELL LATTITUDE 3340 LAPTOP BIPLOB HAZRA		0.11	30-06-2017	
10	DELL LATTITUDE E7270 Laptop- Ramesh Jha		0.81	05-05-2017	
11	HP LAPTOP-IT G4 RAHMAN SIDDIQUR		0.48	01-09-2016	

MAITHON POWER LIMITED

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2021-22

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
12	HP LAPTOP-IT G4-SRIBALLAV SINGH		0.48	01-09-2016	
13	HP LAPTOP 240 G4-BIPLOV CHATTERJEE		0.48	24-09-2016	
14	HP LAPTOP 240 G4-RAMENDRA BANIK		0.48	24-09-2016	
15	HP LAPTOP 240 G4-RAKESH TALUKDAR		0.48	24-09-2016	
16	LAPTOP-NILESH KUMAR		0.48	31-01-2017	
17	LAPTOP-UMESH GAUTAM		0.49	31-01-2017	
18	LAPTOP-NEERAJ PRASAD		0.49	31-01-2017	
19	HP 240 G5 LAPTOP(ASHUTOSH RAI)		0.44	05-05-2017	
20	HP 240 G5 LAPTOP (ABHIJIT CHOUDHARY)		0.44	05-05-2017	
	Sub-Tota1-2		**9.54**		**-**
Exclusion from Decapitalisation -2 (Claimed under Capital Spares; after deducting 10% Terminal Value)					
1					
2					
3					
4					
5					
	Sub-Total-3		-		
	Decap: Part of capital cost	**Sub-Total-1**	**67.07**		**31.52**
	Decap-Exclusion-1: Not part of capital cost	**Sub-Total-2**	**9.54**		
	Decap-Exclusion-2: Claimed under Capital Spares	**Sub-Total-3**	-		
	Grand Total As per Cerificate		**76.61**		**31.52**

(Petitioner)

MAITHON POWER LIMITED

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2022-23

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
Decapitalisation - Part of Capital Cost					
1	Zenith Computer ,Model: Intel G 31		1.49	2010	0.79
2	Zenith Computer ,Model: Intel G 31		5.70	2010	3.02
3	Zenith Computer ,Model: Intel G 31		2.98	2010	1.58
4	TG Auxiliaries		0.00	0	0.00
5	Turbine		0.00	0	0.00
6	Electro Static Precipitator (ESP)		186.97	2011	99.08
7	DC Battery-Plate Type		85.81	2011	45.47
8	Relay Panel		0.00	0	0.00
9	Coal Mill		0.00	0	0.00
10	Super heaters and reheaters		246.50	2011	130.63
11	ZENITH corporate PC H61		3.16	2012	1.51
12	LV Switchgear		0.00	0	0.00
13	DC Battery-Plate Type		91.31	2012	43.63
14	Compressed Air System		0.00	0	0.00
15	Compressed Air System		0.00	0	0.00
16	TG Auxiliaries		0.00	0	0.00
17	ID,PA and FD Fan		0.00	0	0.00
18	ID,PA and FD Fan		0.00	0	0.00
19	Cooling Tower 2		0.00	0	0.00
20	ESP Area		19.25	2012	9.20
21	Capital Spares-AHP		0.00	0	0.00
22	ANALYSER TRIGAS(HY PURITY MTR)H2 CO2&AIR		5.07	2014	1.90
23	PH 700 benchmeter		0.85	2014	0.32
24	conductivity bench top meter Kit		0.98	2014	0.36
25	Multi gas Detector-Explosive meter		0.78	2014	0.29
26	Laptop Dell Latitude 3340 - Ayan Kumar Ghosh		0.49	2014	0.18
27	Laptop Dell Latitude 3340 - ABHISHEK KUMAR		0.49	2014	0.18
28	Laptop Dell Latitude 3340 - SAROJ KUMAR JHA		0.49	2014	0.18
29	SPECTROPHOTOMETER VISIBLE		3.53	2015	1.14
30	Laptop DELL 3450-DEEPAK KR. JAISWAL-Opn		0.50	2015	0.16
31	Laptop DELL 3450-AJAY KUMAR R&R		0.50	2015	0.16
32	Laptop DELL 3440-Mr Rakesh J Singh		0.46	2015	0.15
	Sub-Total-1		**657.31**		**339.94**
Exclusion from Decapitalisation -1 -(Not Part of Capital Cost)					
1	ACER TRAVEL MATE P23-ANIRBAN PAL		0.45	01-01-2018	
2	ACER TRAVEL MATE P23-(AJIT NAYAK)		0.45	01-01-2018	
3	ACER TRAVEL MATE P23-(PRINCE KUMAR SINGH)		0.45	01-01-2018	
4	ACER TRAVEL MATE P23-(PANKAJ KR.SINGH)		0.45	01-01-2018	
5	LAPTOP ACER TRAVEL MATE P23-(RAVI SHANKAR RAJAK)		0.45	01-01-2018	
6	ACER TRAVEL MATE P23-(RAJESH KUMAR YADAV)		0.45	01-01-2018	
7	ACER TRAVEL MATE P2 (SUNIL KURMI)		0.45	15-01-2018	
8	ACER TRAVEL MATE P2 (AJAY KR.BAISYA)		0.45	15-01-2018	
9	ACER TRAVEL MATE P23-K C BEHERA		0.45	01-01-2018	
10	ACER TRAVEL MATE P23 (AJEET SINGH)		0.45	01-01-2018	
11	ACER LAPTOP MATE P23(YARRAM REDDY)		0.45	01-01-2018	
12	ACER TRAVEL MATE P23 (ASHOK TRIPATHI) LAPTOP		0.46	01-12-2017	
13	ACER TRAVEL MATE P23 (SUNIL KUMAR SINGH) LAPTOP		0.46	01-12-2017	
14	ACER TRAVEL MATE P23 (MARUTI DUTTA) LAPTOP		0.46	01-12-2017	
15	ACER TRAVEL MATE P23 (SUMAN GHOSAL) LAPTOP		0.46	01-12-2017	
16	ACER TRAVEL MATE P23 (ASHOK SAHA) LAPTOP		0.46	01-12-2017	
17	ACER TRAVEL MATE P2 (MUKESH KUMAR NAIK)		0.45	15-01-2018	
18	LAPTOP HP 440 G5 (SAMIR PANDAB)		0.59	03-06-2020	
19	DELL LATTITUDE 3490(VISHAL INGALE)		0.55	10-01-2019	
20	DELL LATTITUDE 3490(KANAWAR KUSHWAHA)		0.55	10-01-2019	
21	ACER TRAVEL MATE P238(R B SINGH)		0.45	01-09-2018	
22	ACER TRAVEL MATE P238 (SAIKAT GANGULY)		0.45	01-09-2018	
23	ACER TRAVEL MATE P238 (MANISH KUMAR)		0.45	01-06-2018	



PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2022-23

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
24	ACER TRAVEL MATE P238(SRINIVASA RAO YERRA)		0.45	01-06-2018	
25	ACER TRAVEL MATE P238(AMBRISH KUMAR)		0.45	01-06-2018	
26	ACER TRAVEL MATE P238(SHAMBHU KUMAR)		0.45	01-06-2018	
27	ACER TRAVEL MATE P238 POONAM SHIRKE		0.45	27-06-2018	
28	ACER TRAVEL MATE P23-(AVIJIT KUMAR UOADHAYA)		0.45	05-03-2018	



PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2022-23

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
29	ACER TRAVEL MATE P2 (BABAN CHACKO)		0.45	02-02-2018	
30	ACER TRAVEL MATE P2 (GIRIJA PRASAD THATOI)		0.45	15-01-2018	
31	DELL LATTITUDE 5480(ANISH KHAN) Laptop		0.56	18-09-2017	
32	DELL LATTITUDE 5480(KUNDAN RAJ) Laptop		0.56	18-09-2017	
33	DELL LATTITUDE 5480(MAYANK GARG) Laptop		0.56	18-09-2017	
34	DELL LATTITUDE 5480(RAMESH OJHA) Laptop		0.56	18-09-2017	
35	HP 240 G5 LAPTOP (RANDHIR KUMAR)		0.44	05-05-2017	
36	HP 240 G5 LAPTOP (ARIF JAMAL)		0.44	05-05-2017	
37	HP 240 G5 LAPTOP (SARWOTAM PRASAD)		0.44	05-05-2017	
38	HP 240 G5 LAPTOP (BISWARUP DUTTA)		0.44	05-05-2017	
39	HP 240 G5 LAPTOP(PANKAJ MONDAL)		0.44	05-05-2017	
40	LAPTOP-JAY MALLICK		0.49	31-01-2017	
41	LAPTOP-SUGATA CHAKRABORTY		0.49	31-01-2017	
42	HP laptop-IT G4-IRFAN AHMED		0.48	31-01-2017	
43	HP laptop-IT G4-P UMAKANTH		0.48	31-01-2017	
44	PRINTER HP LASERJET PRO MFP M226DW		0.32	31-01-2017	
45	HP LAPTOP 240 G4-HIMADRI BHATTA		0.48	24-09-2016	
46	HP 240 G3-V.S Mishra-Laptop		0.46	30-04-2016	
47	ACER LAPTOP (M S REHMAN)		0.46	01-12-2017	
48	ACER LAPTOP (AMITABH TIRKEY)		0.46	01-12-2017	
49	ACER LAPTOP (VIKASH ROY)		0.46	01-12-2017	
50	ACER LAPTOP MATE P23 (MADAN PANDA)		0.46	08-12-2017	
51	ACER LAPTOP MATE P23 (SRILAL ACHARYA)		0.46	08-12-2017	
52	ACER LAPTOP MATE P23 (RAJESH SINGH)		0.46	08-12-2017	
53	ACER LAPTOP (SHASHIKANT KUNWAR)		0.46	08-12-2017	
54	ACER LAPTOP (NILESH AMBER)		0.46	08-12-2017	
55	DELL LATTITUDE 5480(SOUMYAJIT JASH) Laptop		0.56	18-09-2017	
56	DELL LATTITUDE 5480(SUSANTA PATRA) Laptop		0.56	18-09-2017	
57	DELL LATTITUDE 5480(ARUNVA DAS) Laptop		0.56	18-09-2017	
58	DELL LATTITUDE 5480 (NITYA MONDAL) LAPTOP		0.55	20-09-2017	
59	DELL LATTITUDE 5480(ANOOP SINGHAL) LAPTOP		0.56	20-09-2017	
60	DELL LATTITUDE 5480(SANCHAL ENDUPURI) LAPTOP		0.56	20-09-2017	
61	ACER Laptop (DINESH GANGWAL) & bag		0.46	06-12-2017	
62	ACER Laptop (KAUSHIK GANGULY) & bag		0.46	06-12-2017	
63	Hyundai CRETA E+ VTVT 1.6 S R Sardul MH01CH-6778		12.25	30-06-2017	
64	Honda City SV CVT -Ajay Konnur-MH01CP-0048		12.75	30-06-2017	
	Sub-Tota1-2		**54.54**		-
Exclusion from Decapitalisation -2 (Claimed under Capital Spares; after deducting 10% Terminal Value)					
1	Relay Panel		6.83	2011	3.62
2	LV Switchgear		36.03	2012	17.22
3	Coal Mill		91.76	2011	48.63
4	Cooling Tower 2		64.91	2012	31.01
5	TG Auxiliaries		1.03	2011	0.55
6	TG Auxiliaries		2.58	2012	1.23
7	Turbine		36.96	2011	19.59
8	Compressed Air System		1.03	2012	0.49
9	Compressed Air System		4.74	2012	2.26
10	ID,PA and FD Fan		0.69	2012	0.33
11	ID,PA and FD Fan		46.56	2012	22.25
12	Capital Spares-AHP		0.92	2012	0.44
	Sub-Total-3		**294.06**		**147.62**
	Decap: Part of capital cost	**Sub-Total-1**	**657.31**		**339.94**
	Decap-Exclusion-1: Not part of capital cost	**Sub-Total-2**	**54.54**	-	-
	Decap-Exclusion-2: Claimed under Capital Spares	**Sub-Total-3**	**294.06**	-	**147.62**
	Grand Total As per Cerificate		**1,005.90**		**487.56**

(Petitioner)

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2023-24

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
Decapitalisation - Part of Capital Cost					
1	Ventilation Fan		0.03	2008	0.02
2	DIGITAL CAMERA-CAPITAL PHOTO SERVICE PVT LTD		0.61	2009	0.34
3	Polycom Soundsation audio conf system		0.55	2009	0.30
4	Ver blind-Installation of Verticals blinds at Proe		0.15	2009	0.08
5	Paper Shredding Machine		0.20	2009	0.11
6	Self Retractable Fall Arrestor.		0	2009	0.00
7	GPS		0.24	2009	0.14
8	Air conditioner		0.13	2009	0.07
9	Kent Grand RO Mineral Water Plant		0.15	2009	0.08
10	Grounding Pit/Trip		0.84	2009	0.47
11	Shoe Shinning Machine		0.16	2009	0.09
12	Digital Camera (Canon-Powershot) A1000IS		0.40	2009	0.22
13	High Brite torch.		0.54	2009	0.30
14	Sony Music System Model GT 484 USB		0.08	2009	0.04
15	Kent Grand RO Mineral Water Plant		0.15	2009	0.08
16	Digital Camera-Canon		0.10	2009	0.06
17	TV		0.07	2009	0.04
18	Kent Grand RO Mineral Water Plant		0.58	2009	0.32
19	refrigerator		0.13	2010	0.07
20	Microwave		0.09	2010	0.05
21	Wet Grinder		0	2010	0.00
22	Nikon Digital Camera (Model S230)		0.09	2010	0.05
23	Water Level Controller		0	2010	0.00
24	Kent Grand+ - RO+UV+MINERALS- 15 Litres/		0.73	2010	0.40
25	LCD size 32(full HD) Model No. 32LF20FR		0.32	2010	0.18
26	Jointing Kit		0.21	2010	0.12
27	HP Laserjet Printer Model: P1505		0.37	2010	0.21
28	ZUARI MADE BED		2.56	2010	1.42
29	Machine WATCHMAN Auto Pump Controller		0	2010	0.00
30	Zenith Computer ,Model: Intel G 31		0.25	2010	0.14
31	M.S Factory Gate(Collapsible) gate Size		0.09	2010	0.05
32	Motorola Make VHF Portable		1.39	2010	0.77
33	Search Light		0.45	2010	0.25
34	High Brite Tourch		1.01	2010	0.56
35	Zenith Computer ,Model: Intel G 31		1.24	2010	0.69
36	Motorola Make VHF Portable		1.39	2011	0.77
37	Mobile Dresser with Almirah code -168		0.12	2011	0.07
38	Geyser for site office		0.05	2011	0.03
39	Chair Manager		5.21	2011	2.89
40	TG.Building		0	2011	0.00
41	CWPH MCC ROOM		8.88	2011	4.92
42	Vibrating Grizzly Feeder		0	2011	0.00
43	Conveyor System		302.10	2011	167.53
44	Conveyor System		148.72	2011	82.47
45	Boiler Drum		0	2011	0.00
46	ESP Area		1.68	2011	0.93
47	Switch Yard-400KVA		0	2011	0.00
48	Switch Yard-400KVA		0	2011	0.00
49	Coal Mill		9.85	2011	5.46
50	Coal Mill		6.22	2011	3.45
51	Coal Mill		4.20	2011	2.33
52	Coal Mill		29.43	2011	16.32
53	Coal Mill		73.44	2011	40.73
54	Variable Frequency Drive (VFD)		0	2011	0.00
55	Steam Water Analysis System (SWAS)		14.46	2011	8.02
56	Steam Water Analysis System (SWAS)		37.81	2011	20.97

MAITHON POWER LIMITED

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2023-24

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
57	Turbine Supervisory System (TSS)		49.94	2011	27.69
58	Uninterupted Power Supply (UPS)		2.05	2011	1.13
59	DG Set		13.79	2011	7.65
60	LV Switchgear		0	2011	0.00
61	Misc. Pumps Horizontal		0	2011	0.00
62	Misc. Pumps Horizontal		0	2011	0.00
63	Control Valves		0	2011	0.00
64	Instrumentation		0	2011	0.00
65	Cooling Tower 1		0	2011	0.00
66	Computer		0.73	2011	0.41
67	Fixed Out Door Camera with Lens		66.06	2011	36.64
68	VHF Portable		1.40	2011	0.78
69	Chair Visitors / Staff/ Conf		0.86	2011	0.48
70	Security Iron Barricade		0.93	2011	0.52
71	CENTRAL STORE		2.34	2011	1.30
72	400KV SWITCHYARD		0	0	0.00
73	Zenith Corporate PC h61		0.40	2012	0.20
74	CANON make Laser Plain Paper Fax Machine		0.17	2012	0.09
75	Storewel Plain Almirah		0.95	2012	0.48
76	Ring Granulator		0	2012	0.00
77	Electricals and C&I		0	2012	0.00
78	Storewel Plain Almirah		0.16	2012	0.08
79	Super heaters and reheaters		260.03	2012	130.65
80	Super heaters and reheaters		17.27	2012	8.68
81	Electrical		0	2012	0.00
82	PLC System		7.60	2012	3.82
83	PLC System		3.52	2012	1.77
84	PLC System		38.92	2012	19.55
85	FIRE SECURITY SYSTEM		2.26	2012	1.14
86	Capital Spares-CHP		0	2012	0.00
87	Electro Static Precipitator (ESP)		25.42	2012	12.77
88	Electro Static Precipitator (ESP)		68.38	2012	34.36
89	Turbine		0	2012	0.00
90	Turbine		0	2012	0.00
91	Boiler Feed Pumps & TDBFP RECIRCULATION VALVE WITH		0	2012	0.00
92	Distributed Control System(DCS)		68.91	2012	34.62
93	Uninterupted Power Supply (UPS)		34.20	2012	17.18
94	Relay Panel		0	2012	0.00
95	DG Set		14.99	2012	7.53
96	Compressed Air System		0	2012	0.00
97	DC Battery-Plate Type		91.31	2012	45.88
98	LV Switchgear		0	2012	0.00
99	Cooling Tower 2		0	2012	0.00
100	AC 1.5 Tonnes , 5 Star		30.20	2013	13.60
101	Chairs-Supreme		2.46	2013	1.11
102	Dinning Table-Godrej Make		0.54	2013	0.24
103	SCANNER - Kodak I 1405		2.02	2013	0.91
104	Motorola GP 328 Walky Talky		3.16	2014	1.26
105	Hp 240 with win-8 pro Laptop		0.40	2014	0.16
106	LAN Printer (Model - Aficio SPC240SF)		0.45	2014	0.18
107	Printer-CANON IR Adv-4025		2.05	2014	0.82
108	Envireomental IT system		3.80	2014	1.51
109	Laptop Dell Latitude 3340-Himadri Bhattacharjee		0.51	2014	0.20
110	Laptop Dell Latitude 3340-Jaya Bajpai		0.51	2014	0.20
111	Laptop Dell Latitude 3340-Soumen Halder		0.49	2014	0.20
112	MILLIPORE FILTER ASSEMBLY		8.57	2014	3.41
113	DADF for Cannon ID-4025		0.37	2015	0.13
114	Canon IR 4225 Printer with DADF		1.61	2015	0.56

MAITHON POWER LIMITED

PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2023-24

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
115	Printer Canon IR 4225 with DADF		1.61	2015	0.56
116	Printer Canon IR 4225 with DADF		1.61	2015	0.56
117	BOMB CALORIMETER		13.50	2015	4.70
118	Weigh Bridge cabin for 5&6		0	2015	0.00
119	2 Ton Voltas SAC 245 DY		0.50	2015	0.18
120	2 Ton Voltas SAC 245 DY		0.50	2015	0.18
121	4Ton Venture Slimline Split AC		0.82	2015	0.29
122	4Ton Venture Slimline Split AC		0.82	2015	0.29
123	4Ton Venture Slimline Split AC		0.82	2015	0.29
124	4Ton Venture Slimline Split AC		0.82	2015	0.29
125	Mini Bar Fridge 47 Ltr-Field Hostel		0.06	2015	0.02
126	Four Door Vertical Freezer-Field Hostel		1.37	2015	0.48
	Sub-Total-1		**1,509.63**		**792.27**
	Exclusion from Decapitalisation -1 -(Not Part of Capital Cost)				
127	HP LAPTOP 440 G5 (SHUBENDU SARKAR)		0.59	16-09-2019	
128	HP LAPTOP440 G5 (SUMAN MUKHERJEE)		0.59	16-09-2019	
129	HP LAPTOP 440 G5 (BIBHUKANT NAYAK)		0.59	02-09-2019	
130	HP LAPTOP440 G5 (BISWAJIT BERA)		0.59	02-09-2019	
131	HP LAPTOP 440 G5 (MANAS SAHOO)		0.59	02-09-2019	
132	HP LAPTOP 440 G5 (SHUBHRANSHU SAHU)5CD9303ZH5		0.59	02-09-2019	
133	HP LAPTOP 440 G5 (DIVYANSHU TRIVEDI) 5CD9303ZHG		0.59	02-09-2019	
134	HP LAPTOP 430 G5 (KAJAL SINGH) SR NO.5CD930877X		0.63	02-09-2019	
135	HP LAPTOP 440 G5 (NEERAJ RAJ) SR NO 5CD9303ZJ2		0.59	02-09-2019	
136	HP LAPTOP 440 G5 (SHANTI MODAK) SR 5CD9303ZHP		0.59	02-09-2019	
137	DELL LATTITUDE 3490(PARTHO BHATTACHARYYA) LAPTOP		0.59	01-05-2019	
138	DELL LATTITUDE 3490(ANKIT ANAND) LAPTOP		0.59	01-05-2019	
139	DELL LATTITUDE 3490(MD NAWAZ) LAPTOP		0.59	01-05-2019	
140	DELL LATTITUDE 3490(AMAN KUMAR) LAPTOP		0.59	01-05-2019	
141	DELL LATTITUDE 3490(RAJIV RANJAN) LAPTOP		0.59	01-05-2019	
142	DELL LATTITUDE 3490(PARTHA BANERJEE) LAPTOP		0.59	01-05-2019	
143	DELL LATTITUDE 3490(RAHUL DEV BANERJEE) LAPTOP		0.59	01-05-2019	
144	DELL LATTITUDE 3490(ABHIJIT PANDEY)		0.55	10-01-2019	
145	DELL LATTITUDE 3490(JATYA BATBAYAL)		0.55	10-01-2019	
146	DELL LATTITUDE 3490(AMIT PATIL)		0.55	10-01-2019	
147	LAPTOP DELL LATTITUDE 3490(RAVI KUMAR)		0.55	10-01-2019	
148	HP LAPTOP 440 G5 (HARISH SINGH)		0.59	16-09-2019	
149	HP LAPTOP 440 G5 (UJJWAL DUTTA)		0.59	10-09-2019	
150	HP LAPTOP 440 G5 (HARISHANKAR SINGH)		0.59	14-10-2019	
151	HP LAPTOP440 G5 (PRADYUT BAJPAYEE)		0.59	14-10-2019	
152	HP LAPTOP 440 G5 (AMIT CHATTERJEE)		0.59	14-10-2019	
153	HP LAPTOP440 G5 (GAURAV BAWASE)		0.59	14-10-2019	
154	HP LAPTOP 430 G5 (S H PANDEY)		0.63	10-09-2019	
155	HP LAPTOP 440 G5 (KARTIK MAHATO)		0.59	14-10-2019	
156	HP LAPTOP 440 G5 (HIRESH KASHYAP)		0.59	14-10-2019	
157	HHP LAPTOP 440 G5 Sandeep Mahto LT003245		0.59	14-10-2019	
158	HP LAPTOP 440 G5 (RASHMI LAKRA)		0.59	14-10-2019	
159	HP LAPTOP440 G5 (ANIL PRADHAN)		0.59	14-10-2019	
160	PRINTER,,LASER JET, PRO MFP M226DN/DW,		0.32	12-12-2019	
161	PRINTER,,LASER JET, PRO MFP M226DN/DW,		0.32	12-12-2019	
162	HP 440 G7		0.61	05-11-2020	
163	HP 440 G7 LAPTOP HP 440 G7 (ARNAB BOSE)		0.61	05-11-2020	
164	HP PRINTER LASER JET PRO MFP M226DN/DW		0.31	01-03-2022	
165	LT007119-ACER TMP214-53-MARSHAL NELSON BRIGANZA		0.70	25-12-2022	
166	DELL LATTITUDE 3490(SOUMYADIP BARAL)		0.55	10-01-2019	
167	Cannon Printer MA-5		0.74	08-01-2016	
168	HP laptop-Rakesh Bhadoria		0.46	31-01-2016	



PART-II
FORM- I

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Take over Date (ToD)	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2023-24

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
169	HP 240 G3-IT- Laptop		0.46	01-04-2016	
170	DELL LATTITUDE 3490(UDAY SINGH)		0.55	10-01-2019	
171	DELL LATTITUDE 3490(MITHUN MAZUMDAR)		0.55	10-01-2019	
172	LAPTOP DELL LATTITUDE 3490(RAVI SHANKAR JETI)		0.55	10-01-2019	
173	ACER TRAVEL MATE P238 (SANTANU GHOSH)		0.45	01-09-2018	
174	ACER TRAVEL MATE P238(TUNA SAHOO)		0.45	01-09-2018	
175	ACER TRAVEL MATE P23 (BIBHUTI ROUTRAY)		0.45	05-03-2018	
176	ACER TRAVEL MATE P23-(RAMANAD SHUKLA)		0.45	05-03-2018	
177	ACER TRAVEL MATE P2 (A K NAYAK)		0.45	15-01-2018	
178	ACER TRAVEL MATE P2 (SAPNA RANI)		0.45	15-01-2018	
179	ACER TRAVEL MATE P23-(SANJEEV SINHA)		0.45	01-01-2018	
180	ACER TRAVEL MATE P23 (BATAVYAL ATISH D)		0.45	01-01-2018	
181	ACER LAPTOP MATE P23 (SUSHEEL SINGH)		0.46	01-12-2017	
182	ACER TRAVEL MATE P23 (RAKESH PANDEY) LAPTOP		0.46	01-12-2017	
183	ACER Laptop (ARUN SINGH) & bag		0.46	06-12-2017	
184	TOSHIBA S40BX0412 (RajKishore Mandal)		0.21	30-06-2017	
185	CANON IR-ADV 4225		1.80	15-06-2017	
186	HP LASERJET 1108		0.11	05-05-2017	
187	HP 240 G5 LAPTOP (RUPESH SINGH)		0.44	05-05-2017	
188	HP PRO 202N PRINTER		0.12	14-10-2016	



PART-II
FORM- I

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
Take over Date (ToD)	**Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012**
For Financial Year	**2023-24**

Amount in Rs Lakh

S.N	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of decapitalization/ Remarks
189	HP LAPTOP-IT G4-SUBHASH TIWARI		0.48	01-09-2016	
190	HP LAPTOP-IT G4-AJAY KONNUR		0.48	01-09-2016	
191	CHAIR OFFICES, EXECUTIVE		2.00	06-09-2018	
192	4 Door Vertical Refrigerator with D.T.C.		1.97	01-09-2015	
193	Potato Peeler5 Kg. per Filling		0.85	01-09-2015	
194	AUTOMATIC TAN TRITRATOR		6.00	30-06-2015	
	Sub-Tota1-2		**45.56**		-
Exclusion from Decapitalisation -2 (Claimed under Capital Spares; after deducting 10% Terminal Value)					
1	400KV SWITCHYARD		0.20	2011	0.11
2	Switch Yard-400KVA		9.54	2011	5.29
3	Switch Yard-400KVA		9.64	2011	5.35
4	LV Switchgear		12.58	2011	6.98
5	Relay Panel		9.61	2012	4.83
6	LV Switchgear		3.87	2012	1.94
7	Control Valves		8.38	2011	4.65
8	Cooling Tower 1		51.08	2011	28.33
9	Cooling Tower 2		46.10	2012	23.16
10	Boiler Feed Pumps & TDBFP RECIRCULATION VALVE WITH		0.25	2012	0.13
11	Turbine		29.19	2012	14.67
12	Turbine		29.19	2012	14.67
13	Compressed Air System		4.26	2012	2.14
14	Capital Spares-CHP		5.88	2012	2.96
15	Ring Granulator		33.67	2012	16.92
16	Vibrating Grizzly Feeder		4.58	2011	2.54
17	Wet Grinder		0.07	2010	0.04
18	Electricals and C&I		6.93	2012	3.48
19	Electrical		15.44	2012	7.76
20	Instrumentation		9.93	2011	5.50
21	Machine WATCHMAN Auto Pump Controller		0.14	2010	0.08
22	Water Level Controller		0.07	2010	0.04
23	Misc. Pumps Horizontal		4.93	2011	2.74
24	Misc. Pumps Horizontal		21.00	2011	11.65
25	Variable Frequency Drive (VFD)		6.48	2011	3.59
26	Boiler Drum		2.48	2011	1.37
27	TG.Building		2.60	2011	1.44
28	Self Retractable Fall Arrestor.		0.58	2009	0.32
29	Weigh Bridge cabin for 5&6		4.59	2015	1.41
	Sub-Total-3		**333.27**		**174.07**
	Decap: Part of capital cost	**Sub-Total-1**	**1,509.63**		**792.27**
	Decap-Exclusion-1: Not part of capital cost	**Sub-Total-2**	**45.56**	-	-
	Decap-Exclusion-2: Claimed under Capital Spares	**Sub-Total-3**	**333.27**	-	**174.07**
	Grand Total As per Cerificate		**1,888.46**		**966.34**

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- K

Statement showing items/assets/works claimed under Exclusions:

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
For Financial Year	2019-20

Amount in Rs Lakh

Sl. No.	Head of Work / Equipment	Party Name	ACE Claimed under Exclusion				Justification
			Accrual basis	Undischarged Liability included in col. 3	Cash basis	IDC included in col. 3	
(1)	(2)		(3)	(4)	(5=3-4)	(6)	(7)
B.1	Claims disallowed (Year Wise)						
1							
2							
	Sub-total B.1: Claims disallowed		-	-	-	-	
B.2	Disallowed Items (Year Wise)						
1							
	Sub-Total: Disallowed Items (Year Wise)		-	-	-	-	
B.3	Items not claimed*						
1	Undischarged Liability Towards Railway Package		10.14	0.00	10.14		
2	Capitalisation towards Railway Package		2524.68	0.00	2524.68		
3							
	Sub-Total: Items not claimed		**2534.82**	**0.00**	**2534.82**	**0.00**	
B.4	Loan ERV						
B.5	Capital Spares						
B.6	Inter Unit Transfer						
1							
2							
	Total Inter Unit Transfer		**0.00**		**0.00**	**0.00**	
B.7	Reversal of Liability						
1							
	Total Reversal of Liability		**0.00**	**0.00**	**0.00**	**0.00**	
B.8	Decap of Buildings- part of Capital Cost						

PART-I
FORM- K

Statement showing items/assets/works claimed under Exclusions:

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
For Financial Year	2019-20

Amount in Rs Lakh

Sl. No.	Head of Work / Equipment	Party Name	ACE Claimed under Exclusion				Justification
			Accrual basis	Undischarged Liability included in col. 3	Cash basis	IDC included in col. 3	
(1)	(2)		(3)	(4)	(5=3-4)	(6)	(7)
1							
2							
3							
	Total Decap of Buildings- part of Capital Cost		**0.00**	**0.00**	**0.00**	**0.00**	
B.9	**Decap of MBOAs: Part of Capital Cost**						
B.10	**Decap of Capital Spares-Not part of Capital Cost**						
	Total Exclusion Claimed		**2534.82**	**0.00**	**2534.82**	**0.00**	

** Capitalised in books in FY 2019-20, however, capitalisation claimed for tariff purpose in FY 2021-22, Reasons provided in the Petition*

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- K

Statement showing items/assets/works claimed under Exclusions:

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
For Financial Year	2020-21

Amount in Rs Lakh

Sl. No.	Head of Work / Equipment	Party Name	ACE Claimed under Exclusion				Justification
			Accrual basis	Undischarged Liability included in col. 3	Cash basis	IDC included in col. 3	
(1)	(2)		(3)	(4)	(5=3-4)	(6)	(7)
B.1	Claims disallowed (Year Wise)						
1							
2							
	Sub-total B.1: Claims disallowed		-	-	-	-	
B.2	Disallowed Items (Year Wise)						
1							
	Sub-Total: Disallowed Items (Year Wise)		-	-	-	-	
B.3	Items not claimed*						
1	Undischarged Liability Towards Railway Package		6566.87	0.00	6566.87		
2	Capitalisation towards Railway Package		60883.18	1.00	60882.18		
3							
	Sub-Total: Items not claimed		**67450.05**	**1.00**	**67449.05**	**0.00**	
B.4	Loan ERV						
B.5	Capital Spares						
B.6	Inter Unit Transfer						
1							
2							
	Total Inter Unit Transfer		0.00		0.00	0.00	
B.7	Reversal of Liability						
1							
	Total Reversal of Liability		0.00	0.00	0.00	0.00	
B.8	Decap of Buildings- part of Capital Cost						
1							

PART-I
FORM- K

Statement showing items/assets/works claimed under Exclusions:

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
For Financial Year	2020-21

Amount in Rs Lakh

Sl. No.	Head of Work / Equipment	Party Name	ACE Claimed under Exclusion				Justification
			Accrual basis	Undischarged Liability included in col. 3	Cash basis	IDC included in col. 3	
(1)	(2)		(3)	(4)	(5=3-4)	(6)	(7)
2							
3							
	Total Decap of Buildings- part of Capital Cost		**0.00**	**0.00**	**0.00**	**0.00**	
B.9	**Decap of MBOAs: Part of Capital Cost**						
B.10	**Decap of Capital Spares-Not part of Capital Cost**						
	Total Exclusion Claimed		**67450.05**	**1.00**	**67449.05**	**0.00**	

** Capitalised in books in FY 2020-21, however, capitalisation claimed for tariff purpose in FY 2021-22, Reasons provided in the Petition*

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- K

Statement showing items/assets/works claimed under Exclusions:

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
For Financial Year	2021-22

Amount in Rs Lakh

Sl. No.	Head of Work / Equipment	Party Name	ACE Claimed under Exclusion				Justification
			Accrual basis	Undischarged Liability included in col. 3	Cash basis	IDC included in col. 3	
(1)	(2)		(3)	(4)	(5=3-4)	(6)	(7)
B.1	Claims disallowed (Year Wise)						
1							
2							
	Sub-total B.1: Claims disallowed		-	-	-	-	
B.2	Disallowed Items (Year Wise)						
1							
	Sub-Total: Disallowed Items (Year Wise)		-	-	-	-	
B.3	Items not claimed						
1							
2							
3							
	Sub-Total: Items not claimed		0.00	0.00	0.00	0.00	
B.4	Loan ERV						
B.5	Capital Spares						
B.6	Inter Unit Transfer						
1							
2							
	Total Inter Unit Transfer		0.00		0.00	0.00	
B.7	Reversal of Liability						
1							
	Total Reversal of Liability		0.00	0.00	0.00	0.00	
B.8	Decap of Buildings- part of Capital Cost						
1							
2							
3							
	Total Decap of Buildings- part of Capital Cost		0.00	0.00	0.00	0.00	
B.9	Decap of MBOAs: Part of Capital Cost						
B.10	Decap of Capital Spares-Not part of Capital Cost						
	Total Exclusion Claimed		0.00	0.00	0.00	0.00	

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- K

Statement showing items/assets/works claimed under Exclusions:

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
For Financial Year	2022-23

Amount in Rs Lakh

Sl. No.	Head of Work / Equipment	Party Name	ACE Claimed under Exclusion				Justification
			Accrual basis	Undischarged Liability included in col. 3	Cash basis	IDC included in col. 3	
(1)	(2)		(3)	(4)	(5=3-4)	(6)	(7)
B.1	Claims disallowed (Year Wise)						
1							
2							
	Sub-total B.1: Claims disallowed		-	-	-	-	
B.2	Disallowed Items (Year Wise)						
1							
	Sub-Total: Disallowed Items (Year Wise)		-	-	-	-	
B.3	Items not claimed						
1	Employee Vehicle Purchase		73.34	0.00	73.34		
2							
3							
	Sub-Total: Items not claimed		73.34	0.00	73.34	0.00	
B.4	Loan ERV						
B.5	Capital Spares						
B.6	Inter Unit Transfer						
1							
2							
	Total Inter Unit Transfer		0.00		0.00	0.00	
B.7	Reversal of Liability						
1							
	Total Reversal of Liability		0.00	0.00	0.00	0.00	
B.8	Decap of Buildings- part of Capital Cost						
1							
2							
3							
	Total Decap of Buildings- part of Capital Cost		0.00	0.00	0.00	0.00	
B.9	Decap of MBOAs: Part of Capital Cost						
B.10	Decap of Capital Spares-Not part of Capital Cost						
	Total Exclusion Claimed		73.34	0.00	73.34	0.00	

(Petitioner)

MAITHON POWER LIMITED

PART-I
FORM- K

Statement showing items/assets/works claimed under Exclusions:

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
For Financial Year	2023-24

Amount in Rs Lakh

Sl. No.	Head of Work / Equipment	Party Name	ACE Claimed under Exclusion				Justification
			Accrual basis	Undischarged Liability included in col. 3	Cash basis	IDC included in col. 3	
(1)	(2)		(3)	(4)	(5=3-4)	(6)	(7)
B.1	Claims disallowed (Year Wise)						
1							
2							
	Sub-total B.1: Claims disallowed		-	-	-	-	
B.2	Disallowed Items (Year Wise)						
1							
	Sub-Total: Disallowed Items (Year Wise)		-	-	-	-	
B.3	Items not claimed						
1	Employee Vehicle Purchase		77.98	0.00	77.98		
2							
3							
	Sub-Total: Items not claimed		77.98	0.00	77.98	0.00	
B.4	Loan ERV						
B.5	Capital Spares						
B.6	Inter Unit Transfer						
1							
2							
	Total Inter Unit Transfer		0.00		0.00	0.00	
B.7	Reversal of Liability						
1							
	Total Reversal of Liability		0.00	0.00	0.00	0.00	
B.8	Decap of Buildings- part of Capital Cost						
1							
2							
3							
	Total Decap of Buildings- part of Capital Cost		0.00	0.00	0.00	0.00	
B.9	Decap of MBOAs: Part of Capital Cost						
B.10	Decap of Capital Spares-Not part of Capital Cost						
	Total Exclusion Claimed		77.98	0.00	77.98	0.00	

(Petitioner)

PART-I
FORM- N

Calculation of Interest on Normative Loan

Name of the Company :	**Maithon Power Limited**
Name of the Power Station :	**1050 Maithon Project**

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8
1	Gross Normative loan – Opening		3,35,563.78	3,37,027.35	3,38,734.56	3,91,593.82	3,93,777.25
2	Cumulative repayment of Normative loan up to previous year		1,64,754.01	1,88,300.14	2,11,971.00	2,37,197.40	2,64,159.04
3	**Net Normative loan – Opening**		1,70,809.77	1,48,727.21	1,26,763.56	1,54,396.42	1,29,618.21
4	Add: Increase due to addition during the year / period		1,496.74	1,719.12	52,906.21	2,643.55	2,974.58
5	Deletion during the year		47.39	17.01	67.07	657.31	1,509.63
6	Deletion during the year (70% of de-cap)		33.18	11.91	46.95	460.12	1,056.74
7	Less: Decrease due to de-capitalisation during the year / period*		18.58	7.47	30.50	309.88	781.53
8	Less: Decrease due to reversal during the year / period						
9	Add: Increase due to discharges during the year / period						
10	Less: Repayment of Loan		23,564.71	23,678.33	25,256.89	27,271.52	27,773.39
11	**Net Normative loan - Closing**		1,48,727.21	1,26,763.56	1,54,396.42	1,29,618.21	1,04,544.19
12	**Average Normative loan**		1,59,768.49	1,37,745.38	1,40,579.99	1,42,007.32	1,17,081.20
13	Weighted average rate of interest		8.32%	8.05%	7.72%	8.12%	8.93%
14	**Interest on Loan**		**13292.43**	**11086.83**	**10855.94**	**11535.36**	**10450.13**

* *Mimnimum of 70% of Decap for the year and actual repayment allowed so far on such decap.*

(Petitioner)

PART 1
FORM- O

Calculation of Interest on Working Capital

Name of the Company :	**Maithon Power Limited**
Name of the Power Station :	**1050 Maithon Project**

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8
1	Cost of Coal/Lignite	21,274.70	28,393.18	26,540.08	24,922.74	27,205.37	27,540.63
2	Cost of Main Secondary Fuel Oil	307.60	308.81	297.58	244.32	299.91	427.02
3	Fuel Cost						
4	Liquid Fuel Stock						
5	O & M Expenses	1,865.89	2163.33	2256.15	2366.17	2459.31	2559.11
6	Maintenance Spares	4,478.13	5192.00	5414.77	5678.80	5902.34	6141.87
7	Receivables	38,211.29	38336.28	36601.15	35601.39	38721.85	39424.77
8	Total Working Capital	66137.61	74393.61	71109.73	68813.42	74588.78	76093.40
9	Rate of Interest	13.50	12.05	11.25	10.50	10.50	12.00
10	**Interest on Working Capital**	**8928.58**	**8964.43**	**7999.84**	**7225.41**	**7831.82**	**9131.21**

Petitioner

MAITHON POWER LIMITED

PART 1
FORM- S

Liability Flow Statement

Name of the Petitioner - **Maithon Power Limited**
Name of the Generating Station - **1050 Maithon Project**

Rs lakh

	Asset / Work	Liability as on 31.03.2019	Liability as on 31.03.2020	Liability as on 31.03.2021	Liability as on 31.03.2022	Liability as on 31.03.2023	Liability as on 31.03.2024
A	**Undischarged Liabilities relating to Capitalised Assets Within Original Scope**						
1	Cost of Land and site	-	-	-	-	-	-
2	Right of Use land		-	-	1.18	-	4,648.45
3	General Civil works-Boundary wall	-	20.42	-	-	-	-
4	Railway package with IDC	-	-	-	1,680.24	1,122.59	1,115.18
5	Lab instruments	-	-	-	0.13	-	8.09
6	Refurbishment of Economiser Coil	-	-	-	-	-	-
7	Spare GT	-	-	-	-	-	-
8	MAX DCS Version up-gradation(Xp) Unit 2	-	-	-	-	-	(3.96)
9	Replacement of Battery	-	-	-	61.18	-	33.59
10	Upgradation of CHP Main PLC	-	-	-	67.02	-	-
11	UP-gradation of DMP PLC & Raw water PLC Upgradation	-	-	-	-	-	-
12	Augmentation of Ash Handling Plant	-	10.53	18.17	13.76	59.23	6.38
13	RCC Structure	-	-	-	-	-	-
14	Infrastructure – Admin	-	6.61	5.54	2.64	-	2.56
15	Infrastructure – IT	-	-	-	-	-	-
16	Ash pond area dust suppression system	-	-	3.80	3.78	-	-
17	SWAS Silica Analyzer Upgradation	-	-	-	-	-	-
18	Unified PI System	-	-	-	-	-	-
19	Upgradation of AHP PLC	-	-	-	-	-	-
20	Upgradation of Fire PLC	-	-	-	-	-	0.77
21	Replacement of Air Conditioners	-	-	-	-	-	-
22	Water Supply Township	-	-	-	-	-	6.09
23	Track Hopper End Wall	-	-	-	-	-	-
24	Water Meter Installation	-	-	-	-	-	-
25	Track Hopper Ventilation System	-	-	-	-	-	18.97
26	Yard Sprinkling System	-	-	-	-	-	-
27	Ceramic Lining of Coal Mill	-	-	-	-	-	60.75
28	Reheater upgradation		-	-	1.84	140.91	174.39
29	ESP Internals		-	-	28.86	0.29	65.19



PART 1
FORM- S

Liability Flow Statement

Name of the Petitioner - **Maithon Power Limited**
Name of the Generating Station - **1050 Maithon Project**

Rs lakh

	Asset / Work	Liability as on 31.03.2019	Liability as on 31.03.2020	Liability as on 31.03.2021	Liability as on 31.03.2022	Liability as on 31.03.2023	Liability as on 31.03.2024
30	ESP Wear Resist Pipes		-	-	-	-	0.01
31	Fabric Expansion Bellows		-	-	-	-	-
32	Fire Hydrant System	-	-	-	-	-	67.65
33	LVS for DCS		-	-	-	-	9.30
34	Network Equipment	-	-	-	-	-	-
35	Main Turbine & TDBFP TSS	-	-	-	-	2.48	67.95
36	DG Set	-	-	-	-	-	-
37	Fire Tender	-	-	-	-	-	63.09
	Total of undischarged liabilities capitalised Assets (A)	-	37.57	27.51	1,860.63	1,325.50	6,344.44
	Liability Discharge for Assets within Original Scope(Yearwise)		-	**10.05**	-	**535.13**	-
B	**Undischarged Liabilities relating to Capitalised Assets Beyond Original Scope**						
1	Boundary Wall under pass	-	-	-	-	-	-
2	Road along boundary wall	-	2.49	-	-	6.44	13.73
3	Implementation of AGC	-	-	4.23	-	-	26.79
4	Coal Pit Run-off Mechanized Drainage systems	-	-	-	-	-	-
5	Mini-fire tender	-	-	-	-	24.95	-
6	Safety (Platform in coal Mill Area)	-	-	2.86	19.71	-	-
7	Economizer platform	-	-	95.13	71.91	23.45	23.13
8	Soak Pit	-	-	-	-	-	-
9	Interconnection of Chutes from BCN 4A/B-	-	-	-	-	-	-
10	Ash Wharf	-	-	-	-	7.20	85.31
11	HVWS System	-	-	-	-	-	7.98
12	Structural Strengthening of BTG, crusher house and CHP	-	-	-	-	-	105.94
13	Field Hostel	-	-	-	-	-	-
14	Fire door for MCC Room	-	-	-	-	-	5.76
15	SCADA Upgradation	-	-	-	-	-	-
16	Store Renovation	-	36.50	6.53	-	1.17	-
17	Ash Weigh Bridge	-	-	-	-	-	-
18	Solar Panel	-	-	-	-	-	-
19	Upgradation of protection system	-	-	-	-	-	-
20	Testing Instrument	-	-	-	-	-	-
21	Augmentation of Fire detection System	-	-	-	8.47	-	-
22	E-security system	-	20.71	2.12	41.56	7.57	11.61
	Total of undischarged liabilities capitalised Assets (B)	-	59.69	110.86	141.65	70.78	280.25

PART 1
FORM- S

Liability Flow Statement

Name of the Petitioner - **Maithon Power Limited**
Name of the Generating Station - **1050 Maithon Project**

Rs lakh

	Asset / Work	Liability as on 31.03.2019	Liability as on 31.03.2020	Liability as on 31.03.2021	Liability as on 31.03.2022	Liability as on 31.03.2023	Liability as on 31.03.2024
	Total Undischarged Liabilities for Capitalised Assets (A+B)		97.26	138.37	2,002.28	1,396.28	6,624.68
	Liability Discharge for Assets Beyond Original Scope(Yearwise)		-	-	-	**70.87**	-

(Petitioner)

MAITHON POWER LIMITED

Computation of Normative IDC (In Rs. Lakh) for Capital Expenditure Schemes Excluding Railways

Details as per Auditor Certificates

Opening Capex (CWIP) as on 01.04.2019 1975.98

Opening UDL as on 01.04.2019 285.99

	FY 20				FY 21				FY 22				FY 23				FY 24			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Closing UDL towards Capex (CWIP)	134.91	59.04	25.08	310.30	67.04	98.85	80.29	21.29	127.58	108.57	347.55	98.62	113.66	54.42	484.21	37.23	729.93	223.29	602.72	207.65
Closing Capex (CWIP)	2299.56	1151.58	1267.76	1218.88	1053.43	643.63	1901.33	306.34	266.34	245.59	796.44	205.98	251.52	438.32	1113.53	43.54	871.32	1076.65	1758.35	703.92

Other CAPEX Schemes (Figures in Rs. Lakh)																				
	FY20				FY21				FY22				FY23				FY24			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Opening Cash Capex	1,689.99	2,164.65	1,092.53	1,242.68	908.58	986.39	544.78	1,821.03	285.05	138.76	137.01	448.89	107.37	137.86	383.90	629.32	6.31	141.39	853.36	1,155.64
Opening Capex	1,975.98	2,299.56	1,151.58	1,267.76	1,218.88	1,053.43	643.63	1,901.33	306.34	266.34	245.59	796.44	205.98	251.52	438.32	1,113.53	43.54	871.32	1,076.65	1,758.35
Closing Capex	2299.56	1151.58	1267.76	1218.88	1053.43	643.63	1901.33	306.34	266.34	245.59	796.44	205.98	251.52	438.32	1113.53	43.54	871.32	1076.65	1758.35	703.92
Less Closing UDL	134.91	59.04	25.08	310.30	67.04	98.85	80.29	21.29	127.58	108.57	347.55	98.62	113.66	54.42	484.21	37.23	729.93	223.29	602.72	207.65
Closing Cash Capex	2,164.65	1,092.53	1,242.68	908.58	986.39	544.78	1,821.03	285.05	138.76	137.01	448.89	107.37	137.86	383.90	629.32	6.31	141.39	853.36	1,155.64	496.27
Average Cash Capex	1,927.32	1,628.59	1,167.61	1,075.63	947.48	765.59	1,182.91	1,053.04	211.91	137.89	292.95	278.13	122.61	260.88	506.61	317.81	73.85	497.37	1,004.50	825.95
Debt (70%)	1,349.12	1,140.02	817.32	752.94	663.24	535.91	828.03	737.13	148.34	96.52	205.07	194.69	85.83	182.62	354.63	222.47	51.69	348.16	703.15	578.17
Wt Avg Rate of Int	8.32%	8.32%	8.32%	8.32%	8.05%	8.05%	8.05%	8.05%	7.72%	7.72%	7.72%	7.72%	8.12%	8.12%	8.12%	8.12%	8.93%	8.93%	8.93%	8.93%
Normative IDC (in lakhs)	**28.06**	**23.71**	**17.00**	**15.66**	**13.35**	**10.78**	**16.66**	**14.83**	**2.86**	**1.86**	**3.96**	**3.76**	**1.74**	**3.71**	**7.20**	**4.52**	**1.15**	**7.77**	**15.69**	**12.90**
				84.43				**55.62**				**12.44**				**16.2**				**37.51**
																				206.20



Computation of Railway IDC
Capitalization proposed in FY22 (Figures in Rs. Lakh)

	FY09		FY10				FY11				FY12				FY13			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Opening Cash Capex	-	1,070.00	4,070.00	4,355.35	4,315.76	4,406.33	4,584.48	4,619.75	8,326.38	9,698.81	10,116.51	12,458.19	12,909.05	13,237.37	12,914.75	13,500.02	13,856.86	13,872.68
Opening Capex	-	-	1,817.44	3,130.43	3,606.40	3,733.22	4,065.22	4,100.10	4,678.63	4,747.97	5,518.11	7,194.38	7,307.08	7,727.58	8,662.64	9,018.32	9,015.23	9,238.04
Addition	-	1,817.44	1,312.99	475.97	126.82	332.00	34.88	578.52	69.34	770.15	1,676.26	112.70	420.50	935.06	355.68	-3.09	222.81	0.18
Less LC Costs																		
Less Capitalisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Closing Capex	-	1,817.44	3,130.43	3,606.40	3,733.22	4,065.22	4,100.10	4,678.63	4,747.97	5,518.11	7,194.38	7,307.08	7,727.58	8,662.64	9,018.32	9,015.23	9,238.04	9,238.22
Add Closing Advance	1,070.00	4,070.00	1,224.92	709.36	698.89	671.84	671.84	4,150.44	5,009.64	4,881.76	5,735.09	5,735.09	5,665.96	5,056.94	5,004.03	5,004.03	4,970.97	4,970.97
Less Closing Undischarged Liability	-	1,817.44	-	-	25.78	152.58	152.19	502.69	58.79	283.37	471.28	133.12	156.17	804.84	522.33	162.40	336.33	175.62
Closing Cash Capex	1,070.00	4,070.00	4,355.35	4,315.76	4,406.33	4,584.48	4,619.75	8,326.38	9,698.81	10,116.51	12,458.19	12,909.05	13,237.37	12,914.75	13,500.02	13,856.86	13,872.68	14,033.57
Average Cash Capex	535.00	2,570.00	4,212.68	4,335.56	4,361.05	4,495.41	4,602.12	6,473.07	9,012.59	9,907.66	11,287.35	12,683.62	13,073.21	13,076.06	13,207.39	13,678.44	13,864.77	13,953.13
Debt (70%)	374.50	1,799.00	2,948.87	3,034.89	3,052.73	3,146.78	3,221.48	4,531.15	6,308.82	6,935.36	7,901.15	8,878.53	9,151.25	9,153.24	9,245.17	9,574.91	9,705.34	9,767.19
Wt Avg Rate of Int	11.25%	11.25%	11.25%	11.25%	11.25%	11.09%	10.75%	10.75%	10.75%	11.15%	12.00%	12.00%	12.00%	12.56%	13.75%	13.75%	13.75%	13.65%
IDC	**10.53**	**50.60**	**82.94**	**85.36**	**85.86**	**87.24**	**86.58**	**121.77**	**169.55**	**193.37**	**237.03**	**266.36**	**274.54**	**287.36**	**317.80**	**329.14**	**333.62**	**333.39**
Yearwise hardcost Capitalizated in Books (excluding IDC)																		
Year wise IDC Capitalised in Books of Accounts																		

	FY14				FY15				FY16				FY17				FY18			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Opening Cash Capex	14,033.57	13,960.91	13,390.28	13,968.24	13,314.80	14,601.79	15,675.56	15,858.83	16,468.25	17,432.31	17,780.06	17,785.39	18,043.30	18,355.90	18,554.60	18,858.80	18,880.61	20,272.78	20,503.04	21,426.09
Opening Capex	9,238.22	9,255.07	9,748.76	10,372.86	10,776.62	11,648.93	13,253.92	13,627.45	14,120.58	14,857.05	15,502.80	15,727.49	15,979.98	16,154.84	16,405.50	16,655.41	17,262.48	18,359.68	18,988.54	20,410.09
Addition	16.85	493.68	624.10	403.76	872.32	1,604.99	373.52	493.13	736.47	645.76	224.69	252.48	174.87	250.66	249.91	607.07	1,097.21	628.85	1,468.01	995.83
Less LC Costs																			46.47	194.09
Less Capitalisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Closing Capex	9,255.07	9,748.76	10,372.86	10,776.62	11,648.93	13,253.92	13,627.45	14,120.58	14,857.05	15,502.80	15,727.49	15,979.98	16,154.84	16,405.50	16,655.41	17,262.48	18,359.68	18,988.54	20,410.09	21,211.83
Add Closing Advance	4,970.97	4,540.22	3,947.37	3,617.57	3,517.17	3,258.98	3,210.16	3,129.02	3,120.31	2,991.46	2,925.39	2,906.65	2,897.31	2,865.99	2,895.13	2,780.44	2,733.36	2,732.00	2,677.75	2,677.75
Less Closing Undischarged Liability	265.14	898.70	351.99	1,079.38	564.32	837.34	978.78	781.34	545.04	714.20	867.50	843.33	696.26	716.89	691.74	1,162.31	820.26	1,217.50	1,661.74	2,294.03
Closing Cash Capex	13,960.91	13,390.28	13,968.24	13,314.80	14,601.79	15,675.56	15,858.83	16,468.25	17,432.31	17,780.06	17,785.39	18,043.30	18,355.90	18,554.60	18,858.80	18,880.61	20,272.78	20,503.04	21,426.09	21,595.54
Average Cash Capex	13,997.24	13,675.59	13,679.26	13,641.52	13,958.29	15,138.68	15,767.20	16,163.54	16,950.28	17,606.19	17,782.73	17,914.34	18,199.60	18,455.25	18,706.70	18,869.71	19,576.70	20,387.91	20,964.57	21,510.82
Debt (70%)	9,798.07	9,572.91	9,575.48	9,549.07	9,770.81	10,597.07	11,037.04	11,314.48	11,865.20	12,324.33	12,447.91	12,540.04	12,739.72	12,918.68	13,094.69	13,208.79	13,703.69	14,271.54	14,675.20	15,057.57
Wt Avg Rate of Int	13.45%	13.45%	13.45%	13.22%	10.96%	10.96%	10.96%	10.96%	10.46%	10.46%	10.46%	10.46%	9.92%	9.92%	9.92%	9.92%	8.99%	8.99%	8.99%	8.99%
IDC	**329.46**	**321.89**	**321.98**	**315.70**	**267.79**	**290.44**	**302.50**	**310.10**	**310.31**	**322.31**	**325.55**	**327.95**	**316.00**	**320.44**	**324.81**	**327.64**	**308.00**	**320.77**	**329.84**	**338.43**
				4,642				**5,813**												
Yearwise hardcost Capitalizated in Books (excluding IDC)												**2,412.62**								
Year wise IDC Capitalised in Books of Accounts												**448.94**								
												2,861.55								

	FY19				FY20				FY21				FY22			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Opening Cash Capex	21,595.54	20,010.11	19,506.69	20,121.35	31,098.86	32,334.10	34,957.31	39,078.97	42,651.79	45,570.11	46,592.89	48,228.64	49,667.91	52,007.18	53,406.81	53,428.75
Opening Capex	21,211.83	22,754.46	23,693.08	26,066.49	31,366.10	33,409.73	36,585.43	40,857.75	44,923.89	46,802.78	48,255.07	49,935.17	55,799.78	55,799.78	55,799.78	55,799.78
Addition	1,871.37	1,002.36	2,558.31	5,363.88	2,097.29	3,245.82	4,339.58	4,077.83	1,878.88	1,452.29	1,680.10	5,864.61	-	-	-	-
Less LC Costs	328.73	63.74	184.90	64.27	53.67	70.12	67.27	11.69				-				
Less Capitalisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Closing Capex	22,754.46	23,693.08	26,066.49	31,366.10	33,409.73	36,585.43	40,857.75	44,923.89	46,802.78	48,255.07	49,935.17	55,799.78	55,799.78	55,799.78	55,799.78	55,799.78
Add Closing Advance	2,777.75	2,777.75	2,877.75	1,863.87	1,859.27	1,660.81	1,302.71	1,003.22	895.43	796.70	661.43	435.00	333.94	206.57	-	-
Less Closing Undischarged Liability	5,522.10	6,964.14	8,822.89	2,131.12	2,934.90	3,288.93	3,081.49	3,275.32	2,128.10	2,458.88	2,367.96	6,566.87	4,126.54	2,599.54	2,371.03	1,680.24
Closing Cash Capex	20,010.11	19,506.69	20,121.35	31,098.86	32,334.10	34,957.31	39,078.97	42,651.79	45,570.11	46,592.89	48,228.64	49,667.91	52,007.18	53,406.81	53,428.75	54,119.54
Average Cash Capex	20,802.83	19,758.40	19,814.02	25,610.11	31,716.48	33,645.71	37,018.14	40,865.38	44,110.95	46,081.50	47,410.76	48,948.27	50,837.55	52,707.00	53,417.78	53,774.14
Debt (70%)	14,561.98	13,830.88	13,869.81	17,927.07	22,201.54	23,551.99	25,912.70	28,605.77	30,877.66	32,257.05	33,187.53	34,263.79	35,586.28	36,894.90	37,392.45	37,641.90
Wt Avg Rate of Int	8.79%	8.79%	8.79%	8.79%	8.32%	8.32%	8.32%	8.32%	8.05%	8.05%	8.05%	8.05%	7.72%	7.72%	7.72%	7.72%
IDC	**320.12**	**304.05**	**304.91**	**394.10**	**461.78**	**489.87**	**538.97**	**594.99**	**621.32**	**649.08**	**667.80**	**689.46**	**687.02**	**712.28**	**721.88**	**549.06**
				11,008				**2,086**				**2,627.65**				**2,670.24**
Yearwise hardcost Capitalizated in Books (excluding IDC)								**2524.68**	**326.86**			51,620.55				**56,884.71**
Year wise IDC Capitalised in Books of Accounts												8,935.76				**9,384.70**
															Interest cost in Capex as per certificate	**1,084.94**
															Net Hard Cost	**55,799.78**
															Total IDC	**18,391.61**
															IDC as per Books	**9,384.70**
															Normative IDC claimed	**9,006.91**



ANNEXURE P/3

TARIFF FILING FORMS (THERMAL)

FOR DETERMINATION OF TARIFF

FOR

Maithon Power Limited

(From 01.04.2024 to 31.03.2029)



Check list

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM- 1	Summary of Tariff	√
FORM -1 (I)	Statement showing claimed capital cost	√
FORM -1 (II)	Statement showing Return on Equity	√
FORM-2	Plant Characteristics	√
FORM-3	Normative parameters considered for tariff computations	√
FORM- 4	Details of Foreign loans	NA
FORM- 4A	Details of Foreign Equity	NA
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	NA
FORM- 6	Financial Package upto COD	NA
FORM- 7	Details of Project Specific Loans	NA
FORM- 8	Details of Allocation of corporate loans to various projects	NA
FORM-9	Statement of Additional Capitalisation after COD	√
FORM- 10	Financing of Additional Capitalisation	√
FORM- 11	Calculation of Depreciation on original project cost	NA
FORM- 12	Statement of Depreciation	√
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	NA
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	NA
FORM- 15	Details of Fuel for Computation of Energy Charges	√
FORM- 16	Details of Limestone for Computation of Energy Charge Rate	NA
FORM-17	Details of Capital Spares	√
FORM- 18	Non-Tariff Income	NA
FORM-19	Details of Water Charges	√
FORM-20	Details of Statutory Charges	NA



PART-I

List of Supporting Forms / documents for tariff filing for Thermal Stations

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM-A	Abstract of Capital Cost Estimates	**NA**
FORM-B	Break-up of Capital Cost for Coal/Lignite based projects	**NA**
FORM-C	Break-up of Capital Cost for Gas/Liquid fuel based Projects	**NA**
FORM-D	Break-up of Construction/Supply/Service packages	**NA**
FORM-E	Details of variables , parameters , optional package etc. for New Project	**NA**
FORM-F	Details of cost over run	**NA**
FORM-G	Details of time over run	**NA**
FORM –H	Statement of Additional Capitalisation during end of the useful life	**NA**
FORM –I	Details of Assets De-capitalised during the period	√
FORM –J	Reconciliation of Capitalisation claimed vis-à-vis books of accounts	**NA**
FORM –K	Statement showing details of items/assets/works claimed under Exclusions	**NA**
FORM-L	Statement of Capital cost	**NA**
FORM-M	Statement of Capital Woks in Progress	**NA**
FORM-N	Calculation of Interest on Normative Loan	√
FORM-O	Calculation of Interest on Working Capital	√
FORM-P	Incidental Expenditure up to SCOD and up to Actual COD	**NA**
FORM-Q	Expenditure under different packages up to SCOD and up to Actual COD	**NA**
FORM-R	Actual cash expenditure	**NA**
FORM-S	Statement of Liability flow	**NA**
FORM-T	Summary of issues involved in the petition	**NA**



Summary of Tariff **Form-1**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Place	Dhanbad

Sr No.	Particulars	Unit	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8	9
1	Summary of Tariff							
1.1	Depreciation	Rs. Lakh		16507.85	17189.94	17797.66	18873.71	20066.93
1.2	Interest on Loan	Rs. Lakh		8855.54	7916.25	6801.23	5899.73	4841.27
1.3	Return of Equity	Rs. Lakh		31993.97	32412.00	32731.28	33235.97	33712.01
1.4	Interest on Working Capital	Rs. Lakh		9218.15	9287.65	9395.49	9514.17	9601.97
1.5	O&M Expenses	Rs. Lakh		42445.27	42486.26	45181.79	46832.09	47368.09
1.6	Special Allowance (if applicable)	Rs. Lakh						
	Total	**Rs. Lakh**		**109020.79**	**109292.10**	**111907.45**	**114355.67**	**115590.26**
2	Primary Fuel							
2.1	Landed Fuel Cost (coal/gas/RLNG/liquid) as per FSA approved by the beneficiaries	Rs./Ton		NA				
	(%) of Fuel Quantity	(%)						
2.2	Landed Fuel Cost (coal from Integrated mine) as per FSA, if any, approved by benficiaries or as per allocation of coal quantity	Rs./Ton		NA				
	(%) of Fuel Quantity	(%)						
2.3	Landed Fuel Cost Imported Coal as per FSA approved by beneficiaries	Rs./Ton		NA				
	(%) of Fuel Quantity	(%)						
2.4	Landed Fuel Cost (coal/gas/RLNG/liquid) other than FSA	Rs./Ton		NA				
	(%) of Fuel Quantity	(%)						
2.5	Landed Fuel Cost Imported Coal other tha	Rs./Ton		NA				
	(%) of Fuel Quantity	(%)						
3	Secondary Fuel							
3.1	Secondary Fuel Cost	Rs./Unit		0.03	0.03	0.03	0.03	0.03
	Energy Charge Rate ex-bus (Paise/kWh)	Rs./Unit		2.847	2.847	2.847	2.847	2.847

Note:

1. Details of calculations, considering equity as per regulation to be furnished.

2A. If multi fuel is used simultaneously, give 2 in respect of every fuel individually

2B. The rate of energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/liquid fuel fired plants.

2C. The total energy charge shall be worked out based on ex-bus energy scheduled to be sent out.

2D. The Energy Charge rate for the month shall be based on fuel cost(s) and GCV(s) for the month as per Regulation 43.

2E. In case breakup is not available for 2.1 to 2.5, consolidated statement needs to be submitted.

MAITHON POWER LIMITED

Statement showing claimed capital cost **Form-I(I)**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Place	Dhanbad

Sr No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	565278.70	572619.86	581005.82	584627.02	602045.69
2	Add: Addition during the year / period	8658.28	10039.55	4763.61	19193.86	2825.00
3	Less: De-capitalisation during the year / period	1317.11	1653.59	1142.42	1775.18	305.41
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Add: Discharges during the year / period	0.00	0.00	0.00	0.00	0.00
6	**Closing Capital Cost**	**572619.86**	**581005.82**	**584627.02**	**602045.69**	**604565.29**
7	Average Capital Cost	568949.28	576812.84	582816.42	593336.35	603305.49

Statement showing claimed capital cost eligible for RoE at normal rate - (A)

Sr No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	560974.88	566463.78	572610.74	575368.33	579268.14
2	Add: Addition during the year / period	6806.02	7800.55	3900.00	5675.00	2350.00
3	Less: De-capitalisation during the year / period	1317.11	1653.59	1142.42	1775.18	305.41
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Closing Capital Cost	566463.78	572610.74	575368.33	579268.14	581312.74
6	Average Capital Cost	563719.33	569537.26	573989.53	577318.24	580290.44

Statement showing claimed capital cost eligible for RoE at one year MCLR + 350 bps subject to ceiling of 14.00% - (B)

Sr No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	4303.82	6156.08	8395.08	9258.69	22777.55
2	Add: Addition during the year / period	1852.26	2239.00	863.61	13518.86	475.00
3	Less: De-capitalisation during the year / period					
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Closing Capital Cost	6156.08	8395.08	9258.69	22777.55	23252.55
6	Average Capital Cost	5229.95	7275.58	8826.88	16018.12	23015.05



Statement showing Return on Equity **Form-I(IIA)**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Place	Dhanbad

Statement showing Return on Equity at Normal Rate

Sr No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
	Return on Equity					
1	Gross Opening Equity (Normal)					
2	Less: Adjustment in Opening Equity					
3	Adjustment during the year					
4	Net Opening Equity (Normal)	168292.46	169939.14	171783.22	172610.50	173780.44
5	Add: Increase in equity due to addition during the year / period	2041.81	2340.17	1170.00	1702.50	705.00
6	Less: Decrease due to Decapitalization during the year / period	395.13	496.08	342.72	532.55	91.62
7	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
9	Net Closing Equity (Normal)	169939.14	171783.22	172610.50	173780.44	174393.82
10	Average Equity (Normal)	169115.80	170861.18	172196.86	173195.47	174087.13
11	Rate of ROE	18.78%	18.78%	18.78%	18.78%	18.78%
12	Total RoE	31763.33	32091.15	32342.01	32529.57	32697.05



Statement showing Return on Equity linked to SBI MCLR **Form-I(IIB)**

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 MW Maithon Project**
Place	**Dhanbad**

Sr No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
	Return on Equity (beyond the original scope of work including additional capitalization due to Change in Law, ECS,Force Majeure)					
1	Gross Opening Equity (Normal)					
2	Less: Adjustment in Opening Equity					
3	Adjustment during the year					
4	Net Opening Equity (Normal)	1291.15	1846.82	2518.52	2777.61	6833.26
5	Add: Increase in equity due to addition during the year / period	555.68	671.70	259.08	4055.66	142.50
6	Less: Decrease due to Decapitalization during the year / period	0.00	0.00	0.00	0.00	0.00
7	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
8	Net Closing Equity (Normal)	1846.82	2518.52	2777.61	6833.26	6975.76
9	Average Equity (Normal)	1568.98	2182.67	2648.07	4805.44	6904.51
10	Rate of ROE (One year SBI MCLR + 350 bps subject to ceiling of 14.00%)	14.70%	14.70%	14.70%	14.70%	14.70%
11	Total RoE	230.64	320.85	389.27	706.40	1014.96



Plant Characteristics

FORM-2

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 Maithon Project**

Unit(s)/Block(s)/Parameters	**Unit 1**	**Unit 2**
Installed Capacity (MW)	**525**	**525**
Schedule COD as per Investment Approval	**6.8.2011**	**25.12.2011**
Actual COD /Date of Taken Over (as applicable)	**01.09.2011**	**24.07.2012**
Pit Head or Non Pit Head	**Non-pit Head**	**Non-pit Head**
Name of the Boiler Manufacture	**BHEL**	**BHEL**
Name of Turbine Generator Manufacture	**BHEL**	**BHEL**
Main Steams Pressure at Turbine inlet (kg/Cm^2) abs[1].	172	172
Main Steam Temperature at Turbine inlet (^oC) [1]	537	537
Reheat Steam Pressure at Turbine inlet ($kg/Cm^{2)}$ [1]	40.5	40.5
Reheat Steam Temperature at Turbine inlet (^oC) [1]	537	537
Main Steam flow at Turbine inlet under MCR condition (tons /hr)[2]	1571.017	1571.017
Main Steam flow at Turbine inlet under VWO condition (tons /hr)[2]	1651.66	1651.66
Unit Gross electrical output under MCR /Rated condition (MW)[2]	525.15	525.15
Unit Gross electrical output under VWO condition (MW)[2]	551.154	551.154
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh)3	1945	1945
Conditions on which design turbine cycle heat rate guaranteed		
% MCR	100%	100%
% Makeup Water Consumption	0	0
Design Capacity of Make up Water System	3	3
Design Capacity of Inlet Cooling System	61000	61000
Design Cooling Water Temperature (^0C)	33	33
Back Pressure	0.1047	0.1047
Steam flow at super heater outlet under BMCR condition (tons/hr)	1700	1700
Steam Pressure at super heater outlet under under BMCR condition (Kg/cm2)	178	178
Steam Temperature at super heater outlet under BMCR condition (0C)	540	540
Steam Temperature at Reheater outlet at BMCR condition (^0C)	540	540
Design / Guaranteed Boiler Efficiency (%)[4]	87.8	87.8
Design Fuel with and without Blending of domestic/imported coal	4671 kcal/kg	4671 kcal/kg



Plant Characteristics

FORM-2

Name of the Petitioner	**Maithon Power Limited**
Name of the Generating Station	**1050 Maithon Project**

Unit(s)/Block(s)/Parameters	**Unit 1**	**Unit 2**
Type of Cooling Tower	Induced Draught Type	Induced Draught Type
Type of cooling system[5]	Re-circulation type	Re-circulation type
Type of Boiler Feed Pump[6]	Two Turbine-driven BFP & One Motor-driven BFP	Two Turbine-driven BFP & One Motor-driven BFP
Fuel Details[7]		
-Primary Fuel	Coal	Coal
-Secondary Fuel	Light Diesel Oil & Heavy Furnace Oil	Light Diesel Oil & Heavy Furnace Oil
-Alternate Fuels		
Types of SOX control system		
Types of NOX control system		
Details of SPM control system		
Special Features/Site Specific Features[8]		
Special Technological Features[9]		
Environmental Regulation related features[10]		
Any other special features		

1. At Turbine MCR condition.
2: with 0% (Nil) make up and design Cooling water temperature
3: at TMCR output based on gross generation, 0% (Nil) makeup and design Cooling water temperature.
4: With Performance coal based on Higher Heating Value (HHV) of fuel and at BMCR) out put
5: Closed circuit cooling, once through cooling, sea cooling, natural draft cooling, induced draft cooling etc.
6: Motor driven, Steam turbine driven etc.
7: Coal or natural gas or Naptha or lignite etc.
8: Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake /makeup water systems etc. scrubbers etc. Specify all such features
9: Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc.
10: Environmental Regulation related features like FGD, ESP etc.,
Note 1: In case of deviation from specified conditions in Regulation, correction curve of manufacturer may also be submitted.
Note 2: Heat Balance Diagram has to be submitted along with above information in case of new stations.
Note 3: The Terms – MCR, BMCR, HHV, Performance coal, are as defined in CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations – 2010 notified by the Central Electricity Authority
Note 4: The copy of Certificate shall be submitted in terms of Regulation 4 as per Appendix-VI

Petitioner

MAITHON POWER LIMITED

Normative Parameters considered for Tariff Computations

Form-3

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Place	Dhanbad

Particulars	Unit	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8
Base Rate of Return on Equity	%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Base Rate of Return on Equity on Add. Capitalization	%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Effective Tax Rate 4	%	17.47%	17.47%	17.47%	17.47%	17.47%	17.47%
Target Availability (NAPAF)	%	85%	85%	85%	85%	85%	85%
Peak Hours	%	0%	0%	0%	0%	0%	0%
Off-Peak Hours	%	85%	85%	85%	85%	85%	85%
ß- Average Monthly Frequency Response Performance5	0-1						
Auxiliary Energy Consumption	%	6.25%	5.75%	5.75%	5.75%	5.75%	5.75%
Gross Station Heat Rate*	kCal/kWh	2375.00	2363.40	2363.40	2363.40	2363.40	2363.40
Specific Fuel Oil Consumption	ml/kWh	0.5	0.5	0.5	0.5	0.5	0.5
Cost of Coal/Lignite for WC1	Months	50	50	50	50	50	50
Cost of Main Secondary Fuel Oil for WC1	Months	2	2	2	2	2	2
Fuel Cost for WC2	Months		NA	NA	NA	NA	NA
Liquid Fuel Stock for WC2	Months		NA	NA	NA	NA	NA
O&M Expenses	Rs. lakh/MW	25.84	27.17	28.6	30.1	31.68	33.34
Maintenance Spares for WC	% of O&M	20%	20%	20%	20%	20%	20%
Receivables for WC	Months		45	45	45	45	45
Storage capacity of Primary fuel	MT		2	2	2	2	2
SBI 1 Year MCLR plus 325 basis point3	%		11.90%	11.90%	11.90%	11.90%	11.90%
Blending ratio of domestic coal/imported coal							
Norms for consumption of reagent							
Specific Limestone consumption for Wet Limestone FGD							
Specific Limestone consumption for Lime Spray Dryer or Semi-dry FGD							
Specific consumption of sodium bicarbonate							
Specific Limestone consumption for CFBC based generating station							
Specific urea consumption of the SNCR							
Specific ammonia consumption of the SCR							
Transitand Handling Losses of coal or lignite, as applicable							

*

Note: 1). For Coal based/lignite based generating stations

2). For Gas Turbine/Combined Cycle generating stations duly taking into account the mode of operation on gas fuel and liquid fuel.

3). Mention relevant date

4). Effective tax rate is to be computed in accordance with Regulation 31 i.e. actual tax (or advance tax)/gross income, where gross income refers the profit before tax.

5). To be submitted at the time of truing up based on RPC certification.

* Gross Heat Rate has been claimed considering boiler efficiency of 86% instead of design boiler efficiency for reasons as stated in Petition



Part-I
FORM-3A
ADDITIONAL FORM

Calculation of O&M Expenses

Name of the Company :	**Maithon Power Limited**
Name of the Power Station :	**1050 MW Maithon Project**

Amount in Rs. Lakhs

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	7	8
1	**O&M expenses under Reg.36(1) (₹ Lakhs/ MW)**	27.17	28.60	30.10	31.68	33.34
1a	Normative	28528.50	30030.00	31605.00	33264.00	35007.00
2	**O&M expenses under Reg.36(6)**					
2a	Water Charges	3339.22	3673.15	4040.46	4456.68	4888.96
2b	Security expenses	1138.15	1245.99	1364.04	1493.28	1634.77
2c	Capital Spares**	3565.46	1282.5	1917.67	1039.5	360
3	O&M expenses-Ash Disposal Expenses	5873.93	6254.62	6254.62	6578.62	5477.36
	Total O&M Expenses	**42445.27**	**42486.26**	**45181.79**	**46832.09**	**47368.09**

** Claimed at 90% of the actual value as per approach adopted by CERC in 2019-24 Period

Petitioner

MAITHON POWER LIMITED

Details of Foreign Loans **Form-4**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Exchange Rate at COD or 31.03.2024, whichever is l	
Exchange Rate as on 31.3.2024	

S. No.	Fianncial Year (Starting from COD)	Year 1				Year 2				Year 3			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)
	Currency1												
A.1	Atthe date of Drawl or atthe beginning to the year of the period2												
2	Scheduled repayment date of principal												
3	Scheduled payment date of interest												
4	At the end of Financial year												
B	In case of Hedging3												
1	At the date of hedging												
2	Period of hedging												
3	Cost of hedging												
	Currency21												
A.1	At the date of Drawl2												
2	Scheduled repayment date of principal												
3	Scheduled payment date of interest												
4	At the end of Financial year												
B	In case of Hedging3												
1	At the date of hedging												

---- Not Applicable ----

MAITHON POWER LIMITED

Details of Foreign Loans **Form-4**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Exchange Rate at COD or 31.03.2024, whichever is l	
Exchange Rate as on 31.3.2024	

S. No.	Fianncial Year (Starting from COD)	Year 1				Year 2				Year 3			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)
	Currency1												
2	Period of hedging												
3	Cost of hedging												
	Currency31& so on												
A.1	At the date of Drawl2												
2	Scheduled repayment date of principal												
3	Scheduled payment date of interest												
4	At the end of Financial year												
B	In case of Hedging3												
1	At the date of hedging												
2	Period of hedging												
3	Cost of hedging												

1. Name of the currency to be mentioned e.g. US$, DM, etc.
2. In case of more than one drawl during the year, Exchange rate at the date of each drawl to be given.
3. Furnish details of hedging, in case of more than one hedging during the year or part hedging, details of each hedging are to be given

4. Tax (such as withholding tax) details as applicable including change in rates, date from which change effective etc. must be clearly indicated.

MAITHON POWER LIMITED

Details of Foreign Equity

Form-4A

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Exchange Rate at COD or 31.03.2024, whichever is later	
Exchange Rate as on 31.3.2024	

S. No.	Fianncial Year (Starting from COD)	Year 1				Year 2				Year 3			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)
	Currency 1												
A.1	At the date of infusion												
2													
3													
	Currency 2												
A.1	At the date of infusion												
2													
3													
	Currency 3												
A.1	At the date of infusion												
2													
3													

---- Not Applicable ----

1. Name of the currency to be mentioned e.g. US$, DM, etc.
2. In case of equity infusion more than once during the year, Exchange rate at the date of each infusion to be given.

MAITHON POWER LIMITED

Financial Package up to COD **Form-6**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
Project Cost as on COD	
Date of Commercial Operation of the Station	

	Financial Package As Approved		**Financial Package As Approved**		**Financial Package As Approved**	
	Currency and Amount		**Currency and Amount**		**Currency and Amount**	
1	**2**	**3**	**4**	**5**	**6**	**7**
Loan-I	NOT APPLICABLE					
Loan-II						
Loan-III						
and so on						
Equity-						
Foreign						
Domestic						
Total Equity						
Debt : Equity Ratio						

Note:

1. Illustration: Say Rs. 80 Cr. + US$ 200 m or Rs. 1680 Cr. including US$ 200 m at an exchange rate of US$=Rs 80
2. Provide details on commercial operation as on COD of each Unit
3. For example: US $ 200m, etc.



Details of Project Specific loans

Form-7

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

Particulars	Package1	Package2	Package3	Package4	Package5	Package6
1	2	3	4	5	6	7
Source of Loan	NOT APPLICABLE					
Currency						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03.2024/COD						
Interest Type						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest						
Margin, if Floating Interest						
Are there any Caps/Floor						
If above is yes, specify caps/floor						
Moratorium Period						
Moratorium effective from						
Repayment Period						
Repayment effective from						
Repayment Frequency						
Repayment Instalment						
Base Exchange Rate						
Are foreign currency loan hedged?						
If above is yes, specify details						

Note:

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.
2. Currency refers to currency of loan such as US$, DM, Yen, Indian Rupee etc.
3. Details are to be submitted as on 31.03.2024 for existing assets and as on COD for the remaining assets.
4. Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.
5. If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.
6. Interest type means whether the interest is fixed or floating.
7. Base rate means the base as PLR, MCLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.
8. Margin means the points over and above the floating rate.
9. At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.
10. Moratorium period refers to the period during which loan servicing liability is not required.
11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.
12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.
13. Where there is more than one drawl/repayment for a loan, the date & amount of each drawl/repayment may also be given separately
14. If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.
15. In case of Foreign loan, date of each drawl& repayment along with exchange rate at that date may be given.
16. Base exchange rate means the exchange rate prevailing as on 31.03.2024 or COD, whichever is later
17. In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.
18. In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.
19. At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately
20. At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing, etc.

MAITHON POWER LIMITED

Details of Allocation of corporate loans to various projects

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

Particulars	Package1	Package2	Package3	Pack
1	2	3	4	5
Source of Loan				
Currency				
Amount of Loan sanctioned				
Amount of Gross Loan drawn upto 31.03.2024/COD				
Interest Type				
Fixed Interest Rate, if applicable				
Base Rate, if Floating Interest				
Margin, if Floating Interest				
Are there any Caps/Floor				
If above is yes, specify caps/floor				
Moratorium Period				
Moratorium effective from				
Repayment Period				
Repayment effective from				
Repayment Frequency				
Repayment Instalment				
Base Exchange Rate				
Are foreign currency loan hedged?				
If above is yes, specify details				
Name of the Projects				
Project 1				
Project 2				
Project 3				

---- Not Applicable ----

Note:

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

2. Currency refers to currency of loan such as US$, DM, Yen, Indian Rupee etc.

3. Details are to be submitted as on 31.03.2024 for existing assets and as on COD for the remaining assets.

4. Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

5. If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.

6. Interest type means whether the interest is fixed or floating.

7. Base rate means the base as PLR, MCLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

8. Margin means the points over and above the floating rate.

9. At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

10. Moratorium period refers to the period during which loan servicing liability is not required.

11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half-yearly, annual, etc.

13. Where there is more than one drawl/repayment for a loan, the date & amount of each drawl/repayment may also be given separately

14. If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.

15. In case of Foreign loan, date of each drawl & repayment along with exchange rate at that date may be given.

16. Base Exchange Rate means the exchange rate prevailing as on 31.03.2024 or COD, whichever is later.

17. In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.

18. In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

19. At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately

20. At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

MAITHON POWER LIMITED

Add cap under Original Scope of work

FORM-9

Sr. No.	Name of the Scheme	2024-25	2025-26	2026-27	2027-28	2028-29	Total (in Rs. Lakhs)	Regulations	To be claimed as Capital Spares/Addcap
1	Centrifugal compressor and motor for BTG				1000.00		1000.00	25(2)(c)	Addcap
2	Centrifugal Compressors for Ash Plant		1454.00	500.00	1000.00		2954.00	25(2)(c)	Addcap
3	ID fan motor with VFD replacement	1200.00	1251.55				2451.55	25(2)(c)	Addcap
4	Laboratory Instruments (Chemical Laboratory)	50.00	50.00	65.00			165.00	25(2)(a) & 25(2)(c)	Addcap
5	Laboratory Instruments (C & I Laboratory)			50.00			50.00	25(2)(a) & 25(2)(c)	
6	Infrastructure - Admin	50.00	50.00	50.00	50.00	50.00	250.00	25(2)(a) with 102	Addcap
7	AVR Retrofitting for Unit - 1 &2			250.00	250.00		500.00	25(2)(b)	Addcap
8	Conveyor Belt	300.00	200.00	250.00	350.00		1100.00	25(2)(a) read with 25(2)(c)	Addcap
9	Service Water Pipeline Revamping Work	75.00					75.00	25(2)(a) read with 25(1)(b)	Addcap
10	Retrofitting of Boiler Elevators				100.00	100.00	200.00	25(2)(a)	Addcap
11	Station Battery Banks	500.00					500.00	25(2)(a)	Addcap
12	Upgradation of Mill & Compressor HT Breakers of the main plant	60.00	60.00	60.00			180.00	25(2)(a) read with 25(2)(d)	Addcap
13	Upgradation of AHP & CHP HT & LT Breakers	125.00	125.00	125.00	125.00	50.00	550.00	25(2)(a) read with 25(2)(d)	Addcap
14	Testing Equipment for Electrical Equipment	25.00	25.00	25.00			75.00	25(2)(a) read with 25(2)(c)	Addcap
15	Fire Hydrant System	157.37	150.00	150.00	150.00		607.37	25(1)(b) and 26(1)(d)	Addcap
16	Replacement of Fire Extinguisher	25.00					25.00	25(1)(b) and 25(2)(a)	Addcap
17	Reheater Upgradation	500.00	500.00	500.00	500.00	500.00	2500.00	25(2)(a) and 25(2)(b)	Addcap
18	Infrastructure - IT	95.57	50.00	50.00	50.00	50.00	295.57	25(2)(a) and 25(2)(b)	Addcap
19	Upgradation of IT network Switches	460.00					460.00	25(2)(c) and 25(2)(b)	Addcap
20	Installation of Security Operation Center (SOC) for all PLC		200.00	200.00			400.00	25(2)(b)	Addcap
21	Upgradation of Max DNA DCS Hardware System				1000.00	1000.00	2000.00	25(2)(a) read with 25(2)(c)	Addcap
22	Upgradation of Real Time Vibration Analysis System		250.00	250.00			500.00	25(2)(a) read with 25(2)(c) or	Addcap
23	Upgradation of MRS and ZLD PLC		75.00	75.00			150.00	25(2)(a) and 25(2)(c)	Addcap
24	Replacement of H2 plant electrolysis module	300.00	300.00				600.00	25(2)(a)	Addcap
25	Ceramic Lining of Coal Mill	180.04					180.04	25(2)(a) and 25(2)(b)	Addcap
26	Upgradation of Main Turbine and TDBFP Electro-hydraulic governing system components		200.00	200.00			400.00	25(2)(a) and 25(2)(c)	Addcap
27	Replacement of Fire Tenders	109.40					109.40	25(1)(b) and 25(2)(a)	Addcap
28	Replacement of pneumatic actuator and control mechanism			200.00	200.00		400.00	25(2)(a) and 25(2)(c)	Addcap
29	Refurbishment of Economizer Coil	600.00	600.00	600.00	600.00	600.00	3000.00	25(2)(a) , 25(2)(b) and 26(1)(i)	Addcap
30	ESP Internals	393.64	510.00	300.00	300.00		1503.64	25(1)(b) and 25(2)(a)	Addcap
31	RAPH I/L and O/L dampers	200.00	250.00				450.00	25(2)(b) and 26(1)(i)	Addcap
32	Max DNA DCS Upgradation with Cyber Security SOC	1400.00	1400.00				2800.00	25(2)(a) and 25(2)(c)	Addcap
33	SCADA Upgradation		100.00				100.00	25(2)(b) and 25(2)(c)	Addcap
	Total	**6806.02**	**7800.55**	**3900.00**	**5675.00**	**2350.00**	**26531.57**		

Add cap beyond Original Scope of work

Add cap under Original Scope of work

FORM-9

Sr. No.	Name of the Scheme	2024-25	2025-26	2026-27	2027-28	2028-29	Total (in Rs. Lakhs)	Regulations	To be claimed as Capital Spares/Addcap
Sr. No.	Name of the Scheme	2024-25	2025-26	2026-27	2027-28	2028-29	Total (in Rs. Lakhs)	Regulations	To be claimed as Capital Spares/Addcap
1	Coal Pit Run-off Mechanized Drainage systems			388.61			388.61	26(1)(c)	Addcap
2	Construction of EMD Workshop	60.00	50.00				110.00	26(1)(b) and 26(1)(i)	Addcap
3	Stacker cum Reclaimer				9543.86		9543.86	26(1)(g) and 26(1)(i)	Addcap
4	Fire Sealing & Painting for Cables	25.00	25.00	25.00	25.00	25.00	125.00	26(1)(d)	Addcap
5	Procurement of Cup Lock Scaffolding	200.00	200.00	200.00	100.00		700.00	26(1)(d) and 26(1)(b)	Addcap
6	Zero Land Fill Waste Processing Unit		120.00				120.00	26(1)(b)	Addcap
7	Ash Silo Loading Arrangement for Railway Wagon				2500.00		2500.00	26(1)(e) and 26(1)(i)	Addcap
8	Extension of Store	95.00	85.00				180.00	26(1)(d) and 26(1)(b)	Addcap
9	Concertina Coil on Top of Boundary Wall		50.00	50.00	50.00	50.00	200.00	26(1)(d)	Addcap
10	Installation of CCTV	120.00	225.00	150.00			495.00	26(1)(d)	Addcap
11	Safety (Platform in coal mill area)	100.00	50.00	50.00			200.00	26(1)(d)	Addcap
12	Upgradation of HP Bypass System	650.00	650.00				1300.00	26(1)(i)	Addcap
13	Road Over Bridge				1300.00		1300.00	26(1)(b), 26(1) (d) and 26(1)(i)	Addcap
14	Unit wise segregation of PWS HT Board					400.00	400.00	26(1)(i)	Addcap
15	Reliability (Structural Strengthening - BTG, CHP)	480.86	200.00				680.86	26(1)(d)	Addcap
16	Ash wharf	121.40	584.00				705.40	26(1)(b), 26(1)(e) and 26(1)(i)	Addcap
	Total	**1852.26**	**2239.00**	**863.61**	**13518.86**	**475.00**	**18948.73**		
	A+B	**8658.28**	**10039.55**	**4763.61**	**19193.86**	**2825.00**	**45480.30**		

Capital Spares

Sr. No.	Name of the Scheme	2024-25	2025-26	2026-27	2027-28	2028-29	Total (in Rs. Lakhs)	Regulations	To be claimed as Capital Spares/Addcap
1	400 KV Switchyard	25.00	25.00	45.00	45.00		140.00		Capital Spares
2	Crusher Rotor Assembly		200.00			250.00	450.00		Capital Spares
3	Procurement of Condensate Extraction Pump Rotor Assembly			125.74			125.74		Capital Spares
4	Procurement of Standby CW Pump and Motor			400.00	800.00		1200.00		Capital Spares
5	FD Fan Rotor Assembly		300.00				300.00		Capital Spares
6	ID Fan Rotor Assembly			100.00			100.00		Capital Spares
7	Cooling Tower Internals	200.00	200.00				400.00		Capital Spares
8	IP Turbine Blades Replacement	900.00					900.00		Capital Spares
9	PA Fan Rotor Assembly			300.00			300.00		Capital Spares
10	Procurement of TDBFP Drive Turbine Rotor Assembly			400.00			400.00		Capital Spares
11	Boiler Circulating Water Pump Assembly	800.00					800.00		Capital Spares
12	Procurement of LT Breaker & Relays	100.00	100.00	60.00	60.00	0.00	320.00		Capital Spares
13	Turbine Bearing set procurement	261.01					261.01		Capital Spares
14	LTSH Coil Assembly	950.00	550.00	500.00			2000.00		Capital Spares
15	Procurement of Upgraded Coal burner Tip & Nozzle			200.00	100.00		300.00		Capital Spares
16	Procurement of Sky Climber components and spares				150.00	150.00	300.00		Capital Spares
17	ID Fan and VFD Transformer	50.00	50.00				100.00		Capital Spares
18	Replenishment of Capital Spares	675.61					675.61		
	Total	**3961.62**	**1425.00**	**2130.74**	**1155.00**	**400.00**	**9072.36**		

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29	Total

Add cap under Original Scope of work

FORM-9

Sr. No.	Name of the Scheme	2024-25	2025-26	2026-27	2027-28	2028-29	Total (in Rs. Lakhs)	Regulations	To be claimed as Capital Spares/Addcap
	Add cap under Original Scope of work	6806.02	7800.55	3900.00	5675.00	2350.00	**26531.57**		
	Add cap beyond Original Scope of work	1852.26	2239.00	863.61	13518.86	475.00	**18948.73**		
	Capital Spares	3961.62	1425.00	2130.74	1155.00	400.00	**9072.36**		
	Grand Total	**12619.90**	**11464.55**	**6894.35**	**20348.86**	**3225.00**	**54552.66**		

POWER LIMITED * MAITHON

Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2024-25

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
Additional Capital Expenditure under Normal ROE								
1	Centrifugal compressor and motor for BTG	0.00		0.00				
2	Centrifugal Compressors for Ash Plant	0.00		0.00				
3	ID fan motor with VFD replacement	1200.00		1200.00				
4	Laboratory Instruments (Chemical Laboratory)	50.00		50.00				
5	Laboratory Instruments (C & I Laboratory)	0.00		0.00				
6	Infrastructure - Admin	50.00		50.00				
7	AVR Retrofitting for Unit - 1 &2	0.00		0.00				
8	Conveyor Belt	300.00		300.00				
9	Service Water Pipeline Revamping Work	75.00		75.00				
10	Retrofitting of Boiler Elevators	0.00		0.00				
11	Station Battery Banks	500.00		500.00				
12	Upgradation of Mill & Compressor HT Breakers of the main plant	60.00		60.00				
13	Upgradation of AHP & CHP HT & LT Breakers	125.00		125.00				
14	Testing Equipment for Electrical Equipment	25.00		25.00				
15	Fire Hydrant System	157.37		157.37				
16	Replacement of Fire Extinguisher	25.00		25.00				



Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2024-25

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
17	Reheater Upgradation	500.00		500.00				
18	Infrastructure - IT	95.57		95.57				
19	Upgradation of IT network Switches	460.00		460.00				
20	Installation of Security Operation Center (SOC) for all PLC	0.00		0.00				
21	Upgradation of Max DNA DCS Hardware System	0.00		0.00				
22	Upgradation of Real Time Vibration Analysis System	0.00		0.00				
23	Upgradation of MRS and ZLD PLC	0.00		0.00				
24	Replacement of H2 plant electrolysis module	300.00		300.00				
25	Ceramic Lining of Coal Mill	180.04		180.04				
26	Upgradation of Main Turbine and TDBFP Electro-hydraulic governing system components	0.00		0.00				
27	Replacement of Fire Tenders	109.40		109.40				
28	Replacement of pneumatic actuator and control mechanism	0.00		0.00				
29	Refurbishment of Economizer Coil	600.00		600.00				
30	ESP Internals	393.64		393.64				
31	RAPH I/L and O/L dampers	200.00		200.00				
32	Max DNA DCS Upgradation with Cyber Security SOC	1400.00		1400.00				
33	SCADA Upgradation	0.00		0.00				

MAITHON POWER LIMITED

Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2024-25

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
	Total (A)	**6,806.02**	**-**	**6,806.02**				
Additional Capital Expenditure under WAROI								
1	Coal Pit Run-off Mechanized Drainage systems	0.00		0.00				
2	Construction of EMD Workshop	60.00		60.00				
3	Stacker cum Reclaimer	0.00		0.00				
4	Fire Sealing & Painting for Cables	25.00		25.00				
5	Procurement of Cup Lock Scaffolding	200.00		200.00				
6	Zero Land Fill Waste Processing Unit	0.00		0.00				
7	Ash Silo Loading Arrangement for Railway Wagon	0.00		0.00				
8	Extension of Store	95.00		95.00				
9	Concertina Coil on Top of Boundary Wall	0.00		0.00				
10	Installation of CCTV	120.00		120.00				
11	Safety (Platform in coal mill area)	100.00		100.00				
12	Upgradation of HP Bypass System	650.00		650.00				
13	Road Over Bridge	0.00		0.00				
14	Unitwise segregation of PWS HT Board	0.00		0.00				
15	Reliability (Structural Strengthening - BTG, CHP)	480.86		480.86				
16	Ash wharf	121.40		121.40				
	Total (B)	**1,852.26**	**-**	**1,852.26**				
	Total Add.Cap Claimed (A+B)	**8,658.28**		**8,658.28**				

1. In case the project has been completed and cost has already been admitted under any tariff notification(s) in the past, fill column 9 giving the cost as admitted for the purpose of tariff notification already issued by (Name of the authority) (Enclose copy of the Tariff Order).

2. The above information needs to be furnished separately for each year / period of tariff period 2024-29.

3. In case of de-capitalisation of assets separate details to be furnished at column 1, 2, 3 and 4. Further, the original book value and year of capitalisation of such asset to be furnished at column 8. Where de-caps are on estimated basis the same to be shown separately.

4. Where any asset is rendered unserviceable the same shall be treated as de-capitalised during that year and original value of such asset to be shown at col. 3. and impaired value if any, year of its capitalisation to be mentioned at column 8.

5. Justification against each asset of capitalization should be specific to regulations under which claim has been made and the necessity of capitalization of that particular asset.

MAITHON POWER LIMITED

Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2024-25

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9

6. The Petitioner to submit the list of individual items along with quantum and individual costs claimed as ACE.

Note:

1. Fill the form in chronological order year wise along with detailed justification clearly bringing out the necessity and the benefits accruing to the beneficiaries.

2. In case initial spares are purchased along with any equipment, then the cost of such spares should be indicated separately. e.g. Rotor - 50 Crs. Initial spares- 5 Crs



Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2025-26

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
Additional Capital Expenditure under Normal ROE								
1	Centrifugal compressor and motor for BTG	-		0.00				
2	Centrifugal Compressors for Ash Plant	1,454.00		1454.00				
3	ID fan motor with VFD replacement	1,251.55		1251.55				
4	Laboratory Instruments (Chemical Laboratory)	50.00		50.00				
5	Laboratory Instruments (C & I Laboratory)	-		0.00				
6	Infrastructure - Admin	50.00		50.00				
7	AVR Retrofitting for Unit - 1 &2	-		0.00				
8	Conveyor Belt	200.00		200.00				
9	Service Water Pipeline Revamping Work	-		0.00				
10	Retrofitting of Boiler Elevators	-		0.00				
11	Station Battery Banks	-		0.00				
12	Upgradation of Mill & Compressor HT Breakers of the main plant	60.00		60.00				
13	Upgradation of AHP & CHP HT & LT Breakers	125.00		125.00				
14	Testing Equipment for Electrical Equipment	25.00		25.00				
15	Fire Hydrant System	150.00		150.00				
16	Replacement of Fire Extinguisher	-		0.00				
17	Reheater Upgradation	500.00		500.00				
18	Infrastructure - IT	50.00		50.00				
19	Upgradation of IT network Switches	-		0.00				
20	Installation of Security Operation Center (SOC) for all PLC	200.00		200.00				
21	Upgradation of Max DNA DCS Hardware System	-		0.00				
22	Upgradation of Real Time Vibration Analysis System	250.00		250.00				
23	Upgradation of MRS and ZLD PLC	75.00		75.00				
24	Replacement of H2 plant electrolysis module	300.00		300.00				
25	Ceramic Lining of Coal Mill	-		0.00				
26	Upgradation of Main Turbine and TDBFP Electro-hydraulic governing system components	200.00		200.00				
27	Replacement of Fire Tenders	-		0.00				
28	Replacement of pneumatic actuator and control mechanism	-		0.00				
29	Refurbishment of Economizer Coil	600.00		600.00				
30	ESP Internals	510.00		510.00				
31	RAPH I/L and O/L dampers	250.00		250.00				
32	Max DNA DCS Upgradation with Cyber Security SOC	1,400.00		1400.00				



Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2025-26

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
33	SCADA Upgradation	100.00		100.00				
	Total	**7,800.55**	**-**	**7,800.55**				
Additional Capital Expenditure under WAROI								
1	Coal Pit Run-off Mechanized Drainage systems	0.00		0.00				
2	Construction of EMD Workshop	50.00		50.00				
3	Stacker cum Reclaimer	0.00		0.00				
4	Fire Sealing & Painting for Cables	25.00		25.00				
5	Procurement of Cup Lock Scaffolding	200.00		200.00				
6	Zero Land Fill Waste Processing Unit	120.00		120.00				
7	Ash Silo Loading Arrangement for Railway Wagon	0.00		0.00				
8	Extension of Store	85.00		85.00				
9	Concertina Coil on Top of Boundary Wall	50.00		50.00				
10	Installation of CCTV	225.00		225.00				
11	Safety (Platform in coal mill area)	50.00		50.00				
12	Upgradation of HP Bypass System	650.00		650.00				
13	Road Over Bridge	0.00		0.00				
14	Unit wise segregation of PWS HT Board	0.00		0.00				
15	Reliability (Structural Strengthening - BTG, CHP)	200.00		200.00				
16	Ash wharf	584.00		584.00				
	Total	**2,239.00**	**-**	**2,239.00**				
	Total Add.Cap Claimed (A+B)	**10,039.55**		**10,039.55**				

1. In case the project has been completed and cost has already been admitted under any tariff notification(s) in the past, fill column 9 giving the cost as admitted for the purpose of tariff notification already issued by (Name of the authority) (Enclose copy of the Tariff Order).

2. The above information needs to be furnished separately for each year / period of tariff period 2024-29.

3. In case of de-capitalisation of assets separate details to be furnished at column 1, 2, 3 and 4. Further, the original book value and year of capitalisation of such asset to be furnished at column 8. Where de-caps are on estimated basis the same to be shown separately.

4. Where any asset is rendered unserviceable the same shall be treated as de-capitalised during that year and original value of such asset to be shown at col. 3. and impaired value if any, year of its capitalisation to be mentioned at column 8.

5. Justification against each asset of capitalization should be specific to regulations under which claim has been made and the necessity of capitalization of that particular asset.

6. The Petitioner to submit the list of individual items along with quantum and individual costs claimed as ACE.

Note:

1. Fill the form in chronological order year wise along with detailed justification clearly bringing out the necessity and the benefits accruing to the beneficiaries.

2. In case initial spares are purchased along with any equipment, then the cost of such spares should be indicated separately. e.g. Rotor - 50 Crs. Initial spares- 5 Crs

Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2026-27

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
Additional Capital Expenditure under Normal ROE								
1	Centrifugal compressor and motor for BTG	-		0.00				
2	Centrifugal Compressors for Ash Plant	500.00		500.00				
3	ID fan motor with VFD replacement	-		0.00				
4	Laboratory Instruments (Chemical Laboratory)	65.00		65.00				
5	Laboratory Instruments (C & I Laboratory)	50.00		50.00				
6	Infrastructure - Admin	50.00		50.00				
7	AVR Retrofitting for Unit - 1 &2	250.00		250.00				
8	Conveyor Belt	250.00		250.00				
9	Service Water Pipeline Revamping Work	-		0.00				
10	Retrofitting of Boiler Elevators	-		0.00				
11	Station Battery Banks	-		0.00				
12	Upgradation of Mill & Compressor HT Breakers of the main plant	60.00		60.00				
13	Upgradation of AHP & CHP HT & LT Breakers	125.00		125.00				
14	Testing Equipment for Electrical Equipment	25.00		25.00				
15	Fire Hydrant System	150.00		150.00				
16	Replacement of Fire Extinguisher	-		0.00				
17	Reheater Upgradation	500.00		500.00				
18	Infrastructure - IT	50.00		50.00				
19	Upgradation of IT network Switches	-		0.00				
20	Installation of Security Operation Center (SOC) for all PLC	200.00		200.00				
21	Upgradation of Max DNA DCS Hardware System	-		0.00				
22	Upgradation of Real Time Vibration Analysis System	250.00		250.00				
23	Upgradation of MRS and ZLD PLC	75.00		75.00				
24	Replacement of H2 plant electrolysis module	-		0.00				
25	Ceramic Lining of Coal Mill	-		0.00				
26	Upgradation of Main Turbine and TDBFP Electro-hydraulic governing system components	200.00		200.00				
27	Replacement of Fire Tenders	-		0.00				
28	Replacement of pneumatic actuator and control mechanism	200.00		200.00				
29	Refurbishment of Economizer Coil	600.00		600.00				
30	ESP Internals	300.00		300.00				
31	RAPH I/L and O/L dampers	-		0.00				
32	Max DNA DCS Upgradation with Cyber Security SOC	-		0.00				
33	SCADA Upgradation	-		0.00				
	Total	**3,900.00**	**-**	**3,900.00**				

MAITHON POWER LIMITED

Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2026-27

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
Additional Capital Expenditure under Normal ROE								
Additional Capital Expenditure under WAROI								
1	Coal Pit Run-off Mechanized Drainage systems	388.61		388.61				
2	Construction of EMD Workshop	0.00		0.00				
3	Stacker cum Reclaimer	0.00		0.00				
4	Fire Sealing & Painting for Cables	25.00		25.00				
5	Procurement of Cup Lock Scaffolding	200.00		200.00				
6	Zero Land Fill Waste Processing Unit	0.00		0.00				
7	Ash Silo Loading Arrangement for Railway Wagon	0.00		0.00				
8	Extension of Store	0.00		0.00				
9	Concertina Coil on Top of Boundary Wall	50.00		50.00				
10	Installation of CCTV	150.00		150.00				
11	Safety (Platform in coal mill area)	50.00		50.00				
12	Upgradation of HP Bypass System	0.00		0.00				
13	Road Over Bridge	0.00		0.00				
14	Unit wise segregation of PWS HT Board	0.00		0.00				
15	Reliability (Structural Strengthening - BTG, CHP)	0.00		0.00				
16	Ash wharf	0.00		0.00				
	Total	**863.61**	-	**863.61**				
	Total Add.Cap Claimed (A+B)	**4,763.61**		**4,763.61**				

1. In case the project has been completed and cost has already been admitted under any tariff notification(s) in the past, fill column 9 giving the cost as admitted for the purpose of tariff notification already issued by (Name of the authority) (Enclose copy of the Tariff Order).

2. The above information needs to be furnished separately for each year / period of tariff period 2024-29.

3. In case of de-capitalisation of assets separate details to be furnished at column 1, 2, 3 and 4. Further, the original book value and year of capitalisation of such asset to be furnished at column 8. Where de-caps are on estimated basis the same to be shown separately.

4. Where any asset is rendered unserviceable the same shall be treated as de-capitalised during that year and original value of such asset to be shown at col. 3. and impaired value if any, year of its capitalisation to be mentioned at column 8.

5. Justification against each asset of capitalization should be specific to regulations under which claim has been made and the necessity of capitalization of that particular asset.

6. The Petitioner to submit the list of individual items along with quantum and individual costs claimed as ACE.

Note:

1. Fill the form in chronological order year wise along with detailed justification clearly bringing out the necessity and the benefits accruing to the beneficiaries.

2. In case initial spares are purchased along with any equipment, then the cost of such spares should be indicated separately. e.g. Rotor - 50 Crs. Initial spares- 5 Crs



Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2027-28

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
Additional Capital Expenditure under Normal ROE								
1	Centrifugal compressor and motor for BTG	1,000.00		1000.00				
2	Centrifugal Compressors for Ash Plant	1,000.00		1000.00				
3	ID fan motor with VFD replacement	-		0.00				
4	Laboratory Instruments (Chemical Laboratory)	-		0.00				
5	Laboratory Instruments (C & I Laboratory)	-		0.00				
6	Infrastructure - Admin	50.00		50.00				
7	AVR Retrofitting for Unit - 1 &2	250.00		250.00				
8	Conveyor Belt	350.00		350.00				
9	Service Water Pipeline Revamping Work	-		0.00				
10	Retrofitting of Boiler Elevators	100.00		100.00				
11	Station Battery Banks	-		0.00				
12	Upgradation of Mill & Compressor HT Breakers of th	-		0.00				
13	Upgradation of AHP & CHP HT & LT Breakers	125.00		125.00				
14	Testing Equipment for Electrical Equipment	-		0.00				
15	Fire Hydrant System	150.00		150.00				
16	Replacement of Fire Extinguisher	-		0.00				
17	Reheater Upgradation	500.00		500.00				
18	Infrastructure - IT	50.00		50.00				
19	Upgradation of IT network Switches	-		0.00				
20	Installation of Security Operation Center (SOC) for a	-		0.00				
21	Upgradation of Max DNA DCS Hardware System	1,000.00		1000.00				
22	Upgradation of Real Time Vibration Analysis System	-		0.00				
23	Upgradation of MRS and ZLD PLC	-		0.00				
24	Replacement of H2 plant electrolysis module	-		0.00				
25	Ceramic Lining of Coal Mill	-		0.00				
26	Upgradation of Main Turbine and TDBFP Electro-hy	-		0.00				
27	Replacement of Fire Tenders	-		0.00				
28	Replacement of pneumatic actuator and control me	200.00		200.00				
29	Refurbishment of Economizer Coil	600.00		600.00				
30	ESP Internals	300.00		300.00				
31	RAPH I/L and O/L dampers	-		0.00				
32	Max DNA DCS Upgradation with Cyber Security SOC	-		0.00				
33	SCADA Upgradation	-		0.00				
	Total	**5,675.00**	**-**	**5,675.00**				

MAITHON POWER LIMITED

Year-wise Statement of Additional Capitalization after COD **Form-9**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2027-28

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
Additional Capital Expenditure under WAROI								
1	Coal Pit Run-off Mechanized Drainage systems	0.00		0.00				
2	Construction of EMD Workshop	0.00		0.00				
3	Stacker cum Reclaimer	9543.86		9543.86				
4	Fire Sealing & Painting for Cables	25.00		25.00				
5	Procurement of Cup Lock Scaffolding	100.00		100.00				
6	Zero Land Fill Waste Processing Unit	0.00		0.00				
7	Ash Silo Loading Arrangement for Railway Wagon	2500.00		2500.00				
8	Extension of Store	0.00		0.00				
9	Concertina Coil on Top of Boundary Wall	50.00		50.00				
10	Installation of CCTV	0.00		0.00				
11	Safety (Platform in coal mill area)	0.00		0.00				
12	Upgradation of HP Bypass System	0.00		0.00				
13	Road Over Bridge	1300.00		1300.00				
14	Unit wise segregation of PWS HT Board	0.00		0.00				
15	Reliability (Structural Strengthening - BTG, CHP)	0.00		0.00				
16	Ash wharf	0.00		0.00				
	Total	**13,518.86**	**0**	**13,518.86**				
	Total Add.Cap Claimed (A+B)	**19,193.86**		**19,193.86**				

1. In case the project has been completed and cost has already been admitted under any tariff notification(s) in the past, fill column 9 giving the cost as admitted for the purpose of tariff notification already issued by (Name of the authority) (Enclose copy of the Tariff Order).
2. The above information needs to be furnished separately for each year / period of tariff period 2024-29.

3. In case of de-capitalisation of assets separate details to be furnished at column 1, 2, 3 and 4. Further, the original book value and year of capitalisation of such asset to be furnished at column 8. Where de-caps are on estimated basis the same to be shown separately.
4. Where any asset is rendered unserviceable the same shall be treated as de-capitalised during that year and original value of such asset to be shown at col. 3. and impaired value if any, year of its capitalisation to be mentioned at column 8.
5. Justification against each asset of capitalization should be specific to regulations under which claim has been made and the necessity of capitalization of that particular asset.
6. The Petitioner to submit the list of individual items along with quantum and individual costs claimed as ACE.

Note:

1. Fill the form in chronological order year wise along with detailed justification clearly bringing out the necessity and the benefits accruing to the beneficiaries.

2. In case initial spares are purchased along with any equipment, then the cost of such spares should be indicated separately. e.g. Rotor - 50 Crs. Initial spares- 5 Crs



Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2028-29

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
Additional Capital Expenditure under Normal ROE								
1	Centrifugal compressor and motor for BTG	-		0.00				
2	Centrifugal Compressors for Ash Plant	-		0.00				
3	ID fan motor with VFD replacement	-		0.00				
4	Laboratory Instruments (Chemical Laboratory)	-		0.00				
5	Laboratory Instruments (C & I Laboratory)	-		0.00				
6	Infrastructure - Admin	50.00		50.00				
7	AVR Retrofitting for Unit - 1 &2	-		0.00				
8	Conveyor Belt	-		0.00				
9	Service Water Pipeline Revamping Work	-		0.00				
10	Retrofitting of Boiler Elevators	100.00		100.00				
11	Station Battery Banks	-		0.00				
12	Upgradation of Mill & Compressor HT Breakers o	-		0.00				
13	Upgradation of AHP & CHP HT & LT Breakers	50.00		50.00				
14	Testing Equipment for Electrical Equipment	-		0.00				
15	Fire Hydrant System	-		0.00				
16	Replacement of Fire Extinguisher	-		0.00				
17	Reheater Upgradation	500.00		500.00				
18	Infrastructure - IT	50.00		50.00				
19	Upgradation of IT network Switches	-		0.00				
20	Installation of Security Operation Center (SOC) fo	-		0.00				
21	Upgradation of Max DNA DCS Hardware System	1,000.00		1000.00				
22	Upgradation of Real Time Vibration Analysis Syst	-		0.00				
23	Upgradation of MRS and ZLD PLC	-		0.00				
24	Replacement of H2 plant electrolysis module	-		0.00				
25	Ceramic Lining of Coal Mill	-		0.00				
26	Upgradation of Main Turbine and TDBFP Electro	-		0.00				
27	Replacement of Fire Tenders	-		0.00				
28	Replacement of pneumatic actuator and control m	-		0.00				
29	Refurbishment of Economizer Coil	600.00		600.00				
30	ESP Internals	-		0.00				
31	RAPH I/L and O/L dampers	-		0.00				
32	Max DNA DCS Upgradation with Cyber Security S	-		0.00				
33	SCADA Upgradation	-						

MAITHON POWER LIMITED

Year-wise Statement of Additional Capitalization after COD

Form-9

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012
For Financial Year	2028-29

S. No.	Head of Work / Equipment	ACE Claimed (Actual/Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual Basis	Un-discharged Liability included in column 3	Cash Basis	IDC Included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
	Total	**2,350.00**	**-**	**2,350.00**				
Additional Capital Expenditure under WAROI								
1	Coal Pit Run-off Mechanized Drainage systems	0.00		0.00				
2	Construction of EMD Workshop	0.00		0.00				
3	Stacker cum Reclaimer	0.00		0.00				
4	Fire Sealing & Painting for Cables	25.00		25.00				
5	Procurement of Cup Lock Scaffolding	0.00		0.00				
6	Zero Land Fill Waste Processing Unit	0.00		0.00				
7	Ash Silo Loading Arrangement for Railway Wago	0.00		0.00				
8	Extension of Store	0.00		0.00				
9	Concertina Coil on Top of Boundary Wall	50.00		50.00				
10	Installation of CCTV	0.00		0.00				
11	Safety (Platform in coal mill area)	0.00		0.00				
12	Upgradation of HP Bypass System	0.00		0.00				
13	Road Over Bridge	0.00		0.00				
14	Unitwise segregation of PWS HT Board	400.00		400.00				
15	Reliability (Structural Strengthening - BTG, CHP)	0.00		0.00				
16	Ash wharf	0.00		0.00				
	Total	**475.00**	**-**	**475.00**				
	Total Add.Cap Claimed (A+B)	**2,825.00**		**2,825.00**				

1. In case the project has been completed and cost has already been admitted under any tariff notification(s) in the past, fill column 9 giving the cost as admitted for the purpose of tariff notification already issued by (Name of the authority) (Enclose copy of the Tariff Order).
2. The above information needs to be furnished separately for each year / period of tariff period 2024-29.

3. In case of de-capitalisation of assets separate details to be furnished at column 1, 2, 3 and 4. Further, the original book value and year of capitalisation of such asset to be furnished at column 8. Where de-caps are on estimated basis the same to be shown separately.
4. Where any asset is rendered unserviceable the same shall be treated as de-capitalised during that year and original value of such asset to be shown at col. 3. and impaired value if any, year of its capitalisation to be mentioned at column 8.
5. Justification against each asset of capitalization should be specific to regulations under which claim has been made and the necessity of capitalization of that particular asset.
6. The Petitioner to submit the list of individual items along with quantum and individual costs claimed as ACE.

Note:

1. Fill the form in chronological order year wise along with detailed justification clearly bringing out the necessity and the benefits accruing to the beneficiaries.
2. In case initial spares are purchased along with any equipment, then the cost of such spares should be indicated separately. e.g. Rotor - 50 Crs. Initial spares- 5 Crs



Financing of Additional Capitalization

Form-10

Name of the Petitioner	Maithon Power Limited
Name of the Generating Sta	1050 MW Maithon Project
COD	Unit 1 - 01.09.2011 & Unit 2 - 24.07.2012

	Actual					**Admitted**				
Financial Year (Starting COD	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Amount capitalised in Work/ Equipment	8,658.28	10,039.55	4,763.61	19,193.86	2,825.00	Not Applicable				
Financing Details										
Loan-1	6,060.80	7,027.69	3,334.53	13,435.70	1,977.50					
Loan-2										
Loan-3 and so on										
Total Loan	6,060.80	7,027.69	3,334.53	13,435.70	1,977.50					
Equity	2,597.48	3,011.87	1,429.08	5,758.16	847.50					
Internal Resources										
Others (Pl. specify)										
Total	**8,658.28**	**10,039.55**	**4,763.61**	**19,193.86**	**2,825.00**					

Note:

1. Year 1 refers to Financial Year of COD and Year 2, Year 3 etc. are the subsequent financial years respectively.
2. Loan details for meeting the additional capitalisation requirement should be given as per FORM-7 or 8 whichever is relevant.

MAITHON POWER LIMITED

Calculation of Depreciation

Form-11

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Name of the Assets	Gross Block as on 31.03.2024	Gross Block as on 31.03.2025	Gross Block as on 31.03.2026	Gross Block as on 31.03.2027	Gross Block as on 31.03.2028	Gross Block as on 31.03.2029	CERC Dep. Rate	Cumulative Depreciation as on 31.03.2025	Cumulative Depreciation as on 31.03.2026	Cumulative Depreciation as on 31.03.2027	Cumulative Depreciation as on 31.03.2028	Cumulative Depreciation as on 31.03.2029
1	2	3	5 = 3+4	7 = 5+6	9 = 7+8	11 = 9+10	13	14	14 = 14x5	15 = 14x7	16 = 14x9	17 = 14x11	17 = 14x13
A	Land under full ownership												
B	Land under lease												
(a)	For investment in the land												
(b)	For cost of clearing the site												
(c)	Land for reservoir in case of hydro generating station												
C	Assets purchased new												
a.	Pl & Machinery in generating stations												
(i)	Hydro electric												
(ii)	Steam electric NIIRB & waste heat recovery boilers												
(iii)	Diesel electric and gas plant												
b.	Cooling towers & circulating water systems												
c.	Hydraulic works forming part of the Hydro-generating stations												
(i)	Dams, Spillways, Weirs, Canals, Reinforced concrete flumes and siphons												
(ii)	Reinforced concrete pipelines and surge tanks, steel pipielines, sluice gates, steel surge tanks, hydraulic control valves and hydraulic works												
d.	Building & Civil Engineering works												
(i)	Offices and showrooms												
(ii)	Containing thermo-electric generating plant												
(iii)	Containing hydro-electric generating plant												
(iv)	Temporary erections such as wooden structures												
(v)	Roads other than Kutcha roads												
(vi)	Others												
e.	Transformers, Kiosk, sub-station equipment & other fixed apparatus (including plant												
(i)	Transformers including foundations having rating of 100 KVA and over												
(ii)	Others												
f.	Switchgear including cable connections												
g.	Lightning arrestor												
(i)	Station type												
(ii)	Pole type												
(iii)	Synchronous condenser												
h.	Batteries												
(i)	Underground cable including joint boxes and disconnected boxes												
(ii)	Cable duct system												
i.	Overhead lines including cable support												
(i)	Lines on fabricated steel operating at terminal voltages higher than 66 KV												
(ii)	Lines on steel supports operating at terminal voltages higher than 13.2 KV but not exceeding 66 KV												
(iii)	Lines on steel on reinforced concrete support												
(iv)	Lines on treated wood support												
j.	Meters												
k.	Self propelled vehicles												
l.	Air Conditioning Plants												
(i)	Static												
(ii)	Portable												
m.(i)	Office furniture and furnishing												
(ii)	Office equipment												
(iii)	Internal wiring including fittings and apparatus												
(iv)	Strret Light fittings												
n.	Apparatus let on hire												
(i)	Other than motors												
(ii)	Motors												
o.	Communication equipment												
(i)	Radio and high frequency carrier system												
(ii)	Telephone lines and telephones												
p.	I. T Equipment including software												
q.	Any other assets not covered above												
	Total	0	0	0	0	0	0	0	0	0	0	0	0

--- Not Applicable ---

MAITHON POWER LIMITED

Statement of Depreciation **Form-12**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5		7	8
1	Opening Capital Cost	562538.93	565278.70	572619.86	581005.82	584627.02	602045.69
2	Closing Capital Cost	565278.70	572619.86	581005.82	584627.02	602045.69	604565.29
3	Average Capital Cost	563908.81	568949.28	576812.84	582816.42	593336.35	603305.49
4	Freehold land	17639.91	17639.91	17639.91	17639.91	17639.91	17639.91
5	Rate of depreciation	5.08%	3.33%	3.42%	3.50%	3.64%	3.81%
6	Depreciable value	491642.02	496178.44	503255.64	508658.86	518126.80	527099.02
7	Balance useful life at the beginning of the period	13.42	12.42	11.42	10.42	9.42	8.42
8	Remaining depreciable value	227482.98	205027.54	196309.12	185451.62	177790.33	168963.55
9	**Depreciation (for the period)**	**27773.39**	**16507.85**	**17189.94**	**17797.66**	**18873.71**	**20066.93**
10	**Depreciation (annualised)**	**27773.39**	**16507.85**	**17189.94**	**17797.66**	**18873.71**	**20066.93**
11	Cumulative depreciation at the end of the period	291932.43	307658.75	324136.47	341004.90	359210.18	378202.40
12	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2024						
13	Deletion during the year	1509.63	1317.11	1653.59	1142.42	1775.18	305.41
14	Less: Cumulative depreciation adjustment on account of de-capitalisation	781.53	712.23	929.23	668.43	1074.71	191.46
15	Net Cumulative depreciation at the end of the period	291150.90	306946.52	323207.24	340336.47	358135.47	378010.95
	Closing Depreciable Value	492874.91	499481.96	507029.32	510288.40	525965.21	528232.84
16	Depreciation Recovered at the end of the year(%)	59.07%	61.45%	63.75%	66.69%	68.09%	71.56%

1. In case of details of FERV, give information for the applicable period.

MAITHON POWER LIMITED

Calculation of Weighted Average Rate of Interest on Actual Loans **Form-13**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Loan-1						
Gross loan - Opening						
Cumulative repayments of Loans upto						
Net loan - Opening						
Add: Drawl(s) during the Year						
Less: Repayment (s) of Loans during the year						
Net loan - Closing						
Average Net Loan						
Rate of Interest on Loan on annual basis						
Interest on loan						
Loan-2						
Gross loan - Opening						
Cumulative repayments of Loans upto						
Net loan - Opening						
Add: Drawl(s) during the Year						
Less: Repayment (s) of Loans during the year						
Net loan - Closing						
Average Net Loan						
Rate of Interest on Loan on annual basis						
Interest on loan						
Loan-3 and so on						
Gross loan - Opening						
Cumulative repayments of Loans upto previous year						
Net loan - Opening						
Add: Drawl(s) during the Year						
Less: Repayment (s) of Loans during the year						
Net loan - Closing						
Average Net Loan						

---- Not Applicable ----

MAITHON POWER LIMITED

Calculation of Weighted Average Rate of Interest on Actual Loans **Form-13**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Rate of Interest on Loan on annual basis						
Interest on loan						
Total Loan						
Gross loan - Opening						
Cumulative repayments of Loans upto previous year						
Net loan - Opening						
Add: Drawl(s) during the Year						
Less: Repayment (s) of Loans during the year						
Net loan - Closing						
Average Net Loan						
Interest on loan						
Weighted average Rate of Interest on Loans		0	0	0	0	0

Note:

1. In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form.

MAITHON POWER LIMITED

Draw Down Schedule for Calculation of IDC & Financing Charges

Form-14

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Draw Down Particulars	Quarter 1			Quarter 2			Quarter 3		
		Quantum in Foreign Currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs. Lakhs)		Exchange Rate on draw down date	Amount in Indian Rupee (Rs. Lakhs)	Quantum in Foreign Currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs. Lakhs)
1	Loans									
1.1	Foreign Loans									
1.1.1	Foreign Loan 1									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.1.2	Foreign Loan 2									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.1	Total Foreign Loans									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.2	Indian Loans									
1.2.1	Indian Loan 1									
	Draw down Amount									
	IDC									
	Financing charges									
1.2.2	Indian Loan 2									
	Draw down Amount									
	IDC									
	Financing charges									
1.2	Total Indian Loans									
	Draw down Amount									
	IDC									
	Financing charges									
1	Total of Loans drawn									
	IDC									
	Financing Charges									
	Foeriegn Exchange Rate Variation									
	Hedging Cost									
2	Equity									
2.1	Foerign Equity Drawn									
2.2	Indian Equity Drawn									
	Total Equity Deployed									

Not Applicable

Note:

1. Drawl of debt and equity shall be on pari-passu basis quarter wise to meet the commissioning schedule. Drawl of higher equity in the beginning is permissible. IDC on normative loan corresponding to excess equity over 30% of funds deployed shall be allowed only in case the actual infusion of equity on a pari-passu basis is more than 30% of total funds deployed and shall be computed on quarterly basis.
2. Applicable interest rates including reset dates used for above computation may be furnished separately

3. In case of multi unit project details of capitalization ratio used to be furnished.

4. In case IDC on normative loan is to be allowed prior to infusion of actual loan, rate of interest for computing such IDC shall be equal to 1-year SBI MCLR as prevailing on 1st April of the respective year. IDC on normative loan, post infusion of actual loan shall be computed based on WAROI for that respective quarter.

MAITHON POWER LIMITED

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Details/Information to be Submitted in respect of Fuel for Computation of

Sl. No.	Month	Unit	Apr-2023		May-2023		Jun-2023		Jul-2023		Aug-2023		Sep-2023		Oct-2023		Nov-2023		Dec-2023		Jan-2024		Feb-2024		Mar-2024	
			Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
A)	OPENING QUANTITY																									
1	Opening Quantity of Coal/Lignite	(MMT)	0.337	-	0.391		0.42	-	0.45	-	0.30	-	0.25	-	0.24	-	0.27	-	0.34	-	0.44	-	0.40	-	0.36	-
2	Value of Stock	(MMT)	1,57,58,33,311		1,71,07,52,702		1,76,78,00,889		1,90,38,29,645		1,19,64,47,247		99,37,62,483		99,80,94,042		1,17,42,60,454		1,58,87,74,154		1,99,87,10,915		1,86,55,33,725		1,80,41,81,441	
B)	QUANTITY																									
3	Coal supplied by Coal/Lignite Company (1+2)	(MMT)	0.4443	-	0.4295	-	0.3761	-	0.247	-	0.330	-	0.418	-	0.443	-	0.495	-	0.522	-	0.393	-	0.357	-	0.442	-
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Coal supplied by Coal/Lignite Company (3+4)	(MMT)	0.4443	-	0.4295	-	0.3761	-	0.2472	-	0.3300	-	0.4184	-	0.4433	-	0.4949	-	0.5222	-	0.3935	-	0.3573	-	0.4422	-
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(MMT)	0.0036	-	0.0034	-	0.0030	-	0.0020	-	0.0026	-	0.0033	-	0.0035	-	0.0040	-	0.0042	-	0.0031	-	0.0029	-	0.0035	-
7	Net coal / Lignite Supplied (3-6)	(MMT)	0.4408	-	0.4261	-	0.3731	-	0.2452	-	0.3274	-	0.4150	-	0.4397	-	0.4909	-	0.5180	-	0.3903	-	0.3544	-	0.4386	-
C)	PRICE																									
8	Amount charged by the Coal/Lignite Company	(Rs.)	1,45,05,01,371		1,35,82,88,121		1,25,54,66,674		65,96,21,374		1,02,57,97,484		1,46,10,54,097		1,69,77,76,499		2,01,07,21,163		1,96,57,44,137		1,54,42,44,736		1,55,99,11,420		1,61,41,68,250	
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)	-	-	11,38,916	-	-2,76,17,928	-													-	-	-	-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)	4,06,47,397.85		5,39,12,273		4,87,63,102		3,52,25,292		4,57,71,342		5,20,50,910		4,29,68,218		5,08,29,780		4,48,03,943		4,58,30,189		4,76,44,345		4,15,65,426	
11	**Total amount Charged (8+9+10)**	**(Rs.)**	**1,49,11,48,769.28**		**1,41,33,39,304.53**		**1,27,66,11,848.72**		**69,48,46,665.74**		**1,07,15,68,826.50**		**1,51,31,05,007.11**		**1,74,07,44,716.35**		**2,06,15,50,942.73**		**2,01,05,48,080.25**		**1,59,00,74,845.40**		**1,60,75,55,764.64**		**1,65,57,33,675.92**	
D)	TRANSPORATION																									
12	Transportation charges by rail/ship/road transport	(Rs.)	33,55,64,455		35,45,51,835		27,80,84,718		21,17,99,078		21,06,88,851		24,81,96,576		27,15,33,797		30,14,88,176		32,22,55,869		26,97,87,491		28,94,99,953		35,51,38,485	
	By Rail		11,63,92,950		16,14,77,797		11,41,59,669		17,96,33,187		10,92,40,977		11,33,36,648		9,12,72,519		6,84,99,272		8,54,56,713		7,55,99,686		8,40,78,628		17,49,34,368	
	By Road		21,91,71,505		19,30,74,128		16,38,45,109		3,21,65,892		10,14,47,874		13,48,59,928		18,02,61,278		23,29,88,904		23,67,99,156		19,41,87,805		20,54,21,325		18,02,04,118	
	By Ship																									
	Total			**33,55,64,455**		**35,45,51,835**		**27,80,84,718**		**21,17,99,078**		**21,06,88,851**		**24,81,96,576**		**27,15,33,797**		**30,14,88,176**		**32,22,55,869**		**26,97,87,491**		**28,94,99,953**		**35,51,38,485**
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	Rs/Ton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	**Total Transportation Charges (12+13+14+15)**			**33,55,64,455**		**35,45,51,835**		**27,80,84,718**		**21,17,99,078**		**21,06,88,851**		**24,81,96,576**		**27,15,33,797**		**30,14,88,176**		**32,22,55,869**		**26,97,87,491**		**28,94,99,953**		**35,51,38,485**
17	**Total amount Charged for coal/lignite supplied including Transportation (11+16)**	**(MT)**		**1,82,67,13,224.03**		**1,76,78,91,139.04**		**1,55,46,16,566.77**		**90,66,45,744.04**		**1,28,22,57,677.95**		**1,76,13,01,582.98**		**2,01,22,78,513.19**		**2,36,30,39,118.52**		**2,33,28,03,949.42**		**1,85,98,62,336.53**		**1,89,70,55,717.76**		**2,01,08,72,161.16**
E)	TOTAL COST																									
18	**Landed cost of coal/ Lignite (2+17)/(1+7)**	**(Rs./Ton)**		**4,375.30**		**4,257.54**		**4,214.59**		**4,032.49**		**3,971.83**		**4,141.44**		**4,422.42**		**4,676.13**		**4,571.72**		**4,662.76**		**4,986.75**		**4,766.38**
19	Blending Ratio (Domestic/Imported)	Domestic(%)/Imported (%)	100%	0%	100%	0%	100%	0%																		
20	Weighted average cost of coal/ Lignite for preceding three months		4,639.64		4,527.12		4,412.54		4,281.76		4,174.71		4,082.60		4,049.92		4,104.80		4,424.80		4,561.85		4,634.92		4,730.95	
F)	QUALITY																									
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	4,938		4,928		4,866		4,931		4,756		4,947		5,021		5,089		4,993		4,981		5,021		5,139	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	4,928		4,866		4,931		4,756		4,947		5,021		5,089		4,993		4,981		5,021		5,139		5,020	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)		-																						
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)		-																						
25	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)		**4,932**		**4,895**		**4,897**		**4,869**		**4,857**		**4,993**		**5,013**		**4,998**		**4,986**		**5,000**		**5,077**		**5,074**
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	4,182.20		4,191		4,123.23		4,143.51		4,022.44		4,059.53		3,991.00		3,908.58		3,938.18		3,955.74		4,030.88		4,129.38	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	4,197.97		4,061		4,166.89		3,799.43		4,093.14		3,949.68		3,863.40		3,954.19		3,967.26		4,115.03		4,240.57		3,970.24	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)	-	-	-	-	-	-																		
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)		-		-		-																		
30	**Weighted average GCV of coal/ Lignite as received**	**(kCal/Kg)**		**4,191.17**		**4,122.97**		**4,143.60**		**4,021.81**		**4,059.67**		**3,990.79**		**3,908.34**		**3,938.26**		**3,955.80**		**4,031.19**		**4,129.80**		**4,041.86**

Petitioner

MAITHON POWER LIMITED

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1] - Form-15-Oil

Name of the Company Maithon Power Limited
Name of the Power Station 1050 MW Maithon Project

Sl. No.	Month	Unit	Apr-2023		May-2023		Jun-2023		Jul-2023		Aug-2023		Sep-2023		Oct-2023		Nov-2023		Dec-2023		Jan-2024		Feb-2024		Mar-2024	
			Domestic	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal	Domestic Coal	Imported Coal
A)	OPENING QUANTITY																									
1	Opening Quantity of Oil	(KL)	942.815	-	1,029.869		1,074.869	-	1,027.166	-	1,123.282	-	1,022.672	-	971.071	-	824.811	-	1,052.707	-	1,037.807	-	1,024.007	-	964.23	-
2	Value of Stock	(Rs.)	5,90,88,348		6,33,61,453		6,67,30,046		6,28,66,940		6,82,89,656		6,27,05,606		5,95,93,838		5,01,59,456		6,56,77,884		6,46,64,749		6,36,12,484		6,00,90,528	
B)	QUANTITY																									
3	Oil supplied by Oil Company (1+2)	(KL)	147.0741	-	45.0000	-	97.9158	-	179.7598	-	73.0000	-	-	-	-	-	227.8958	-	-	-	-	-	-	-	133.327	-
4	Adjustment (+/-) in quantity supplied made by Oil Company	(KL)		-		-		-		-		-		-		-		-		-		-		-	-	-
5	Oil supplied by Oil Company (3+4)	(KL)	147.0741	-	45.0000	-	97.9158	-	179.7598	-	73.0000	-	-	-	-	-	227.8958	-	-	-	-	-	-	-	133.3267	-
6	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(KL)		-		-		-		-		-		-		-		-		-		-		-	-	-
7	Net Oil Supplied (3-4)	(KL)	147.0741	-	45.0000	-	97.9158	-	179.7598	-	73.0000	-	-	-	-	-	227.8958	-	-	-	-	-	-	-	133.3267	-
C)	PRICE																									
8	Amount charged by the Oil Company	(Rs.)	79,68,355		33,38,660		59,49,729		1,12,01,096		57,20,539		-		-		1,53,44,883		-		-		-		79,15,060	
9	Adjustment (+/-) in amount charged made by Oil Company	(Rs.)		-		-		-														-		-	-	-
10	Handling, Sampling and such other similar charges	(Rs.)																							-	
11	**Total amount Charged (8+9+10)**	**(Rs.)**	**79,68,354.64**	-	**33,38,659.85**	-	**59,49,728.68**	-	**1,12,01,095.66**	-	**57,20,539.32**	-	-	-	-	-	**1,53,44,883.24**	-	-	-	-	-	-	-	**79,15,060.14**	
D)	TRANSPORATION																									
12	Transportation charges by rail/ship/road transport	(Rs.)	1,15,589		35,438		77,018		1,41,372		57,488		-		-		1,79,204		-		-		-		1,11,770	
	By Rail																								-	
	By Road																								-	
	By Ship							-																		
	Total																								-	
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Demurrage Charges, if any	(Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	**Total Transportation Charges (12+13+14+15)**		**1,15,589**	-	**35,438**	-	**77,018**	-	**1,41,372**	-	**57,488**	-	-	-	-	-	**1,79,204**	-	-	-	-	-	-	-	**1,11,770**	
17	**Total amount Charged for Oil supplied including Transportation (11+16)**	**(Rs.)**	**80,83,943.89**	-	**33,74,097.35**	-	**60,26,746.18**	-	**1,13,42,467.66**	-	**57,78,026.82**	-	-	-	-	-	**1,55,24,086.74**	-	-	-	-	-	-	-	**80,26,830.54**	
E)	TOTAL COST																									
18	**Landed cost of Oil (2+17)/(1+7)**	**(Rs./ml)**	**0.062**		**0.062**		**0.062**		**0.061**		**0.062**		**0.061**		**0.061**		**0.062**		**0.062**		**0.062**		**0.062**		**0.062**	
19	Blending Ratio (Domestic/Imported)	Domestic(%)/Imported		0%		0%		0%																		
20	Weighted average cost of Oil for preceding three months																									
F)	QUALITY																									
21	GCV of Domestic Oil of the opening stock as per bill of OilCompany	(kCal/L)	9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100	
22	GCV of Domestic Oil supplied as per bill of Oil Company	(kCal/L)	9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100		9,100	
23	GCV of Imported Oil of the opening stock as per bill Oil Company	(kCal/L)		-																						
24	GCV of Imported Oil supplied as per bill Oil Company	(kCal/L)		-																						
25	Weighted average GCV of Oil as Billed	(kCal/L)	**9,100**		**9,100**		**9,100**		**9,100**		**9,100**		**9,100**		**9,100**		**9,100**		**9,100**		**9,100**		**9,100**		**9,100**	
26	GCV of Domestic Oil of the opening stock as received at Station	(kCal/L)	9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00	
27	GCV of Domestic Oil supplied as received at Station	(kCal/L)	9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00		9,100.00	
28	GCV of Imported Oil of opening stock as received at Station	(kCal/L)		-		-		-																		
29	GCV of Imported Oil supplied as received at Station	(kCal/L)		-		-		-																		
30	**Weighted average GCV of Oil as received**	(kCal/L)	**9,100.00**		**9,100.00**		**9,100.00**		**9,100.00**		**9,100.00**		**9,100.00**		**9,100.00**		**9,100.00**		**9,100.00**		**9,100.00**		**9,100.00**		**9,100.00**	

Petitioner

MAITHON POWER LIMITED

Details of Limestone for Computation of Energy Charge Rate **Form-16**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Month	Unit	For preceding	For preceding	For preceding
			3rd Month (from COD or from 1.4.2024 as the case may be)	2nd Month (from COD or from 1.4.2024 as the case may be)	
1	Quantity of Limestone supplied by Limestone supply Company	(MMT)	**Not Applicable**		
2	Adjustment (+/-) in quantity supplied made by Limestone supply Company	(MMT)			
3	Limestone supplied by Limestone supply Company(1+2)	(MMT)			
4	Net Limestone Supplied (3-4)	(MMT)			
5	Amount charged by the Limestone supply Company	(Rs.)			
6	Adjustment (+/-) in amount charged made by Limestone supply Company	(Rs.)			
7	Total amount Charged (6+7)	(Rs.)			
8	Transportation charges by rail/ship/road transport	(Rs.)			
9	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
10	Demurrage Charges, if any	(Rs.)			
11	Total Transportation Charges (8+/-9-10)	(Rs.)			
12	Total amount Charged for Limestone supplied including Transportation (7+11)	(Rs.)			

MAITHON POWER LIMITED

Details of Capital Spares **Form-17**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Deatails of Capital Spares and Expenses	2024-25	Claimed a s a part of additional Capitalization	Funded through compensatory allowance (If Applicable)	Funded through Special Allowance	Claimed as a part of stores and spares
	Name of Spare	**Amount in Rs. Lakh**				
1	400 KV Switchyard	25				
2	Crusher Rotor Assembly	0				
3	Procurement of Condensate Extraction Pump Rotor Assembly	0				
4	Procurement of Standby CW Pump and Motor	0				
5	FD Fan Rotor Assembly	0				
6	ID Fan Rotor Assembly	0				
7	Cooling Tower Internals	200				
8	IP Turbine Blades Replacement	900				
9	PA Fan Rotor Assembly	0				
10	Procurement of TDBFP Drive Turbine Rotor Assembly	0				
11	Boiler Circulating Water Pump Assembly	800				
12	Procurement of L T Breaker & Relays	100				
13	Turbine Bearing set procurement	261.01				
14	LTSH Coil Assembly	950				
15	Procurement of Upgraded Coal burner Tip & Nozzle	0				
16	Procurement of Sky Climber components and spares	0				
17	ID Fan and VFD Transformer	50				
18	Replenishment of Capital Spares	675.61				
	Total	**3961.62**				

1) No Spares individually costing upto Rs. 10 lakh shall be claimed.
2) Spares that have been procured in the past through compensatory allowance to be provided.

MAITHON POWER LIMITED

Details of Capital Spares

Form-17

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Deatails of Capital Spares and Expenses	2025-26	Claimed as a part of additional Capitalization	Funded through compensatory allowance (If Applicable)	Funded through Special Allowance	Claimed as a part of stores and spares
	Name of Spare	**Amount in Rs. Lakh**				
1	400 KV Switchyard	25.00				
2	Crusher Rotor Assembly	200.00				
3	Procurement of Condensate Extraction Pump Rotor Assembly	0.00				
4	Procurement of Standby CW Pump and Motor	0.00				
5	FD Fan Rotor Assembly	300.00				
6	ID Fan Rotor Assembly	0.00				
7	Cooling Tower Internals	200.00				
8	IP Turbine Blades Replacement	0.00				
9	PA Fan Rotor Assembly	0.00				
10	Procurement of TDBFP Drive Turbine Rotor Assembly	0.00				
11	Boiler Circulating Water Pump Assembly	0.00				
12	Procurement of LT Breaker & Relays	100.00				
13	Turbine Bearing set procurement	0.00				
14	LTSH Coil Assembly	550.00				
15	Procurement of Upgraded Coal burner Tip & Nozzle	0.00				
16	Procurement of Sky Climber components and spares	0.00				
17	ID Fan and VFD Transformer	50.00				
18	Replenishment of Capital Spares	0.00				
	Total	**1425.00**				

1) No Spares individually costing upto Rs. 10 lakh shall be claimed.
2) Spares that have been procured in the past through compensatory allowance to be provided.



Details of Capital Spares **Form-17**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Deatails of Capital Spares and Expenses	2026-27	Claimed as a part of additional Capitalization	Funded through compensatory allowance (If Applicable)	Funded through Special Allowance	Claimed as a part of stores and spares
	Name of Spare	**Amount in Rs. Lakh**				
1	400 KV Switchyard	45.00				
2	Crusher Rotor Assembly	0.00				
3	Procurement of Condensate Extraction Pump Rotor Assembly	125.74				
4	Procurement of Standby CW Pump and Motor	400.00				
5	FD Fan Rotor Assembly	0.00				
6	ID Fan Rotor Assembly	100.00				
7	Cooling Tower Internals	0.00				
8	IP Turbine Blades Replacement	0.00				
9	PA Fan Rotor Assembly	300.00				
10	Procurement of TDBFP Drive Turbine Rotor Assembly	400.00				
11	Boiler Circulating Water Pump Assembly	0.00				
12	Procurement of LT Breaker & Relays	60.00				
13	Turbine Bearing set procurement	0.00				
14	LTSH Coil Assembly	500.00				
15	Procurement of Upgraded Coal burner Tip & Nozzle	200.00				
16	Procurement of Sky Climber components and spares	0.00				
17	ID Fan and VFD Transformer	0.00				
18	Replenishment of Capital Spares	0.00				
	Total	**2130.74**				

1) No Spares individually costing upto Rs. 10 lakh shall be claimed.
2) Spares that have been procured in the past through compensatory allowance to be provided.

MAITHON POWER LIMITED

Details of Capital Spares

Form-17

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Deatails of Capital Spares and Expenses	2027-28	Claimed as a part of additional Capitalization	Funded through compensatory allowance (If Applicable)	Funded through Special Allowance	Claimed as a part of stores and spares
	Name of Spare	**Amount in Rs. Lakh**				
1	400 KV Switchyard	45.00				
2	Crusher Rotor Assembly	0.00				
3	Procurement of Condensate Extraction Pump Rotor Assembly	0.00				
4	Procurement of Standby CW Pump and Motor	800.00				
5	FD Fan Rotor Assembly	0.00				
6	ID Fan Rotor Assembly	0.00				
7	Cooling Tower Internals	0.00				
8	IP Turbine Blades Replacement	0.00				
9	PA Fan Rotor Assembly	0.00				
10	Procurement of TDBFP Drive Turbine Rotor Assembly	0.00				
11	Boiler Circulating Water Pump Assembly	0.00				
12	Procurement of LT Breaker & Relays	60.00				
13	Turbine Bearing set procurement	0.00				
14	LTSH Coil Assembly	0.00				
15	Procurement of Upgraded Coal burner Tip & Nozzle	100.00				
16	Procurement of Sky Climber components and spares	150.00				
17	ID Fan and VFD Transformer	0.00				
18	Replenishment of Capital Spares	0.00				
	Total	**1155.00**				

1) No Spares individually costing upto Rs. 10 lakh shall be claimed.

2) Spares that have been procured in the past through compensatory allowance to be provided.



Details of Capital Spares **Form-17**

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Deatails of Capital Spares and Expenses	2028-29	Claimed as a part of additional Capitalization	Funded through compensatory allowance (If Applicable)	Funded through Special Allowance	Claimed as a part of stores and spares
	Name of Spare	**Amount in Rs. Lakh**				
1	400 KV Switchyard	0.00				
2	Crusher Rotor Assembly	250.00				
3	Procurement of Condensate Extraction Pump Rotor Assembly	0.00				
4	Procurement of Standby CW Pump and Motor	0.00				
5	FD Fan Rotor Assembly	0.00				
6	ID Fan Rotor Assembly	0.00				
7	Cooling Tower Internals	0.00				
8	IP Turbine Blades Replacement	0.00				
9	PA Fan Rotor Assembly	0.00				
10	Procurement of TDBFP Drive Turbine Rotor Assembly	0.00				
11	Boiler Circulating Water Pump Assembly	0.00				
12	Procurement of L T Breaker & Relays	0.00				
13	Turbine Bearing set procurement	0.00				
14	LTSH Coil Assembly	0.00				
15	Procurement of Upgraded Coal burner Tip & Nozzle	0.00				
16	Procurement of Sky Climber components and spares	150.00				
17	ID Fan and VFD Transformer	0.00				
18	Replenishment of Capital Spares	0.00				
	Total	**400.00**				

1) No Spares individually costing upto Rs. 10 lakh shall be claimed.
2) Spares that have been procured in the past through compensatory allowance to be provided.



Details of Water Charges

Form-19

Name of the Petitioner	Maithon Power Limited
Name of the Generating Station	1050 MW Maithon Project

S. No.	Details of Water charges (excluding water cess)		Quantity Allocated	Projected Water Consumption			Normative Consumption at 85% PLF	Rate specified (as per govt. notification or agreement	Spillage of water (in percentage)	Amount Claimed
	Name of Source and quantity	Amount	Unit	Plant		Total	m3	Rs/m3		Rs Lakhs
FY 25	DVC			19486825			27364050	17.14		3339.22
FY 26	DVC			19486825			27364050	18.85		3673.15
FY 27	DVC			19486825			27364050	20.73		4040.46
FY 28	DVC			19540214			27439020	22.81		4456.68
FY 29	DVC			19486825			27364050	25.09		4888.96

Note-1: The water charges shall include only the expenditure paid to the third party/Govt. entity for water consumed for the generation of electricity only, exclusive of expenses associated with the owner i.e. manpower, pumping charges etc.

Note-2: The supporting documents with regard to the rate specified by the Govt. entity shall be submitted

MAITHON POWER LIMITED

Details of Assets De-capitalised during the period

Form-I

Name of the Petitioner:	Maithon Power Limited
Name of the Project	1050 MW Maithon Project

S. No.	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization	Whether earning RoE at the normal rate or at SBI MCLR+350 bps
1	2	3	4	5		7
	2024-25					
1	Laboratory Instruments (Chemical Laboratory)		26.52	2011-12	16.32	
2	Conveyor Belt		159.10	2011-12	97.92	
3	Station Battery Banks		265.16	2011-12	163.20	
4	Upgradation of Mill & Compressor HT Breakers of the main plant		31.82	2011-12	19.58	
5	Upgradation of AHP & CHP HT & LT Breakers		66.29	2011-12	40.80	
6	Testing Equipment for Electrical Equipment		13.26	2011-12	8.16	
7	Replacement of Fire Extinguisher		13.26	2011-12	8.16	
8	Reheater Upgradation		265.16	2011-12	163.20	
9	IT Infrastructure		50.68	2011-12	31.19	
10	Replacement of H2 plant electrolysis module		159.10	2011-12	97.92	
11	Replacement of Fire Tenders		58.02	2011-12	35.71	
12	ESP Internals		208.76	2011-12	128.49	
	Sub-Total		**1317.11**		**810.66**	
	2025-26					
1	Centrifugal Compressors for Ash Plant		734.37	2011-12	451.99	
2	Laboratory Instruments (Chemical Laboratory)		25.25	2011-12	15.54	
3	Conveyor Belt		101.01	2011-12	62.17	
4	Upgradation of Mill & Compressor HT Breakers of the main plant		30.30	2011-12	18.65	
5	Upgradation of AHP & CHP HT & LT Breakers		63.13	2011-12	38.86	
6	Testing Equipment for Electrical Equipment		12.63	2011-12	7.77	
7	Reheater Upgradation		252.53	2011-12	155.43	
8	IT Infrastructure		25.25	2011-12	15.54	
9	Replacement of H2 plant electrolysis module		151.52	2011-12	93.26	
10	ESP Internals		257.58	2011-12	158.54	
	Sub-Total		**1653.59**		**1017.76**	
	2026-27					
1	Centrifugal Compressors for Ash Plant		240.51	2011-12	148.03	
2	Laboratory Instruments (Chemical Laboratory)		31.27	2011-12	19.24	
3	Laboratory Instruments (C & I Laboratory)		24.05	2011-12	14.80	
4	AVR Retrofitting for Unit - 1 &2		120.25	2011-12	74.01	
5	Conveyor Belt		120.25	2011-12	74.01	
6	Upgradation of Mill & Compressor HT Breakers of the main plant		28.86	2011-12	17.76	
7	Upgradation of AHP & CHP HT & LT Breakers		60.13	2011-12	37.01	
8	Testing Equipment for Electrical Equipment		12.03	2011-12	7.40	
9	Reheater Upgradation		240.51	2011-12	148.03	
10	IT Infrastructure		24.05	2011-12	14.80	
11	Replacement of pneumatic actuator and control mechanism		96.20	2011-12	59.21	
12	ESP Internals		144.31	2011-12	88.82	
	Sub-Total		**1142.42**		**703.14**	
	2027-28					
1	Centrifugal compressor and motor for BTG		458.11	2011-12	281.96	
2	Centrifugal Compressors for Ash Plant		458.11	2011-12	281.96	
3	AVR Retrofitting for Unit - 1 &2		114.53	2011-12	70.49	
4	Conveyor Belt		160.34	2011-12	98.69	
5	Retrofitting of Boiler Elevators		45.81	2011-12	28.20	
6	Upgradation of AHP & CHP HT & LT Breakers		57.26	2011-12	35.25	
7	Reheater Upgradation		229.06	2011-12	140.98	
8	IT Infrastructure		22.91	2011-12	14.10	
9	Replacement of pneumatic actuator and control mechanism		91.62	2011-12	56.39	
10	ESP Internals		137.43	2011-12	84.59	
	Sub-Total		**1775.18**		**1092.60**	
	2028-29					
1	Retrofitting of Boiler Elevators		43.63	2011-12	26.85	
2	Upgradation of AHP & CHP HT & LT Breakers		21.81	2011-12	13.43	
3	Reheater Upgradation		218.15	2011-12	134.27	
4	IT Infrastructure		21.81	2011-12	13.43	
	Sub-Total		**305.41**		**187.97**	
	Total		**6193.71**		**3812.14**	



Calculation of Interest on Normative Loan

Form-N

Name of the Petitioner:	Maithon Power Limited
Name of the Project	1050 MW Maithon Project

S. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5		7	8
1	Gross Normative loan – Opening	393777.25	395695.09	400833.90	406704.07	409238.91	421431.99
2	Cumulative repayment of Normative loan up to previous year	264159.04	291150.90	306946.52	323207.24	340336.47	358135.47
3	Net Normative loan – Opening	129618.21	104544.19	93887.38	83496.84	68902.44	63296.51
4	Add: Increase due to addition during the year / period	2974.58	6060.80	7027.69	3334.53	13435.70	1977.50
5	Deletion during the year	1509.63	1317.11	1653.59	1142.42	1775.18	305.41
6	Deletion during the year (70% of de-cap)	1056.74	921.98	1157.51	799.69	1242.63	213.79
7	Less: Decrease due to de-capitalisation during the year / period	781.53	712.23	929.23	668.43	1074.71	191.46
8	Less: Decrease due to reversal during the year / period	0.00					
9	Less: Repayment of Loan	27773.39	16507.85	17189.94	17797.66	18873.71	20066.93
10	**Net Normative loan - Closing**	**104544.19**	**93887.38**	**83496.84**	**68902.44**	**63296.51**	**45184.75**
11	**Average Normative loan**	**117081.20**	**99215.78**	**88692.11**	**76199.64**	**66099.47**	**54240.63**
12	Weighted average rate of interest	8.93%	8.93%	8.93%	8.93%	8.93%	8.93%
13	**Interest on Loan**	**10450.13**	**8855.54**	**7916.25**	**6801.23**	**5899.73**	**4841.27**

	Installed Capacity		1050	1050	1050	1050	1050

Computation of Energy Charges

Name of the Company	Maithon Power Limited	**ADDITIONAL FORM**
Name of the Power Station	1050 MW Maithon Project	**(In Addition to FORM-O)**

Norms

Sr.No.	Description	UoM	2024-25	2025-26	2026-27	2027-28	2028-29
1	**Normative Parameters**						
	Sp. Oil consumption	ml/kwh	0.50	0.50	0.50	0.50	0.50
	Auxiliary consumption	%	5.75%	5.75%	5.75%	5.75%	5.75%
	Heat Rate	Kcal/Kwh	2363	2363	2363	2363	2363
2	**Computation of Variable Charges**						
		Unit					
	Variable Charge (Coal)	Rs/kwh	2.814	2.814	2.814	2.814	2.814
	Variable Charge (Oil)	Rs/kwh	0.033	0.033	0.033	0.033	0.033
	Total	Rs/kwh	2.847	2.847	2.847	2.847	2.847
3	**Wt Avg Price of Fuel of FY 23-24**						
	Coal Cost	(Rs./MT)	4446.76	4446.76	4446.76	4446.76	4446.76
	Oil Cost	(Rs./KL)	61948.38	61948.38	61948.38	61948.38	61948.38
4	**Computation of Fuel Expenses for**						
	Net Generation for the FY	(MU)	7368.75	7368.75	7368.75	7388.94	7368.75
	Variable cost for the FY	(Rs. Lakh)	209775.16	209775.16	209775.16	210349.88	209775.16
5	**Coal**		**Apr'23**	**May'23**	**Jun'23**		**Wt.Avg.**
	Coal Receipt	MT	4,40,778	4,26,052	3,73,098		48,59,619
	Wtd. Avg. Price of Coal	Rs/MT	4,375	4,258	4,215		4,446.76
	Wtd. Avg. GCV of Coal as received	kCal/kg	4,191	4,123	4,144		3,954.99
	Sec. Oil						
	Oil Receipt	KL	147	45	98		904
	Wtd. Avg. Price of Secondary Fuel	Rs/KL	61,632	62,087	62,038		61,948.38
	Wtd. Avg. GCV of Secondary Fuel	kCal/L	9,100	9,100	9,100		9,100.00
	Coal		**Jul'23**	**Aug'23**	**Sep'23**		
	Coal Receipt	MT	2,45,234	3,27,370	4,15,041		
	Wtd. Avg. Price of Coal	Rs/MT	4,032	3,972	4,141		
	Wtd. Avg. GCV of Coal as received	kCal/kg	4,022	4,060	3,991		
	Sec. Oil						
	Oil Receipt	KL	180	73	-		
	Wtd. Avg. Price of Secondary Fuel	Rs/KL	61,486	61,915	61,315		
	Wtd. Avg. GCV of Secondary Fuel	kCal/L	9,101	9,102	9,103		
	Coal		**Oct'23**	**Nov'23**	**Dec'23**		
	Coal Receipt	MT	4,39,705	4,90,935	5,18,029		
	Wtd. Avg. Price of Coal	Rs/MT	4,422	4,676	4,572		
	Wtd. Avg. GCV of Coal as received	kCal/kg	3,908	3,938	3,956		



	Installed Capacity		**1050**	**1050**	**1050**	**1050**	**1050**

Computation of Energy Charges

Name of the Company	Maithon Power Limited	**ADDITIONAL FORM**
Name of the Power Station	1050 MW Maithon Project	**(In Addition to FORM-O)**

Norms

Sr.No.	Description	UoM	2024-25	2025-26	2026-27	2027-28	2028-29
	Sec. Oil						
	Oil Receipt	KL	-	228	-		
	Wtd. Avg. Price of Secondary Fuel	Rs/KL	61,369	62,395	62,390		
	Wtd. Avg. GCV of Secondary Fuel	kCal/L	9,104	9,105	9,106		
	Coal		**Jan'24**	**Feb'24**	**Mar'24**		
	Coal Receipt	MT	3,90,338	3,54,426	4,38,615		
	Wtd. Avg. Price of Coal	Rs/MT	4,663	4,987	4,766		
	Wtd. Avg. GCV of Coal as received	kCal/kg	4,031	4,130	4,042		
	Sec. Oil						
	Oil Receipt	KL	-	-	133		
	Wtd. Avg. Price of Secondary Fuel	Rs/KL	62,309	62,121	62,063		
	Wtd. Avg. GCV of Secondary Fuel	kCal/L	9,107	9,108	9,109		
							PETITIONER





Calculation of Interest on Working Capital

Form-O

Name of the Petitioner:	Maithon Power Limited						
Name of the Project	1050 MW Maithon Project						
S.No.	**Particulars**	**Existing 2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	Cost of Coal/Lignite		28404.59	28404.59	28404.59	28404.59	28404.59
2	Cost of Main Secondary Fuel Oil		403.61	403.61	403.61	403.61	403.61
3	Fuel Cost						
4	Liquid Fuel Stock						
5	Cost of Limestone						
6	O & M Expenses		2750.49	2912.43	3084.13	3267.83	3460.89
7	Maintenance Spares		6601.18	6989.83	7401.90	7842.79	8306.15
8	Receivables		39303.61	39337.06	39659.50	40032.19	40113.54
9	Total Working Capital		77463.47	78047.51	78953.72	79951.01	80688.78
10	Rate of Interest		11.90%	11.90%	11.90%	11.90%	11.90%
11	Interest on Working Capital		9218.15	9287.65	9395.49	9514.17	9601.97



Ash Disposal Expenses for FY25 to FY29

FY ---------->		FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
Gross Generation	Mus	7818.30	7818.30	7818.30	7839.72	7818.30
Sp. Coal Consumption	kg/Kwh	0.583				
Coal Consumption at 85% PLF	MT	4555195	4555195	4555195	4567675	4555195

FY	Consumption Plan MT(As Per 85% PLF)	Ash Generation	Fly Ash & Bottom Ash (Cost effective Utilisation)	FLY Ash (Stowing of Mines)	Bottom Ash (Stowing of Mines)	Lifting from Ash Pond	Closing Stock	Ash Disposal Cost (In Rs. Lakh)	Total Fly ash disposal including moisture	Total bottom ash disposal including moisture	Total Ash Utilization %
FY-25	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	2,07,519.68	6468.9	12,28,417.14	7,02,825.73	101.67
FY-26	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	1,76,155.63	6792.4	12,28,417.14	7,02,825.73	101.67
FY-27	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	1,44,791.57	6792.4	12,28,417.14	7,02,825.73	101.67
FY-28	4567675	1888733	8,37,796	5,41,984	5,56,754	4,30,000	1,14,201.58	7144.2	12,31,782.67	7,04,751.28	101.62
FY-29	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	82,837.53	7129.4	12,28,417.14	7,02,825.73	101.67

Assumptions :

1) Ash Generation Considered at 85% PLF.
2) Ash production is based on 41.35% of coal consumption
3) Ash % in coal has been assumed as 41.35% as an average of FY 20 to FY 24
4) Cost effective Utilization has been taken 56% of Fly ash and 21% of bottom ash
5) Moisture % included in the quantity as Fly Ash -8%, Bottom Ash -33% and Pond Ash -27% based on past data
6) Ash Disposal Rate (Rs/MT) Considered is as per prevailing Rate for FY 24-25 for disposable distance of about 41 km as below:
Ash Disposal rate for Fly Ash - 353, Bottom Ash - 353 and Pond Ash -362 as per prevailing rate for FY 24-25 and with price escallation of 5% at every 2 year starting from FY 25-26.
7) Cost effective Disposal considered as an average rate of Rs 125/Mt as per prevailing rate for FY 24-25 and with price escallation of 5% at every 2 year starting from FY 25-26
8) Opening Pond Ash stock as on 1.4.2024 = 238884/0.73=327238 MT



Ash Disposal Expenses with Additional Capital Expenditure proposed FY25 to FY29

FY ---------->		FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
Gross Generation at B	Mus	7818.30	7818.300	7818.300	7839.720	7818.300
Sp. Coal Consumptio	kg/Kwh	0.583				
Coal Consumption	MT	4555195	4555195	4555195	4567675	4555195

FY	Consumption Plan MT	Ash Generation	Fly Ash & Bottom Ash (Cost effective Utilisation)	FLY Ash (Stowing of Mines)	Bottom Ash (Stowing of Mines)	Lifting from Ash Pond	Closing Stock	Ash Disposal Cost (In Rs. Lakh)	Total Fly ash disposal including moisture	Total bottom ash disposal including moisture	Total Ash Utilization %	Difference between Original and Add cap_ash wharf (In Rs Lacs)
FY-25	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	2,07,519.68	5873.9	12,28,417.14	7,02,825.73	101.67	595.0
FY-26	4555195	1883573	9,12,757	4,91,367	5,27,119	4,30,000	1,76,155.63	6254.6	12,28,417.14	7,02,825.73	101.67	537.8
FY-27	4555195	1883573	9,12,757	4,91,367	5,27,119	4,30,000	1,44,791.57	6254.6	12,28,417.14	7,02,825.73	101.67	537.8
FY-28	4567675	1888733	9,15,257	4,92,713	5,28,563	4,30,000	1,14,201.58	6578.6	12,31,782.67	7,04,751.28	101.62	565.6
FY-29	4555195	1883573	10,09,319	4,29,946	4,91,978	4,30,000	82,837.53	5477.4	12,28,417.14	7,02,825.73	101.67	1652.0

Assumptions :

1) Ash Generation Considered at 85% PLF.
2) Ash production is based on 41.35% of coal consumption
3) Ash % in coal has been assumed as 41.35% as an average of FY 20 to FY 24
4) Cost effective Utilization has been taken as below considering the additional capitalisation of Ash Wharf in FY 24-25 and Ash Silos in FY29:

	Of 80% Fly Ash	Bottom Ash
FY 25	56%	21%
FY 26	60%	25%
FY 27	60%	25%
FY 28	60%	25%
FY 29	65%	30%

Balance of Fly Ash and Bottom Ash is being disposed off for filling Void mines and low lying areas to meet 100% ash utilisation target

5) Moisture % included in the quantity as Fly Ash -8%, Bottom Ash -33% and Pond Ash -27% based on past data
6) Ash Disposal Rate (Rs/MT) Considered is as per prevailing Rate for FY 24-25 for disposable distance of about 41 km as below:

Ash Disposal rate for Fly Ash - 353, Bottom Ash - 353 and Pond Ash -362 as per prevailing rate for FY 24-25 and with price escallation of 5% at every 2 year starting from FY 25-26.

7) Opening Pond Ash stock as on 1.4.2024 = 238884/0.73=327238 MT
8) Rake Handling Charges is considered at rate of Rs 168.93/Mt for pond Ash and Rs. 153/Mt for FLY Ash as per prevailing rate for FY 24-25 and with price escallation of 5% at every 2 year starting from FY 25-26

9) Subsidy of Rs. 100/Mt and Revenue of Rs. 110/Mt has been considered for offtake of Pond Ash and Fly Ash respectively in Rake mode as per prevailing rate for FY 24-25.

10)With commissioning of Ash Silos for loading, the net rate of disposal of FLY Ash in Rake mode has been considered as -Rs 50/Mt from FY 2028-29 onwards



S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

INDEPENDENT AUDITOR'S REPORT

To the Members of Maithon Power Limited

Report on the Audit of the Ind AS Financial Statements

Opinion

We have audited the accompanying Ind AS financial statements of Maithon Power Limited ("the Company"), which comprise the Balance sheet as at March 31 2020, the Statement of Profit and Loss, including the statement of Other Comprehensive Income, the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and notes to the Ind AS financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid Ind AS financial statements give the information required by the Companies Act, 2013, as amended ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2020, its profit including other comprehensive income, its cash flows and the changes in equity for the year ended on that date.

Basis for Opinion

We conducted our audit of the Ind AS financial statements in accordance with the Standards on Auditing (SAs), as specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Ind AS Financial Statements' section of our report. We are independent of the Company in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Ind AS financial statements.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Ind AS financial statements for the financial year ended March 31, 2020. These matters were addressed in the context of our audit of the Ind AS financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have determined the matters described below to be the key audit matters to be communicated in our report. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the Ind AS financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the Ind AS financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying Ind AS financial statements.

S.R. Batliboi & Co. LLP Kolkata

Key audit matters	How our audit addressed the key audit matter
Accrual of Recoverable from Beneficiaries/Payable to Beneficiaries for items which are subject matter of true up in tariff orders *(as described in note 10 and note 21 of the Ind AS financial statements)*	
The Company's revenue recognition is guided by the tariff norms prescribed by the Central Electricity Regulatory Commission (CERC) guidelines and the tariff orders passed based on these regulations. Consequently, Recoverable from Beneficiaries/Payable to Beneficiaries is recognized for items which are subject matter of true up in tariff orders to be notified in future years. Judgement is exercised by management in estimating recoverability / payability of such other assets and liabilities in the books. As on 31st March 2020, the Company is carrying an amount of Rs. 135.20 crores as Payable to Beneficiaries (Net of Recoverable from Beneficiaries of Rs 200.06 crores) which is material to the financial statements of the Company. Considering the judgements involved in the estimates of various elements of capital and operational costs used in the computation of revenue as per applicable regulations and the amount involved we have determined this to be a key audit matter.	Following procedures have been performed to address this key audit matter:- 1. We have tested the design and operating effectiveness of key controls related to the valuation and recoverability of such Recoverable from Beneficiaries/Payable to Beneficiaries. 2. We have evaluated the estimation by management of recognition of these Recoverable from Beneficiaries/Payable to Beneficiaries with reference to Tariff Regulations and the tariff orders of earlier years on similar matters and also the underlying records of the Company. 3. We also evaluated the True-up orders passed by CERC during the year on certain balances of Recoverable from Beneficiaries/Payable to Beneficiaries to determine the consistency and appropriateness of principles applied by the Company in determining and measuring these Other assets and liabilities. 4. We discussed with management to understand their assessment on each of the qualitative factors and ensured consistency of the management's explanation with the underlying documentation, rules and regulations. 5. We have re-calculated the workings obtained from the management to check the arithmetical accuracy of the calculations. 6. We have also checked the adequacy of the disclosure on these matters in the financial statements of the Company.
Recoverability of MAT Credit Entitlement in future *(as described in note 20d of the Ind AS financial statements)*	
The Company does not have taxable income owing to unabsorbed depreciation and benefits of section 80IA of Income Tax Act, 1961 and therefore it has been paying. Minimum Alternate Tax (MAT) under the relevant provisions of the Income Tax Act, 1961. The Act also provides that	Following procedures have been performed to address this key audit matter:- 1. We have tested the design and operating effectiveness of key controls related to the computation and recognition of such MAT credit. 2. We have assessed the methodology applied by the Company with current accounting standards and

S.R. Batliboi & Co. LLP Kolkata

Key audit matters	How our audit addressed the key audit matter
such MAT paid can be carried forward (MAT credit entitlement) for set off against regular tax payable in subsequent fifteen years period. Such MAT credit entitlements are recognized when it is probable that normal taxable profit will be available against which these MAT credits can be utilized. The Company's ability to recognize these MAT credit assets is assessed by management at the end of each reporting period, taking into account forecasts of future taxable profits and the law and jurisdiction of the land in force. The assumptions on these projections are determined by management. At March 31, 2020, MAT credit entitlement recognized in the Company's financial statements amounts to Rs. 369.39 crores. Given the degree of judgment involved in making a forecast of the profitability of the Company and the materiality of the amounts involved, we considered this to be a key audit matter.	applicable taxation laws along with the future business forecast of taxable profits. 3. We have assessed the likelihood of the Company to utilize the available MAT credit entitlements in the future with underlying projections and assumptions relating to future estimated profits, future capitalization and depreciation allowance thereon and future estimates of taxable income. 4. We have tested the arithmetical accuracy of the future taxability workings prepared by the management. We have also checked the adequacy of the disclosure on these matters in the financial statements of the Company.

We have determined that there are no other key audit matters to communicate in our report.

Information Other than the Financial Statements and Auditor's Report Thereon

The Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Annual report, but does not include the Ind AS financial statements and our auditor's report thereon.

Our opinion on the Ind AS financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Ind AS financial statements, our responsibility is to read the other information and, in doing so, consider whether such other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

S R Batliboi & Co. LLP Kolkata

Responsibilities of Management for the Ind AS Financial Statements

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation of these Ind AS financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act read with the Companies (Indian Accounting Standards) Rules, 2015, as amended. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the Ind AS financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those Board of Directors are also responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Ind AS Financial Statements

Our objectives are to obtain reasonable assurance about whether the Ind AS financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Ind AS financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Ind AS financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

S R Batliboi & Co. LLP Kolkata

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Ind AS financial statements, including the disclosures, and whether the Ind AS financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the Ind AS financial statements for the financial year ended March 31, 2020 and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2016 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the "Annexure 1" a statement on the matters specified in paragraphs 3 and 4 of the Order.
2. As required by Section 143(3) of the Act, we report that:

   (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

   (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books;

   (c) The Balance Sheet, the Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account;

   (d) In our opinion, the aforesaid Ind AS financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;

S.R. Batliboi & Co. LLP Kolkata

(e) On the basis of the written representations received from the directors as on March 31, 2020 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2020 from being appointed as a director in terms of Section 164 (2) of the Act;

(f) With respect to the adequacy of the internal financial controls over financial reporting of the Company with reference to these Ind AS financial statements and the operating effectiveness of such controls, refer to our separate Report in "Annexure 2" to this report;

(g) In our opinion, the managerial remuneration for the year ended March 31, 2020 has been paid / provided by the Company to its directors in accordance with the provisions of section 197 read with Schedule V to the Act;

(h) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended in our opinion and to the best of our information and according to the explanations given to us:

i. The Company has disclosed the impact of pending litigations on its financial position in its Ind AS financial statements - Refer Note 32 to the Ind AS financial statements;

ii. The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses;

iii. There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Kamal Agarwal
Partner
Membership Number: 058652
UDIN: 20058652AAAAAO1731
Place of Signature: Kolkata
Date: April 27, 2020

S.R. Batliboi & Co. LLP Kolkata

S.R. BATLIBOI & CO. LLP
Chartered Accountants

"ANNEXURE 1" TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE FINANCIAL STATEMENTS OF MAITHON POWER LIMTED

(i)

(a) The Company has maintained proper records showing full particulars, including quantitative details and situation of fixed assets.

(b) All fixed assets have not been physically verified by the management during the year but there is a regular programme of verification which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. No material discrepancies were noticed on such verification.

(c) According to the information and explanation given to us and the records examined by us and based on the examination of the registered sale deed/transfer deed/conveyance deed provided to us, we report that, the title deeds, comprising of all the immovable properties of land which are freehold, are in the name of the Company as at the balance sheet date, except the following:

Type of Land	Area	Amount in crores	Remarks
Raiyati Land (Free hold) located at Maithon, Jharkhand.	564.67 acres	159.80	The title deed to the Private land is in the name of Damodar Valley Corporation (DVC). Pending transfer of title as per the shareholders agreement, the Company had entered into an Indenture deed with DVC on 5 December, 2008, which provided inter-alia, lease of private land for a period of 35 years (and extendable for another 35 years at the option of the Company).
Railway Land (Freehold Land) located at Maithon, Jharkhand.	66.74 acres	137.12	The title deed to the Private land is in the name of Damodar Valley Corporation (DVC). As required by the shareholders agreement, DVC is in the process of transferring title in these lands in favour of the Company as per applicable laws of the State of Jharkhand.

Further, the Company is also in possession of leasehold land amounting to Rs. 69.09 crores, the original title deeds whereof could not be verified by us in view of nationwide lockdown consequent to the Coronavirus pandemic, and hence we are unable to comment upon the same.

(ii) The management has conducted physical verification of inventory at reasonable intervals during the year and no material discrepancies were noticed on such physical verification.

S.R. Batliboi & Co. LLP Kolkata

(iii) According to the information and explanations given to us, the Company has not granted any loans, secured or unsecured to Companies, firms, Limited Liability Partnerships or other parties covered in the register maintained under section 189 of the Companies Act, 2013. Accordingly, the provisions of clause 3(iii)(a), (b) and (c) of the Order are not applicable to the Company and hence not commented upon.

(iv) In our opinion and according to the information and explanations given to us, there are no loans, investments, guarantees, and securities given in respect of which provisions of section 185 and 186 of the Companies Act 2013 are applicable and hence not commented upon.

(v) According to the information and explanation given to us the Company has not accepted any deposits within the meaning of Sections 73 to 76 of the Act and the Companies (Acceptance of Deposits) Rules, 2014 (as amended). Accordingly, the provisions of clause 3(v) of the Order are not applicable.

(vi) We have broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section 148(1) of the Companies Act, 2013, related to the generation of electricity, and are of the opinion that prima facie, the specified accounts and records have been made and maintained. We have not, however, made a detailed examination of the same.

(vii)

(a) The Company is regular in depositing with appropriate authorities undisputed statutory dues including provident fund, employees' state insurance, income-tax, sales-tax, service tax, duty of custom, duty of excise, value added tax, goods and service tax, cess and other statutory dues applicable to it.

(b) According to the information and explanations given to us, no undisputed amounts payable in respect of provident fund, employees' state insurance, income-tax, service tax, sales-tax, duty of custom, duty of excise, value added tax, goods and service tax, cess and other statutory dues were outstanding, at the year end, for a period of more than six months from the date they became payable.

(c) According to the information and explanations given to us, there are no dues of income tax, sales-tax, service tax, customs duty, excise duty, value added tax , goods and service tax and cess which have not been deposited on account of any dispute.

(viii) In our opinion and according to the information and explanations given to us by the management, the Company has not defaulted in repayment of loans or borrowing to a financial institution, bank or government or dues to debenture holders. The Company did not have any outstanding loans or borrowing in respect of financial institution and government.

(ix) According to the information and explanations given by the management, the Company has not raised any money by way of initial public offer / further public offer / debt instruments. The term loan have been applied for the purpose for which they were raised.

(x) Based upon the audit procedures performed for the purpose of reporting the true and fair view of the financial statements and according to the information and explanations given by

S.R. Batliboi & Co. LLP Kolkata

the management, we report that no fraud by the company or no fraud / material fraud on the Company by the officers and employees of the Company has been noticed or reported during the year.

(xi) According to the information and explanations given by the management, the managerial remuneration has been paid / provided in accordance with the requisite approvals mandated by the provisions of section 197 read with Schedule V to the Companies Act, 2013.

(xii) In our opinion, the Company is not a Nidhi company. Therefore, the provisions of clause 3(xii) of the order are not applicable to the Company and hence not commented upon.

(xiii) According to the information and explanations given by the management, transactions with the related parties are in compliance with section 177 and 188 of Companies Act, 2013 where applicable and the details have been disclosed in the notes to the financial statements, as required by the applicable accounting standards.

(xiv) According to the information and explanations given to us and on an overall examination of the balance sheet, the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review and hence, reporting requirements under clause 3(xiv) are not applicable to the company and, not commented upon.

(xv) According to the information and explanations given by the management, the Company has not entered into any non-cash transactions with directors or persons connected with him as referred to in section 192 of Companies Act, 2013.

(xvi) According to the information and explanations given to us, the provisions of section 45-IA of the Reserve Bank of India Act, 1934 are not applicable to the Company.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Kamal Agarwal
Partner
Membership Number: 058652
Place of Signature: Kolkata
Date: April 27, 2020

S R Batliboi & Co. LLP Kolkata

S.R. BATLIBOI & CO. LLP
Chartered Accountants

ANNEXURE 2 TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE IND AS FINANCIAL STATEMENTS OF MAITHON POWER LIMTED

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of Maithon Power Limited ("the Company") as of March 31, 2020 in conjunction with our audit of the Ind AS financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's Management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India. These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditor's Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting with reference to these Ind AS financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing as specified under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting with reference to these Ind AS financial statements was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls over financial reporting with reference to these Ind AS financial statements and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting with reference to these Ind AS financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the internal financial controls over financial reporting with reference to these Ind AS financial statements.

S R Batliboi & Co. LLP Kolkata

Meaning of Internal Financial Controls Over Financial Reporting With Reference to these Financial Statements

A Company's internal financial control over financial reporting with reference to these Ind AS financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting with reference to these Ind AS financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls Over Financial Reporting With Reference to these Ind AS Financial Statements

Because of the inherent limitations of internal financial controls over financial reporting with reference to these Ind AS financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting with reference to these Ind AS financial statements to future periods are subject to the risk that the internal financial control over financial reporting with reference to these Ind AS financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, adequate internal financial controls over financial reporting with reference to these Ind AS financial statements and such internal financial controls over financial reporting with reference to these Ind AS financial statements were operating effectively as at March 31, 2020, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

S.R. Batliboi & Co. LLP Kolkata

per Kamal Agarwal
Partner
Membership Number: 058652
Place of Signature: Kolkata
Date: April 27, 2020

MAITHON POWER LIMITED
Balance Sheet as at 31st March,2020

	Notes	As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
Assets			
Non-current Assets			
(a) Property, Plant and Equipment	5	3,217.73	3,337.16
(b) Capital Work-in-Progress		476.39	360.28
(c) Intangible Assets	6	0.37	0.49
(d) Financial Assets			
(i) Loans	7	0.19	0.25
(ii) Other Financial Assets	8	0.41	0.34
(e) Non-current Tax Assets (Net)	9	7.66	9.75
(f) Other Non-current Assets	10	38.46	104.51
Total Non-current Assets		3,741.21	3,812.78
Current Assets			
(a) Inventories	11	205.49	218.47
(b) Financial Assets			
(i) Loans	7	0.02	0.02
(ii) Investments	12	166.33	-
(iii) Trade Receivables	13	217.71	362.99
(iv) Unbilled Revenue		31.77	98.79
(v) Cash and Cash Equivalents	14	84.65	0.10
(c) Other Current Assets	10	154.27	367.13
Total Current Assets		860.24	1,047.50
Total Assets		**4,601.45**	**4,860.28**
Equity and Liabilities			
Equity			
(a) Equity Share Capital	15	1,508.92	1,508.92
(b) Other Equity	16	559.51	571.69
Total Equity		2,068.43	2,080.61
Liabilities			
Non-current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	17	1,247.03	1,759.54
(ii) Other Financial Liabilities	18	11.88	9.29
(b) Long Term Provisions	19	8.76	5.20
(c) Deferred Tax Liabilities (Net)	20	52.60	14.34
(d) Other Non-current Liabilities	21	16.97	16.97
Total Non-current Liabilities		1,337.24	1,805.34
Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	22	15.00	460.98
(ii) Trade Payables			
(a) Total outstanding dues of micro enterprises and small enterprises	23	0.24	0.37
(b) Total outstanding dues of creditors other than micro enterprises and small enterprises		168.96	161.43
(iii) Other Financial Liabilities	18	868.27	311.96
(b) Provisions	19	0.37	5.35
(c) Current Tax Liabilities (Net)	9	1.18	12.59
(d) Other Current Liabilities	21	141.76	21.65
Total Current Liabilities		1,195.78	974.33
Total Liabilities		2,533.02	2,779.67
Total Equity and Liabilities		**4,601.45**	**4,860.28**

See accompanying notes to the Ind AS Financial Statements 1-41

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: **301003E/E300005**

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 27 APR 2020

For and on behalf of the Board,

Ramesh Subramanyam
Chairman
Place: Mumbai
Date: 27th Apr, 2020

Suvamay Halder
Director
Place: Kolkata
Date:

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date:

Satish Kumar
Chief Financial Officer
Place: Dhanbad
Date:

Poonam Shirke
Company Secretary
Place: Mumbai
Date:

MAITHON POWER LIMITED

Statement of Profit and Loss for the year ended 31st March,2020

	Notes	For Year ended 31st March,2020 ₹ Crores	For Year ended 31st March,2019 ₹ Crores
(I) Revenue from Operations	24	2,741.17	2,776.05
(II) Other Income	25	28.33	65.05
(III) Total Income		**2,769.50**	**2,841.10**
(IV) Expenses			
Cost of Power Purchased		1.78	1.40
Cost of Fuel Consumed		1575.51	1769.85
Employee Benefits Expense	26	40.80	41.18
Depreciation and Amortisation Expenses	27	243.81	238.24
Finance Costs	28	193.11	204.85
Other Expenses	29	257.83	226.86
Total Expenses		**2,312.84**	**2,482.38**
(V) Profit Before Tax		**456.66**	**358.72**
(VI) Tax Expense			
Current Tax		80.13	77.78
Adjustment of tax relating to earlier period		0.45	0.02
Deferred Tax		38.26	8.03
Income Tax Expense	30	**118.84**	**85.83**
(VII) Profit For The Year		**337.82**	**272.89**
(VIII) Other Comprehensive Income			
Add/(Less):			
(i) Items that will not be reclassified to profit and loss		0.00 *	*(0.48)*
(a) Remeasurement of the Defined Benefit Plans		0.00 *	(0.48)
(ii) Tax relating to items that will not be reclassified to Profit & Loss		0.00 *	0.17
(a) Current Tax		0.00 *	0.17
Total Other Comprehensive Income (Net of taxes)		0.00 *	(0.31)
(IX) Total Comprehensive Income for the year		**337.82**	**272.58**
(X) Earnings Per Equity Share (Face Value ₹ 10/- Per Share)	33		
(i) Basic (₹)		2.24	1.81
(ii) Diluted (₹)		2.24	1.81

* Amount is lesser than the rounding off norms followed by the Company.

See accompanying notes to the Ind AS Financial Statements 1-41

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 27 APR 2020

For and on behalf of the Board,

Ramesh Subramanyam
Chairman
Place: Mumbai
Date: 27th Apr, 2020

Suvamay Halder
Director
Place: Kolkata
Date:

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date:

Satish Kumar
Chief Financial Officer
Place: Dhanbad
Date:

Poonam Shirke
Company Secretary
Place: Mumbai
Date:

MAITHON POWER LIMITED

Statement of Changes in Equity for the year ended 31st March,2020

A. Equity Share Capital

		₹ Crores
Equity Shares of ₹ 10 each issued, subscribed and fully paid	No. of Shares	Amount
Balance as at 1st April,2018	1,50,89,17,729	1,508.92
Balance as at 31st March,2019	1,50,89,17,729	1,508.92
Balance as at 1st April,2019	1,50,89,17,729	1,508.92
Balance as at 31st March,2020	1,50,89,17,729	1,508.92

B. Other Equity

			₹ Crores
	Reserves and Surplus		
	Debenture Redemption Reserve	Retained Earnings	Total
Balance as at 1st April,2018	**60.56**	**413.55**	**474.11**
Profit for the year	-	272.89	272.89
Other Comprehensive Income for the year (Net of Tax)	-	(0.31)	(0.31)
Total Comprehensive Income	**-**	**272.58**	**272.58**
Dividend paid	-	(145.16)	(145.16)
Dividend Distribution Tax	-	(29.84)	(29.84)
Transfer to Debenture Redemption Reserve	34.20	(34.20)	-
	34.20	**(209.20)**	**(175.00)**
Balance as at 31st March,2019	**94.76**	**476.93**	**571.69**
Balance as at 1st April,2019	**94.76**	**476.93**	**571.69**
Profit for the year	-	337.82	337.82
Other Comprehensive Income for the year (Net of Tax)	-	0.00 *	0.00
Total Comprehensive Income	**-**	**337.82**	**337.82**
Dividend paid	-	(290.32)	(290.32)
Dividend Distribution Tax	-	(59.68)	(59.68)
Transfer to Debenture Redemption Reserve	34.29	(34.29)	-
	34.29	**(384.29)**	**(350.00)**
Balance as at 31st March,2020	**129.05**	**430.46**	**559.51**

* Amount is lesser than the rounding off norms followed by the Company

See accompanying notes to the Ind AS Financial Statements

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 27 APR 2020

S.R. Batliboi & Co. LLP Kolkata

For and on behalf of the Board,

Ramesh Subramanyam
Chairman
Place: Mumbai
Date:

Suvamay Halder
Director
Place: Kolkata
Date:

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date:

Satish Kumar
Chief Financial Officer
Place: Dhanbad
Date:

Poonam Shirke
Company Secretary
Place: Mumbai
Date:

MAITHON POWER LTD.

MAITHON POWER LIMITED
Statement of Cash Flows For Year ended 31st March,2020

Particulars	For Year ended 31st March,2020 ₹ Crores	For Year ended 31st March,2019 ₹ Crores
A. Cash Flow from Operating Activities		
Profit before Taxes	**456.66**	**358.72**
Adjustments to reconcile profit before tax to net cash flows		
Depreciation and Amortisation Expenses	243.81	238.24
Finance Costs	193.11	204.85
Interest Income	(0.14)	(0.26)
Amortization of Leasehold Land	-	6.01
Late Payment Surcharge	(20.79)	(58.64)
(Gain) / Loss on disposal of Property, Plant and Equipment (Net)	(0.04)	0.03
Profit on sale of Investments (Net)	(4.34)	(3.72)
Operating Profit before Working Capital Changes	**868.27**	**745.23**
Working Capital Adjustments		
Trade Receivable	145.28	(99.36)
Unbilled Revenue	67.02	(58.60)
Inventories	12.97	(108.69)
Other Current Assets	208.69	(155.03)
Other Non-Current Assets	-	(16.74)
Other Non Current Financial Assets	(0.01)	(0.04)
Trade Payables	7.40	10.47
Other Current Liabilities	138.01	(2.29)
Other Financial current liabilities	(0.43)	(313.19)
Short-term provisions	(4.99)	3.67
Long-term provisions	3.56	(2.16)
Cash Generated from Operations	**1,445.77**	**3.29**
Income Taxes Paid	(89.89)	(64.67)
Net Cash flow from/(used) in Operating Activities	**1,355.88**	**(61.39)**
B. Cash Flow from Investing Activities		
Capital expenditure on Property, Plant and Equipment, including capital advances	(154.64)	(126.54)
Proceeds from sale of Property, Plant and Equipment	0.05	0.04
Purchase of Current Investments	(2,309.53)	(2,195.96)
Proceeds from sale of Current Investments	2,147.54	2,298.23
Interest Received	0.14	0.26
Late Payment Surcharge received	20.79	58.64
Net Cash used in Investing Activities	**(295.65)**	**34.67**
C. Cash Flow from Financing Activities		
Repayment of Non Current Borrowings	(141.10)	(188.14)
Proceeds from Non Current Borrowings	250.00	-
Proceeds from Current Borrowings	2,478.80	2,222.09
Repayment of Current Borrowings	(2,924.78)	(1,789.15)
Interest Paid	(183.60)	(198.09)
Dividend Paid	(377.42)	(58.00)
Dividend Distribution Tax	(77.58)	(12.00)
Net Cash from Financing Activities	**(975.68)**	**(23.28)**
Net (Decrease)/Increase in Cash and Cash Equivalents	84.55	(49.99)
Cash and Cash Equivalents as at 1st April, 2019 (Opening Balance)	0.10	50.09
Cash and Cash Equivalents as at 31st March,2020	**84.65**	**0.10**

S. Ballibai & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED

Statement of Cash Flows For Year ended 31st March,2020

Cash and Cash Equivalents Include:

	As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
(i) Balances with banks in Current Accounts	84.65	0.10
	84.65	0.10

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 27 APR 2020

S.R. Batliboi & Co. LLP Kolkata

For and on behalf of the Board,

Ramesh Subramanyam
Chairman
Place: Mumbai
Date: 27th Apr, 2020

Suvamay Halder
Director
Place: Kolkata
Date:

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date:

Satish Kumar
Chief Financial Officer
Place: Dhanbad
Date:

Poonam Shirke
Company Secretary
Place: Mumbai
Date:

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March,2020

1. Corporate Information

MAITHON POWER LIMITED ('the Company'), has been set up pursuant to an agreement entered into between The Tata Power Company Limited (TPCL) and Damodar Valley Corporation (DVC) with 74% and 26% shareholding respectively, to operate and maintain Electric power generating stations. The Company has set up a thermal power generation plant (comprising of two units of 525 MW each namely 'Unit I and Unit II') at Maithon, Jharkhand with a total capacity of 1050 MW. Unit I and Unit II of the project were commissioned on 1 September, 2011 and 24 July, 2012 respectively. The registered office of the Company is Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400009, Maharashtra, India.

The financial statements have been approved for issue in accordance with a resolution of the directors on 27th April, 2020

2. Significant Accounting Policies

2.1 Basis of preparation and presentation

The financial statements of the Company have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 (as amended from time to time) and presentation requirements of Division II of Schedule III to the Companies Act, 2013, (Ind AS compliant Schedule III).

The financial statements have been prepared on a historical cost basis except for certain financial assets and liabilities measured at fair value (refer accounting policy regarding financial instruments)

Accounting Policy are consistent with earlier years unless stated otherwise.

3. Summary of Significant Accounting Policies

3.1 Leases

At inception of contract, the Company assesses whether the Contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. At inception or on reassessment of a contract that contains a lease component, the Company allocates consideration in the contract to each lease component on the basis of their relative stand alone price.

Company as a lessee

i) Right - of - use - assets

The Company recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, lease payments made at or before the commencement date less any lease incentives received and estimate of costs to dismantle. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

- Land: 05 to 35 years

The right-of-use assets are also subject to impairment in accordance with Ind AS 36 "Impairment of assets". The Company presents right-of-use assets that do not meet the definition of investment property in 'Property, plant and equipment'.

ii) Lease Liabilities

At the commencement date of the lease, the Company recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. In calculating the present value of lease payments, the Company uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable.

After the commencement date , the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. The carrying amount is remeasured when there is a change in future lease payments arising from a change in index or rate. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset. The Company's lease liabilities are included in Interest-bearing loans and borrowings.

iii) Short term leases and leases of low value of assets

The Company applies the short-term lease recognition exemption to its short-term leases (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption that are considered to be low value. Lease payments on short-term leases and leases of low value assets are recognised as expense on a straight-line basis over the lease term.

As a lessor

Leases in which the company does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms. Contingent rents are recognised as revenue in the period in which they are earned.

3.2 Foreign Currencies

The functional currency of the Company is Indian rupee (₹)

Income and expenses in foreign currencies are recorded at exchange rates prevailing on the date of the transaction. Foreign currency denominated monetary assets and liabilities are translated at the exchange rate prevailing on the balance sheet date and exchange gains and losses arising on settlement and restatement are recognized in the statement of profit and loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognised in OCI or profit or loss are also recognised in OCI or profit or loss, respectively).

Exchange differences on monetary items are recognized in profit or loss in the period in which they arise except for exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

3.3 Current Vs Non Current

The Company presents assets and liabilities in the balance sheet based on current/ non-current classification. An asset is treated as current when it is:

- Expected to be realised or intended to be sold or consumed in normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realised within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is treated as current when :

- it is expected to be settled in normal operating cycle,
- it is held primarily for the purpose of trading,
- it is due to be settled within twelve months after the reporting period, or
- there is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period.

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The Company has identified twelve months as its operating cycle.

3.4 Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in statement of profit and loss.

3.5 Financial Assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace. Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss. The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them.

3.5.1 Financial assets at amortised cost

A 'financial asset' is measured at the amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and

b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. The EIR amortisation is included in finance income in the profit or loss.

3.5.2 Financial assets at fair value through other comprehensive income(FVTOCI)

A 'financial asset' is classified as at the FVTOCI if both of the following criteria are met:

a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset's contractual cash flows represent SPPI.

On initial recognition, the Company makes an irrevocable election on an instrument-by-instrument basis to present the subsequent changes in fair value in other comprehensive income pertaining to investments in equity instruments, other than equity instruments which are held for trading. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instruments through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on sale of the investments.

3.5.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Company irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading.

Other financial assets are measured at fair value through profit or loss unless it is measured at amortised cost or at fair value through other comprehensive income on initial recognition. The transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognized in statement of profit or loss.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

3.5.4 Derecognition of Financial Assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the Company's balance sheet) when:

i) the right to receive cash flows from the asset have expired, or
ii) the Company has transferred its right to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its right to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Company continues to recognise the transferred asset to the extent of the Company's continuing involvement. In that case, the Company also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

3.5.5 Impairment of financial assets

The Company assesses at each date of balance sheet whether a financial asset or a group of financial assets is impaired. Ind AS 109 requires expected credit losses to be measured through a loss allowance. The Company recognises lifetime expected losses for all contract assets and / or all trade receivables that do not constitute a financing transaction. For all other financial assets, expected credit losses are measured at an amount equal to the 12 month expected credit losses or at an amount equal to the life time expected credit losses if the credit risk on the financial asset has increased significantly since initial recognition.

3.6 Financial Liabilities

All financial liabilities are recognised initially at fair value and in case of loans and borrowings and payables, net of directly attributable transaction cost.
For purposes of subsequent measurement, financial liabilities are classified in two categories:
a) Financial liabilities at fair value through profit or loss
b) Financial liabilities at amortised cost (loans and borrowings)

3.6.1 Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Gains or losses on liabilities held for trading are recognised in the profit or loss. The Company has not designated any financial liability as at fair value through profit or loss.

3.6.2 Financial liabilities at amortised cost (Loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process. The EIR amortisation is included as finance costs in the statement of profit and loss.

3.6.3 Derecognition of Financial Liabilities

A Financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified , such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability . The difference in the respective carrying amounts is recognised in the statement of profit and loss.

3.7 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

3.8 Dividend Distribution to equity shareholders of the Company

The Company recognises a liability to make dividend distributions to its equity holders when the distribution is authorised and the distribution is no longer at the discretion of the Company . As per the corporate laws in India, a distribution is authorised when it is approved by the shareholders. A corresponding amount is recognised directly in equity.
In case of Interim Dividend, the liability is recognised on its declaration by the Board of Directors.

3.9 Critical accounting estimates and judgements

In the application of the Company's accounting policies, the management of the Company is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods. Detailed information about each of these estimates and judgements is included in relevant notes together with information about the basis of calculation for each affected line item in the financial statements.
The areas involving critical estimates or judgements are:

a) Estimation of current tax and deferred tax expense (including Minimum alternate tax credit) - Note 20 and Note 30
b) Recoverable from Beneficiaries / Payable to Beneficiaries - Note 10 and Note 21
c) Estimation on recoverability of Late Payment Surcharge (LPS) – Note 252
d) Estimation of defined benefit obligations- Note 19
e) Judgement to estimate the amount of provision required or to determine required disclosure related to litigation and claims against the Company - Note 32.

Estimates and judgement are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the Company and that are believed to be reasonable under the circumstances.

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

4. Changes in accounting policies and disclosure

Ind AS 116 Leases.

Ind AS 116 Leases was notified in March 2019 and it replaced Ind AS 17 Leases. Ind AS 116 is effective for annual periods beginning on or after April 1, 2019. The Company has adopted Ind AS 116 'Leases' with a date of initial application of April 1, 2019 using modified retrospective approach, under which the cumulative effect of initial application is recognized as at April 1, 2019.

Lessor accounting under Ind AS 116 is substantially unchanged from Ind AS 17. Lessors will continue to classify leases as either operating or finance leases using similar principles as in Ind AS 17. As a lessee, the Company previously classified leases as operating or finance lease based on its assessment of whether the lease transferred significantly all of the risk and rewards incidental to the ownership of the underlying asset of the Company.

On adoption of Ind AS 116, the Company has reclassified unamortised premium for Leasehold Land as 'Right-of-use' assets amounting to ₹ 73.31 crore (adjusted by the prepaid lease payments amounting to ₹ 73.31 crore) and 'Lease liabilities' amounting to ₹ Nil , as at April 1, 2019. There is no impact on retained earnings as at April 1, 2019. (Refer note 5B)

5. Property, Plant and Equipment

5.1 Accounting Policy

Property, plant and equipment is stated at cost less accumulated depreciation and accumulated impairment losses, if any. Cost includes purchase price (net of trade discount and rebates) and any directly attributable cost of bringing the asset to its working condition for its intended use and for qualifying assets, borrowing costs capitalised in accordance with Ind AS 23. Capital work in progress is stated at cost, net of accumulated impairment loss, if any. Other Indirect Expenses incurred relating to project, net of income earned during the project development stage prior to its intended use, are considered as pre-operative expenses and disclosed under Capital Work-in-Progress. When significant parts of plant and equipment are required to be replaced at intervals, the Company depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in the statement of profit and loss as incurred.

5.2 **Subsequent Cost**

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably. All other repair and maintenance costs are recognized in profit or loss as incurred.

5.3 **Depreciation**

Depreciation commences when the assets are ready for the intended use.

Depreciation on property, plant and equipment in respect of electricity business of the Company is covered under Part B of Schedule II of the Companies Act, 2013, has been provided on the straight line method at the rates using the methodology required by relevant provisions of Central Electricity Regulatory Commission.

Depreciation on all other assets is recognised on the cost of assets (other than freehold land) less their residual values over their estimated useful lives, using the straight-line method

5.5 **Useful lives of tangible assets:**

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis. The Company, based on technical assessment made by technical expert and management estimate, depreciates certain items of building, plant and equipments over estimated useful lives which are different from the useful life prescribed in Schedule II to the Companies Act, 2013. The management believes that these estimated useful lives are realistic and reflect fair approximation of the period over which the assets are likely to be used.

Type of Asset	Useful Lives
Buildings-Plant	25 Years
Buildings-Others	25 Years
Plant and Equipment	25 Years
Computer	3 Years
Furniture and Fixtures	5 to 10 years
Office Equipment	5 to 10 years
Motor vehicles etc	5 Years

5.6 **Derecognition of tangible assets**

An item of Property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipments is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the statement of profit and loss.

5.7 **Impairment of tangible and intangible assets**

The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets of or Group of assets.

When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Impairment losses of tangible and intangible assets are recognised in the statement of profit and loss.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

5. Property, Plant and Equipment (Continued)

₹ Crores

(A) Owned Assets

Description	Freehold Land	Buildings - Plant	Buildings - Others	Plant and Equipment	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation								
Balance as at 1st April,2019	298.64	251.11	177.94	4,252.89	13.58	6.98	2.88	5,004.02
Additions	-	2.75	0.63	47.21	0.32	0.09	-	51.00
Disposals	-	-	-	(0.52)	-	-	(0.16)	(0.68)
Balance as at 31st March,2020	**298.64**	**253.86**	**178.57**	**4,299.58**	**13.90**	**7.07**	**2.72**	**5,054.34**
Accumulated depreciation								
Balance as at 1st April,2019	-	53.06	27.49	1,569.10	8.89	6.30	2.02	1,666.86
Depreciation Expense (Refer Note 27)	-	8.41	5.90	223.44	1.18	0.22	0.34	239.49
Disposal of assets	-	-	-	(0.48)	-	-	(0.15)	(0.63)
Balance as at 31st March,2020		**61.47**	**33.38**	**1,792.07**	**10.07**	**6.50**	**2.21**	**1,905.70**
Net carrying amount								
As at 31st March,2020	**298.64**	**192.39**	**145.19**	**2,507.51**	**3.83**	**0.57**	**0.51**	**3,148.64**
As at 31st March,2019	**298.64**	**198.05**	**150.45**	**2,683.79**	**4.69**	**0.68**	**0.86**	**3,337.16**

₹ Crores

Description	Freehold Land	Buildings - Plant	Buildings - Others	Plant and Equipment	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation								
Balance as at 1st April,2018	296.92	245.14	176.43	4,238.65	13.41	7.15	3.20	*4,980.90*
Additions	1.72	5.97	1.51	14.41	0.17	-	0.15	*23.93*
Disposals	-	-	-	(0.17)	-	(0.17)	(0.47)	*(0.81)*
Balance as at 31st March,2019	*298.64*	*251.11*	*177.94*	*4,252.89*	*13.58*	*6.98*	*2.88*	*5,004.02*
Accumulated depreciation								
Balance as at 1st April,2018	-	44.78	21.62	1,347.19	7.60	6.17	2.09	*1,429.45*
Depreciation Expense (Refer Note 27)	-	8.28	5.87	222.04	1.29	0.30	0.38	*238.16*
Disposal of assets	-	-	-	(0.13)	-	(0.17)	(0.45)	*(0.75)*
Balance as at 31st March,2019	-	*53.06*	*27.49*	*1,569.10*	*8.89*	*6.30*	*2.02*	*1,666.86*
Net carrying amount								
As at 31st March,2019	***298.64***	***198.05***	***150.45***	***2,683.79***	***4.69***	***0.68***	***0.86***	***3,337.16***
As at 31st March,2018	***296.92***	***200.36***	***154.81***	***2,891.46***	***5.81***	***0.97***	***1.12***	***3,551.45***

S. R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

5. **Property, Plant and Equipment (Continued)**

Note:

(a) The Plant land of 1,116 acres comprising Private land (565 acres), Gair Mazura (GM) land (115 acres) and Forest land (436 acres) was identified and acquired by Damodar Valley Corporation (DVC) exclusively for the Maithon Right Bank Thermal Power Project.
The title to the private land measuring 565 acres, acquired for the site, where the power generating station is set up, is in the name of DVC. As per the Shareholders Agreement, the title is to be transferred to the Company. Pending transfer of title as stated above, the Company had entered into an Indenture Deed with DVC on 5 December, 2008, which provided inter-alia, lease of private land for a period of 35 years (and extendable for another 35 years at the option of the Company) and provision to create security in favour of Lenders and transfer this land to the Company at the cost at which it was acquired subject to approval of the Government of the State of Jharkhand. Subsequently, the Company had created security in favour of Lenders on 17 July, 2017, as per the terms of the loan agreement and accordingly the lease rent has been fixed at ₹ 1 per annum.
The expenditure in connection with private land including land compensation and rehabilitation and resettlement expenses has been capitalised as freehold land.

(b) Railway infrastructure land of 133 acres comprising Private land (70 acres), Gair Mazura (GM) land (28 acres) and Eastern Railway land (35 acres) was identified exclusively for the Railway Corridor of Maithon Right Bank Thermal Power Project.
DVC has acquired Private land (67 acres). As per the shareholders agreement, the title / lease of these lands is to be transferred to the Company. DVC is in the process of transferring title / lease in these lands in favour of the Company as per applicable laws of the State of Jharkhand. The Company has directly acquired 2.72 acres out of 3.12 acres in name of Company and the balance is in process of acquiring.
The expenditure in connection with private land including land compensation and rehabilitation and resettlement expenses has been capitalised as freehold land.

(c) The Company has elected to fair value its freehold land and use that fair value in its opening Ind AS Balance Sheet as at 1 April, 2015 as deemed cost. Accordingly, the freehold land is carried at fair value of ₹ 296.92 crores and carrying amount reported under previous GAAP was ₹ 172.71 crores. Accordingly an amount of ₹ 123.51 crores has been credited to retained earnings as at 1 April, 2015 (transition date).

(d) Freehold land with a carrying amount of ₹ 298.64 crores (as at 31 March, 2019 - ₹ 298.64 crores) has been mortgage to secure borrowings of the Company (see note 17).

(e) Computers are included under Plant and Equipment.

(B) Right - of - use - assets

₹ Crores

Description	ROU-Land	Total
Cost		
Balance as on 1st April 2019 (Refer note 4)	98.78	98.78
Balance as at 31st March,2020	**98.78**	**98.78**
Accumulated depreciation		
Balance as on 1st April 2019 (Refer note 4)	25.47	25.47
Depreciation Expense (Refer Note 27)	4.22	4.22
Balance as at 31st March,2020	**29.69**	**29.69**
Net carrying amount		
As at 31st March,2020	**69.09**	**69.09**
As at 1st April, 2019	**73.31**	**73.31**

Lessee

The Company has lease contracts for various items of plant, machinery, land, vehicles and other equipment used in its operations. Leases of land generally have lease terms between 05 and 35 years. Expenses related to leases of low value asset has been charged to statement of profit and loss account as lease rent amounting ₹0.68 crores during the current year. (Refer note 3.1)

Note:

(a) Out of Plant land of 1,116 acres, DVC had acquired GM Land (115 acres) and Forest Land (436 acres) from the State of Jharkhand with the right to use them for the project. As per the Shareholders Agreement, the lease is to be transferred to the Company. Pending transfer of lease in the name of the Company by DVC, the Company had entered into a License Agreement with DVC for GM Land (115 acres) and Forest Land (238 acres) on 18 January, 2008 for use of these lands initially for a period of five years and which is to be automatically renewed thereafter. The Company has received demand for 191 acres of Jungle Jhar (Forest Land) from Government of Jharkhand and has made payment of requisite amount and is in process of execution of lease from Government of Jharkhand directly in the name of Company.
The expenditure in connection with GM land and Forest land has been included in Right of Use Assets.

(b) Out of Railway infrastructure land of 133 acres, DVC has acquired GM land (18 acres). As per the shareholders agreement, the title / lease of these lands is to be transferred to the Company. DVC is in the process of transferring title / lease of these lands in favour of the Company as per applicable laws of the State of Jharkhand. The Company has directly paid requisite amount for balance GM Land (10 acres) and is in process of execution of lease agreement from Government of Jharkhand directly in the name of Company.
The Company has acquired 35 acres (14.274 hectares) through lease from Eastern Railway (ER) as required for the construction of railway infrastructure. The said land has been licensed for five years by the ER in favour of your Company with a provision of successive renewal.
The expenditure in connection with GM land and Eastern Railway land has been included in Right of Use Assets.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

6. Other Intangible Assets

6.1. Accounting Policy

Intangible assets acquired separately
Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses, if any.

6.2. Internally generated intangibles

Internally generated intangibles, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

6.3. Subsequent Cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably.

6.4. Derecognition of intangible assets
An intangible asset is derecognized on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset is measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

6.5. Amortisation of intangible assets
Intangible assets with finite lives are amortised over the useful economic life on straight line basis and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life is reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

Estimated useful lives of the intangible assets are as follows:

Type of Asset	Useful Lives
Computer Software	5 years

₹ Crores

Description	Computer software	Total
Cost		
Balance as at 1st April,2019	1.06	1.06
Balance as at 31st March,2020	**1.06**	**1.06**
Accumulated amortisation		
Balance as at 1st April,2019	0.57	0.57
Amortisation expense (Refer Note 27)	0.12	0.12
Balance as at 31st March,2020	**0.69**	**0.69**
Net Book Value		
As at 31st March,2020	**0.37**	**0.37**
As at 31st March,2019	**0.49**	**0.49**

Description	Computer software	Total
Cost		
Balance as at 1st April,2018	0.50	0.50
Additions	0.56	0.56
Balance as at 31st March, 2019	**1.06**	**1.06**
Accumulated amortisation		
Balance as at 1st April,2018	0.48	0.48
Amortisation expense (Refer Note 27)	0.09	0.09
Balance as at 31st March, 2019	**0.57**	**0.57**
Net Book Value		
As at 31st March,2019	**0.49**	**0.49**
As at 31st March,2018	**0.02**	**0.02**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March,2020

	As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
7. Loans		
Unsecured and considered good unless otherwise stated		
Non-current		
Loans to Employees		
Including loans due by officers of the Company - ₹ 0.01 Crores		
(As at March 31, 2019 - ₹ 0.01 Crores)	0.19	0.25
	0.19	**0.25**
Current		
Loans to Employees		
Including loans due by officers of the Company - ₹ 0.00 Crores		
(As at March 31, 2019 - ₹ 0.00 Crores)*	0.02	0.02
* Amount is lesser than the rounding off norms followed by the Company.	**0.02**	**0.02**
8. Other Financial Assets		
Non-current		
Security Deposit		
With related parties (Refer note 34)	0.28	0.20
With Others	0.12	0.13
With bank in deposit accounts*	0.01	0.01
	0.41	**0.34**
* Under lien with District Mining Authority, Jharkhand		
9. Tax Assets / Liabilities		
Non-current tax assets		
Advance Income-tax (Net)	7.66	9.75
	7.66	**9.75**
Current tax liabilities		
Income Tax Payable (Net)	1.18	12.59
	1.18	**12.59**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March,2020

		As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
10.	**Other Assets**		
	Non-current		
	(Unsecured, considered good)		
	(i) Capital Advances	21.72	18.64
	(ii) Unamortised Premium for Leasehold Land (Refer Note 4)	-	69.14
	(iii) Other Advances		
	Claims Receivable from Supplier	16.74	16.73
		38.46	**104.51**
	Current		
	(Unsecured, Considered Good)		
	(i) Unamortised Premium for Leasehold Land (Refer Note 4)	-	4.17
	(Ii) Other		
	Prepaid Expenses	0.70	3.91
	Advances to Vendors	153.57	100.69
		154.27	**104.60**
	(iii) Recoverable from Beneficiaries (Net) (Refer note 24)	-	258.36
		154.27	**367.13**

11. Inventories

Inventories are stated at the lower of cost and net realisable value. Cost of inventory includes cost of purchase and other costs incurred in bringing the inventories to their present location and condition. Costs of inventories are determined on weighted average basis. Finished goods and work in progress: cost includes cost of direct materials and labour and a proportion of manufacturing overheads based on the normal operating capacity, but excluding borrowing costs. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale. Unserviceable/damaged stores and spares are identified and written down based on technical evaluation.

	(a) Raw Materials (lower of cost and net realisable value)		
	Fuel	154.37	155.68
	Fuel-in-Transit	1.52	19.11
	(b) Stores and Spares		
	Stores and Spare Parts	49.60	43.61
	(c) Loose Tools	-	0.07
		205.49	**218.47**

12. Current Investments

	Investments carried at Fair Value through Profit and Loss		
	Mutual Funds (Quoted)		
i.	SBI Liquid Fund - Direct Plan - Growth 17,36,58.926 units (31st March, 2019 : Nil units)	53.99	-
ii.	Kotak Overnight Fund - Direct Plan Growth^ 2,72,086.479 units (31st March, 2019 : Nil units)	59.00	-
iii.	Axis Liquid Fund - Direct growth 2,24,837.986 units (31st March, 2019 : Nil units)	49.56	-
iv.	TATA Liquid Fund Direct Growth 1,21,24.351 units (31st March, 2019 : Nil units)	3.78	-
		166.33	-

^ This includes ₹ 30.00 Crore invested on 31st March 2020 for which 2,81,449.891 units were allotted after Balance Sheet date

Notes:

1. Aggregate Market Value of Quoted Investments	166.33	-
2. Aggregate Carrying Value of Quoted Investments	166.33	-

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

	As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
13. Trade Receivables		
Current Trade Receivables		
Secured Considered good	177.32	170.91
Unsecured Considered good	40.39	192.08
	217.71	**362.99**

The average credit period for the Company's receivable from its sale of power is 60 days. As per the relevant provisions of the CERC Regulations, penal interest @ 18% pa is claimable from the customers as Late payment Surcharge (LPS).

No trade or other receivable are due from directors or other officers of the company either severally or jointly with any other person. Nor any trade or other receivable are due from firms or private companies respectively in which any director is a partner, a director or a member

Age of Receivables

Within credit period	187.59	281.02
1-90 days past due	19.32	34.21
91-182 days past due	1.31	45.12
More than 182 days past due	9.49	2.65
	217.71	362.99

14. Cash and cash equivalents

Accounting Policy

Cash and cash equivalents in the balance sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value. Cash and cash equivalents include balances with banks which are unrestricted for withdrawal and usage.

For the purpose of the statement of cash flows, cash and cash equivalents consist of cash at bank, cash/cheques on hand and short-term deposits, as defined above as they are considered an integral part of the Company's cash management.

(i) Balances with Banks:		
In Current Accounts	84.65	0.10
Cash and Cash Equivalents as per Balance Sheet	**84.65**	**0.10**
Cash and Cash Equivalents as per Statement of Cash Flows	**84.65**	**0.10**

Reconciliation of liabilities from Financing Activities

₹ Crores

Particulars	As at 31st March, 2019	Cash flows		Non Cash Transactions	As at 31st March,2020
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	1,947.16	250.00	(141.10)	2.78	2,058.84
Current Borrowings (excluding Bank Overdraft)	460.98	2,478.80	(2,924.78)	-	15.00
Total	**2,408.14**	**2,728.80**	**(3,065.88)**	**2.78**	**2,073.84**

₹ Crores

Particulars	As at 31st March, 2018	Cash flows		Non Cash Transactions	As at 31st March, 2019
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	2,129.23	-	(188.14)	6.07	1,947.16
Current Borrowings (excluding Bank Overdraft)	28.18	2,222.09	(1,789.15)	0.15	460.98
Total	**2,157.41**	**2,222.09**	**(1,977.29)**	**6.22**	**2,408.14**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March,2020

15. Equity - Share Capital

	As at 31st March,2020		As at 31st March,2019	
	Number	₹ Crores	Number	₹ Crores
Authorised				
Equity Shares of ₹ 10/- each	2,00,00,00,000	2,000.00	2,00,00,00,000	2,000.00
		2,000.00		2,000.00
Issued, Subscribed and Paid-up Capital				
Equity shares of ₹ 10 each fully paid up	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

(i) **Reconciliation of the shares outstanding at the beginning and at the end of the reporting period**

	As at 31st March,2020		As at 31st March,2019	
	Number	₹ Crores	Number	₹ Crores
Equity Shares				
At the beginning of the year and at the end of the year	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

Terms/rights attached to Equity Shares

The Company has issued only one class of Equity Shares having a par value of ₹ 10/- per share. Each holder of Equity Shares is entitled to one vote per share. The final dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting.

In the event of liquidation of the Company, the holders of Equity Shares will be entitled to receive remaining assets of the Company, after distribution of all preferential amounts. The distribution will be in proportion to the number of Equity Shares held by the shareholders.

(II) **Details of shareholders holding more than 5% shares in the Company and shares held by holding Company**

	As at 31st March,2020		As at 31st March,2019	
	Number	% Holding	Number	% Holding
Equity Shares of ₹10/- each fully paid				
The Tata Power Company Limited (the holding Company)	1,11,65,99,120	74%	1,11,65,99,120	74%
Damodar Valley Corporation	39,23,18,609	26%	39,23,18,609	26%

16. Other Equity

	As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
(i) Debenture Redemption Reserve (DRR)		
As at the beginning of the year	94.76	60.56
Add: Amount transferred from Retained Earnings	34.29	34.20
As at the end of the year	**129.05**	**94.76**
(II) Retained Earnings		
As at the beginning of the year	476.93	413.55
Add: Remeasurement of Defined Benefit Obligation (Net of Tax)	0.00 *	(0.31)
Profit for the period	337.82	272.89
Less: Dividend	290.32	145.16
Dividend Distribution Tax	59.68	29.84
Transfer to Debenture Redemption Reserve	34.29	34.20
Movement for the year	(46.47)	63.38
As at the end of the year	**430.46**	**476.93**
	559.51	**571.69**

Note:

1 The shareholders of the Company in their meeting held on 14th June 2019 approved final dividend of ₹1.51 per share aggregating ₹ 228.11 crore (excluding dividend distribution tax) for the financial year 2018-19. The said dividend was paid to the holders of fully paid equity shares on 17th June, 2019.

2 On 23th March, 2020, Interim dividend of ₹0.41 per share (4.12%) aggregating ₹62.21 Crore (excluding dividend distribution tax) was declared and paid to the holders of the fully paid equity shares on 27th March, 2020.

* Amount is lesser than the rounding off norms followed by the Company.

Nature and purpose of reserves:

Debenture Redemption Reserve

The Company has issued non convertible debentures. Accordingly, the Companies (Share capital and Debentures) Rules, 2014 (as amended), require the Company to create DRR out of profits of the Company available for payment for dividend. DRR is required to be created for an amount which is equal to 25% of the value of debentures issued.

Retained Earnings

Retained Earnings are the profits of the Company earned till date net of appropriations.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March,2020

17. Non-current Borrowings	As at 31st March,2020 ₹ Crores		As at 31st March,2019 ₹ Crores	
	Non-current	Current Maturities*	Non-current	Current Maturities*
Secured - At Amortised Cost				
(i) Redeemable Non-Convertible Debentures (See Note I & II below)	997.03	-	996.28	-
(ii) Term Loans from Banks (See Note III & IV below)				
(a) State Bank of India	-	811.81	763.26	187.62
(b) Axis Bank	250.00	-	-	-
	250.00	811.81	763.26	187.62
* (Refer Note 18)	**1,247.03**	**811.81**	**1,759.54**	**187.62**

I. **Redeemable Non-Convertible Debentures issued on 30th November 2015**

(a) The Company has issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹10.00 lakhs each on 30 November, 2015 at par. The debentures have been issued for the part-refinancing of the outstanding term loan from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures have been secured in favour of the debenture trustee by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land) of the issuer, both present and future.

(c) These debentures carry a floating rate which is base rate of HDFC Bank Limited plus 15 basis points. Interest is payable on the November of each year.

II. **Redeemable Non-Convertible Debentures issued on 9th February 2017**

(a) The Company has issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹0.50 crores on 9 February, 2017 at par respectively. The debentures have been issued for the part-refinancing of the outstanding term loan from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures have been secured by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land), all movable properties and assets, all the bank accounts, all current assets, all intangible assets, both present and future.
Assignment by way of security over letter of credit, performance bonds or guarantees provided by any person, all the rights, title, interest, benefits, claims and demands, whatsoever of the Issuer in each of the Project Documents, all Insurance Contracts/proceeds under Insurance Contracts, in relation to the Project of the issuer.
The above security will at all times, rank pari-passu inter se the Existing Lenders and the Debenture holders.

(c) The debentures carry a fixed rate of interest of 8% per annum. Interest is payable on the February of each year.

The Company will have to take a prior written no-objection certificate from the debentureholders in the event it intends to create a security over the above secured properties in favour of its working capital lenders over and above ₹ 1000.00 crores.

III **Term loans from State Bank of India**

(a) The Company has enter into loan agreement with the State Bank of India on 18th July, 2017.

(b) These loan have been secured by Security as mentioned in above para II-(b)

(c) Interest rate on term loan rate is SBI 1 year MLCR plus 50 basis points.

IV **Term loans from Axis Bank**

(a) The Company has entered into a Loan Agreement with the Axis Bank on 28th January, 2020

(b) These loan have been secured by Security as mentioned in above para II-(b)

(c) Interest rate term loan is Axis bank 12 Month MLCR plus 25 basis points.

Terms of Repayment As at 31st March,2020

Particulars		Amount Outstanding	Repayments						
			FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26 to FY 29-30	FY 30-31 & onwards
(i)	Non-Convertible Debentures issued on 30th Nov , 2015	500.00	-	165.00	165.00	170.00	-	-	-
(ii)	Non-Convertible Debentures issued on 09th Feb , 2017	500.00	-	-	100.00	100.00	100.00	200.00	-
(iii)	Term Loan - SBI	813.14	813.14	-	-	-	-	-	-
(iv)	Term Loan - Axis Bank	250.00	-	11.36	22.73	22.73	22.73	113.64	56.82
Less: Impact of recognition of borrowings at amortised cost using EIR		4.30							
Total		**2,058.84**							

Terms of Repayment As at 31st March,2019

Particulars		Amount Outstanding	Repayments						
			FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25 to FY 28-29	FY 29-30 & onwards
(i)	Non-Convertible Debentures issued on 30th Nov , 2015	500.00	-	-	165.00	165.00	170.00	-	-
(ii)	Non-Convertible Debentures issued on 09th Feb , 2017	500.00	-	-	-	100.00	100.00	300.00	-
(iii)	Term Loan - SBI	954.24	188.14	766.10	-	-	-	-	-
Less: Impact of recognition of borrowings at amortised cost using EIR		7.08							
Total		**1,947.16**							

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

	As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
18. Other Financial Liabilities		
Non-current		
Payables towards Purchase of Property, Plant and Equipment	11.88	9.29
	11.88	9.29
Current		
(a) Current Maturities of Long-term Debt (Refer Note 17)	811.81	187.62
(b) Interest accrued but not due on Borrowings	28.05	21.32
(c) Provision for Interim Dividend	-	87.10
(d) Payables towards Purchase of Property,Plant and Equipment	27.86	14.94
(e) Security Deposits from Others	0.55	0.98
	868.27	311.96

19. Provisions

Accounting Policy

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of time value of money is material)

Present obligations arising under onerous contracts are recognised and measured as provisions with charge to statement of profit and loss. An onerous contract is considered to exist where the Company has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Defined contribution plans

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

Defined benefits plans

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liabilities and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the balance sheet with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods. Past service costs are recognised in the statement of profit and loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Company recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liabilities or asset. The Company recognises the following changes in the net defined benefit obligation as an expense in the statement of profit and loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non routine settlements; and
- Net interest expense or income.

A liability for a termination benefit is recognised at the earlier of when the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs.

The cost of the defined benefit gratuity plan and other post-employment medical benefits and the present value of the gratuity obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases and mortality rates. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

The parameter most subject to change is the discount rate. In determining the appropriate discount rate for plans operated in India, the management considers the interest rates of government bonds. The mortality rate is based on publicly available mortality tables. Those mortality tables tend to change only at interval in response to demographic changes. Future salary increases and gratuity increases are based on expected future inflation rates.

Current and other non-current employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of current employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other non-current employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

	As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
19. Provisions		
Non-Current		
Compensated Absences	5.58	1.23
Post-Employment Medical Benefits	0.97	0.71
Other Defined Benefit Plans	1.41	1.46
Other Employee Benefits	0.80	1.80
	8.76	**5.20**
Current		
Compensated Absences	0.22	3.99
Gratuity (Net)	-	1.09
Post-Employment Medical Benefits	-	0.00 *
Other Defined Benefit Plans	0.15	0.14
Other Employee Benefits	-	0.13
	0.37	**5.35**

* Amount is lesser than the rounding off norms followed by the Company.

Employee Benefit Plans

19.1 Defined Contribution plan

The Company makes Provident Fund and Superannuation Fund contributions to defined contribution retirement benefit plans for eligible employees. The provident fund plan is operated by the Regional Provident Fund Commissioner. The Superannuation fund is managed by LIC of India. Under the schemes, the Company is required to contribute a specified percentage of the payroll costs to fund the benefits. The only obligation of the Company with respect to the retirement benefit scheme is to make the specified contributions.

The Company has recognized ₹ 1.48 crores (31st March, 2019 ₹ 1.39 crores) for provident fund contributions and ₹ 0.49 crores (31st March, 2019 ₹ 0.59 crores) for superannuation contributions in the Statement of Profit and Loss. The contributions payable to these plans by the Company are at rates specified in the rules of the schemes.

19.2 Defined benefit plans

(i) Unfunded

Post-Employment Medical Benefits
The Company provides certain post-employment health care benefits to superannuated employees at some of its locations. In terms of the plan, the retired employees can avail free medical check-up and medicines at Company's facilities.

Pension
The Company operates a defined benefit pension plan for employees who have completed 15 years of continuous service. The plan provides benefits to members in the form of a pre-determined lumpsum payment on retirement. Executive Director, on retirement, is entitled to pension payable for life including HRA benefit. The level of benefit is approved by the Board of Directors of the Company from time to time.

Ex-Gratia Death Benefit
The Company has a defined benefit plan granting ex-gratia in case of death during service. The benefit consists of a pre-determined lumpsum amount along with a sum determined based on the last drawn basic salary per month and the length of service.

Retirement Gift
The Company has a defined benefit plan granting a pre-determined sum as retirement gift on superannuation of an employee.

(ii) Funded

Gratuity Plan
The Company has a defined benefit gratuity plan. The gratuity plan is primarily governed by the Payment of Gratuity Act, 1972. Employees who are in continuous service for a period of five years are eligible for gratuity. The level of benefits provided depends on the member's length of service and salary at the retirement, withdrawal, resignation or death of an employee. The gratuity plan is funded plan. The gratuity fund is managed by Aditya Birla Sun Life Insurance Company Limited. The fund has the form of a trust and is governed by Trustees appointed by the Company. The Trustees are responsible for the administration of the plan assets and for the definition of the investment strategy in accordance with the regulations. The funds are deployed in recognized insurer managed funds in India. The Company does not fully fund the liability and maintains a target level of funding to be maintained over a period of time based on estimates of expected gratuity payments.

The Plan assets include investments in G-Sec Bonds and accordingly exposed to financial risk.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

(iii) Risks associated with Plan Provisions

Risks associated with the plan provisions are actuarial risks. These risks are: - (i) investment risk, (ii) interest risk (discount rate risk), (iii) mortality risk and (iv) salary risk.

Investment risk	The present value of the defined benefit plan liability is calculated using a discount rate determined by reference to Government Bonds Yield. If plan liability is funded and return on plan assets is below this rate, it will create a plan deficit.
Interest rate risk (discount rate risk)	A decrease in the bond interest rate (discount rate) will increase the plan liability; however , this will be partially offset by an increase in the return on the plan debt investments.
Mortality risk	The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after the employment. Indian Assured Lives Mortality (2006-08) ultimate table has been used in respect of the above. An increase in the life expectancy of the plan participants such as, an increase in the salary of the plan participants will increase the plan's liability.
Salary escalation risk	The present value of the defined benefit plan liability is calculated with the assumption of salary increase rate of plan participants in future. Deviation in the rate of increase of salary in future for plan participants from the rate of increase in salary used to determine the present value of obligation will have a bearing on the plan's liability.
Demographic risk	This is the risk of variability of results due to unsystematic nature of decrements that include mortality, withdrawal, disability and retirement. The effect of these decrements on the defined benefit obligations is not straight forward and depends upon the combination of salary increase, discount rate and vesting criterion.
Medical inflation rate risk	Higher than expected increase in salary and medical cost will increase the defined benefit obligation.
Change in Leave Balances	This is the risk of variability of results due to a significant variation from expected accumulation of leave balances. All other aspects remaining same, higher than expected increase in the leave balances will increase the defined benefit obligation.

(iv) The principal assumptions used for the purposes of the actuarial valuations were as follows:

S. No.	Particulars	Refer note below	As at 31st March, 2020	As at 31st March, 2019
i.	Discount rate (p.a)	1	6.50%	7.40%
ii.	Salary escalation rate (p.a)	2	7.00%	7.00%
iii.	Retirement Age		60 years	60 years
iv.	Mortality Table		Indian Assured Lives Mortality (2006-08) Ult	Indian Assured Lives Mortality (2006-08) (modified) Ult
v.	Withdrawal Rate			
	44>Age>21		6.00%	2.50%
	Age>44		2.00%	1.00%
vi.	Rate of Gold Inflation		8.00%	8.00%
vii.	Rate of Medical inflation (p.a)		8.00%	8.00%

Note:
1. The discount rate is based on the prevailing market yields of Indian Government securities as at the balance sheet date for the estimated term of obligations
2. The gratuity plan is funded
3. The estimates of future salary increases considered take into account the inflation, seniority, promotion and other relevant factors.

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

19.3 The amounts recognized in the financial statements and the movements in the net defined benefit obligations over the year are as follows:

i. Amounts recognized in the Statement of Profit and Loss in respect of the funded defined benefits plans are as follows:

Particulars	For Year ended 31st March,2020 ₹ crores	For Year ended 31st March, 2019 ₹ crores
Current service cost	1.06	0.99
Net interest expenses	(0.02)	0.02
Components of defined benefit costs recognized in profit or loss	**1.04**	**1.01**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March,2020 ₹ crores	For Year ended 31st March, 2019 ₹ crores
Actuarial (gain)/Loss due to DBO Experience	(0.32)	0.23
Actuarial (gain)/Loss due to assumption Changes	0.75	0.37
Actuarial (gain)/loss arising during period	0.42	0.60
Return on plan assets (greater)/less than discounting rate	(0.03)	(0.05)
Component of defined benefit costs recognized in Other Comprehensive Income	**0.40**	**0.55**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. The amount included in the Balance Sheet arising from the entity's obligation in respect of its defined benefits plans as follows:

Particulars	For Year ended 31st March,2020 ₹ Crores	For Year ended 31st March,2019 ₹ Crores
Present value of funded defined benefit obligation	(12.42)	(11.00)
Fair value of plan assets	12.87	10.46
Funded status surplus/(deficit)	**0.45**	**(0.54)**

iv. Movement in the fair value of the defined benefit obligation:

Particulars	For Year ended 31st March,2020 ₹ crores	For Year ended 31st March, 2019 ₹ crores
Opening defined benefit obligation	11.00	9.55
Current service cost	1.06	0.99
Interest cost on defined benefit obligation	0.81	0.73
Acquisitions cost	(0.79)	(0.71)
Actuarial (gains) / loss arising from changes in demographic assumptions	(0.35)	-
Actuarial (gains) / loss arising from changes in experience	(0.32)	0.23
Actuarial (gains) / loss arising from changes in financial assumption	1.10	0.37
Benefits paid	(0.09)	(0.16)
Closing defined benefit obligations	**12.42**	**11.00**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

v. Movement in the fair value of the plan assets are as follows:

Particulars	For Year ended 31st March,2020 ₹ Crores	For Year ended 31st March,2019 ₹ Crores
Opening fair value of plan assets	10.46	8.68
Interest income	0.83	0.71
Employer contributions	1.55	1.02
Return on plan assets (excluding amount included in net interest expenses)	0.03	0.05
Benefits paid	-	-
Closing fair value of plan assets	**12.87**	**10.46**

Note:

1) The plan assets of the Company managed through a trust are managed by Birla Sun Life Insurance (BSLI) Company Limited. The details of investments relating to these assets are not shown by BSLI. Hence, the composition of each major category of plan assets, the percentage or amount that each major category constitutes to the fair value of the total plan assets has not been disclosed.

2) The Company expects to make a contribution of ₹ Nil (as at 31 March, 2019: 0.54 crores) to defined benefit plan during the next financial year.

vi. Sensitivity analysis

Significant actuarial assumptions for the determination of the defined benefit obligation are discount rate, expected salary increase and mortality. The sensitivity analysis below have been determined based on reasonably possible changes of the assumptions occurring at the end of the reporting period, while holding all other assumptions constant.

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

Particulars	31st March,2020 ₹ Crores		31st March,2019 ₹ Crores	
	Decrease	Increase	Decrease	Increase
Discount Rate (-/+0.5%)	0.68	(0.63)	0.66	(0.60)
Salary Growth Rate (-/+0.5%)	(0.63)	0.68	(0.61)	0.66
Withdrawal Rate (-/+ 5%)	-	(0.93)	-	(0.65)

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit liability recognized in the Balance sheet.

There was no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

vii. The expected maturity analysis of defined benefit obligation is as follows:

Time Period	31st March,2020 ₹ Crores	31st March,2019 ₹ Crores
Within 1 year	0.43	0.90
Between 1-2 years	0.63	0.22
Between 2-3 years	0.54	0.42
Between 3-4 years	1.02	0.30
Between 4-5 years	1.23	0.76
Beyond 5 years	9.52	9.06

Particulars	31st March,2020	31st March,2019
The weighted average duration of the defined benefit plan obligation represents average duration for active members	7.4 years	8.1 years

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

19.4 **Other Defined benefit plans**

The amounts recognized in the financial statements and the movements in the net defined benefit obligations over the year are as follows:

i. Amounts recognized In the Statement of Profit and Loss in respect of these defined benefits plans are as follows:

Particulars	For Year ended 31st March,2020 ₹ crores	For Year ended 31st March, 2019 ₹ crores
Current service cost	0.99	0.94
Past Service Cost	0.19	0.55
Net interest expenses	0.70	0.62
Actuarial (Gain)/ Loss	(1.20)	0.10
Components of defined benefit costs recognized in profit or loss	**0.68**	**2.21**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March,2020 ₹ crores	For Year ended 31st March, 2019 ₹ crores
Actuarial (gain)/Loss due to Defined Benefit Obligation Experience	(1.56)	(0.16)
Actuarial (gain)/Loss due to assumption Changes	(0.04)	0.10
Component of defined benefit costs recognized in Other Comprehensive Income	**(1.60)**	**(0.06)**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. Reconcillation of Net Balance Sheet Position

Particulars	For Year ended 31st March,2020 ₹ crores	For Year ended 31st March, 2019 ₹ crores
Opening Net defined benefit asset/ (liability)	**(9.46)**	**(7.72)**
Current service cost	(0.99)	(0.94)
Past service cost	(0.19)	(0.55)
Net interest on net defined benefit liability/ (asset)	(0.70)	(0.62)
Amount recognized in OCI	0.39	0.06
Actuarial Gains/ (Losses)	1.20	(0.10)
Employer contributions	-	-
Benefit paid directly by the Company	0.35	0.39
Acquisitions credit/ (cost)	0.26	0.02
Closing Net defined benefit asset/ (liability)	**(9.13)**	**(9.46)**

iv. Sensitivity analysis

Particulars	31st March,2020 ₹ crores		31st March, 2019 ₹ crores	
	Decrease	Increase	Decrease	Increase
Discount Rate (-/+0.5%)	0.61	(0.55)	0.64	(0.57)
Salary Growth Rate (-/+0.5%)	(0.35)	0.38	(0.41)	0.44
Withdrawal Rate (-/+ 5%)	-	(2.11)	-	(2.23)
Gold Inflation Rate (-/+ 5%)	(0.05)	0.06	(0.06)	0.06
Medical Inflation Rate (-/+ 5%)	(0.12)	0.15	(0.09)	0.11

vi. The expected maturity analysis of defined benefit obligations

Time Period	31st March,2020 ₹ crores	31st March, 2019 ₹ crores
Within 1 year	0.38	0.53
Between 1-2 years	0.50	0.41
Between 2-3 years	0.45	0.58
Between 3-4 years	0.76	0.52
Between 4-5 years	0.60	0.81
Beyond 5 years	4.53	4.90

Particulars	31st March,2020	31st March, 2019
The weighted average duration of the Post Retirement Medical Benefit represents average duration for active members	16.81 years	17.10 years

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

20. Deferred Tax Assets / Liabilities (Net)

Accounting Policy

Deferred Tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

For operations carried out under tax holiday period (80IA benefits of Income Tax Act, 1961), deferred tax assets or liabilities, if any, have been established for the tax consequences of those temporary differences between the carrying values of assets and liabilities and their respective tax bases that reverse after the tax holiday ends.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss (either in other comprehensive income or in equity). Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the relevant entity intends to settle its current tax assets and liabilities on a net basis.

Deferred tax assets include Minimum Alternative Tax (MAT) paid in accordance with the tax laws in India, which is likely to give future economic benefits in the form of availability of set off against future income tax liability. Accordingly, MAT is recognised as deferred tax asset in the balance sheet when the asset can be measured reliably and it is probable that the future economic benefit associated with the asset will be realised. The Company reviews the "MAT credit entitlement" asset at each reporting date and writes down the asset to the extent that it is no longer probable that it will pay normal tax during the specified period.

In the situations where one or more units of the Company are entitled to a tax holiday under the tax law, no deferred tax (asset or liability) is recognized in respect of temporary differences which reverse during the tax holiday period, to the extent the concerned unit's gross total income is subject to the deduction during the tax holiday period. Deferred tax in respect of temporary differences which reverse after the tax holiday period is recognized in the year in which the temporary differences originate. However, the Company restricts recognition of deferred tax assets to the extent it is probable that sufficient future taxable income will be available against which such deferred tax assets can be realized. For recognition of deferred taxes, the temporary differences which originate first are considered to reverse first.

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

MAT Credit Entitlement

Minimum alternate tax (MAT) paid in a year is charged to the statement of profit and loss as current tax for the year. The deferred tax asset is recognised for MAT credit available only to the extent that it is probable that the Company will pay normal income tax during the specified period, i.e., the period for which MAT credit is allowed to be carried forward. In the year in which the Company recognizes MAT credit as an asset, it is created by way of credit to the statement of profit and loss and shown as part of deferred tax asset. The Company reviews the "MAT credit entitlement" asset at each reporting date.

	As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
Deferred Tax Liabilities (Net)	421.99	303.60
Less: MAT Credit entitlement	369.39	289.26
Deferred Tax Liabilities (Net)	**52.60**	**14.34**

For Year ended 31st March,2020

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive income	Closing balance
MAT credit entitlement	**289.26**	**80.13**	-	**369.39**
Deferred Tax Liabilities (Net) in relation to:				
Property, plant and equipment	423.36	(1.37)	-	421.99
Provision for compensated absences	(1.52)	1.52	-	-
Unabsorbed depreciation	(118.23)	118.23	-	-
	303.60	**118.39**	-	**421.99**
Total	**14.34**	**38.26**		**52.60**

For Year ended 31st March,2019

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive income	Closing balance
MAT credit entitlement	**170.76**	**118.50**	-	**289.26**
Deferred Tax Liabilities (Net) in relation to:				
Property, plant and equipment	422.83	0.52	-	423.36
Provision for compensated absences	(1.02)	(0.50)	-	(1.52)
Unabsorbed depreciation	(244.74)	126.51	-	(118.23)
	177.07	**126.53**	-	**303.60**
Total	**6.31**	**8.03**		**14.34**

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

Note:

a. Deferred tax assets and liabilities are being offset as they relate to taxes on income levied by the same governing taxation laws.

b. The Company is entitled for availing the tax benefit under section 80IA of the Income-tax Act, 1961, with effect from the financial year 2016-17 for 10 years. Deferred tax liabilities as at 31 March, 2020, reflect the quantum of tax liabilities accrued upto the period end but payable after the expiry of the tax holiday period.

c. Pursuant to amendment in section 115JAA of Income Tax Act,1961, MAT credit can be utilised upto the 15th assessment year as against the 10th assessment year earlier. Accordingly, the Company has recognised MAT credit aggregating to ₹ 369.39 crores as at the year-end, to the extent that there will be sufficient future taxable income against which such MAT credit entitlement can be adjusted.

d. The Company has recognised MAT credit entitlement of ₹ 369.39 crores as at March 31, 2020 (as at March 31, 2019: ₹ 338.47 crores). Basis the existing tax laws and the projections of future profitability considering definitive Power purchase agreements which are completely tied up with the plant capacity, management expects that the Company will be subjected to normal taxation from the financial year 2026-27 onwards. The management is not expecting any major capitalisation / new projects eligible under Section 80IA of the Income Tax Act, 1961 till atleast FY 2031-32. Accordingly, the management is confident of earning taxable profits each year and will be able to utilise the entire amount of MAT credit entitlement recognised in the financial Statement

	As at 31st March,2020 ₹ Crores	As at 31st March,2019 ₹ Crores
21. Other Liabilities		
Non-current		
Consumers' Benefit Account	16.97	16.97
	16.97	**16.97**
Current		
Payable to Beneficiaries (Net) (Refer Note 24)	135.20	-
Dividend Distribution tax payable	-	17.90
Statutory Liabilities	6.37	3.67
Other Liabilities	0.19	0.08
	141.76	**21.65**
22. Current Borrowings		
Unsecured - At Amortised Cost		
From Banks		
Commercial Paper	-	300.00
	-	**300.00**
Secured - At Amortised Cost		
From Banks		
(a) Cash Credit Account	-	18.09
(b) Short term loan from Bank	15.00	124.68
(c) Letter of Credit	-	18.21
	15.00	**160.98**
	15.00	**460.98**

Note:

i. The Company has entered into 'Working Capital Facility Agreement' with State Bank of India, Kotak Mahindra Bank and HDFC Bank for availing fund for managing working capital requirement.

ii Security offered to State Bank of India secured by way of first pari-passu charge on movable and immovable assets of the Company present and future, with other term loan and working capital lenders.

iii Kotak Mahindra Bank working capital facilities is secured by way of first hypothecation charge on all the existing and future current assets of the borrower on pari passu with other secured lenders of the borrower.

iv HDFC Bank working capital facilities is secured by way of pari passu charge on current assets along with other term loan and working capital lenders.

23. MSME Disclosure

Micro and small enterprises under the Micro, Small and Medium Enterprises Development Act, 2006:

The principal amount and the interest due thereon remaining unpaid to any supplier as at the end of each accounting year		
(a) Principal amount remaining unpaid	0.24	0.37
(b) Interest* due thereon	-	-
(c) The amount of Interest* paid along with the amounts of the payment made to the supplier beyond the appointed day	-	-
(d) The amount of Interest* due and payable for the year	-	-
(e) The amount of Interest* accrued and remaining unpaid	-	-
(f) The amount of further interest* due and payable even in the succeeding years, until such date when the interest* dues as above are actually paid	-	-
	0.24	**0.37**

* Amounts unpaid to Micro and Small Enterprises vendors on account of retention money have not been considered for the purpose of interest calculation.

MAITHON POWER LTD. MAITHON

24. Revenue from Operations

Accounting Policy

Revenue recognition
Revenue from contracts with customers is recognised when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.

Description of performance obligations are as follows :

Sale of Power - Generation (Thermal)
Revenue from sale of power is recognised net of cash discount over time for each unit of electricity delivered.

Contract price determined as per tariff regulations
The Company as per the prevalent tariff regulations is required to recover its Annual Revenue Requirement ('ARR') comprising of expenditure on account of fuel cost, operations and maintenance expenses, financing costs, taxes and assured return on regulator approved equity with additional incentive for operational efficiencies. Accordingly, rate per unit is determined using input method based on the Company's efforts to the satisfaction of a performance obligation to deliver power. As per tariff regulations, the Company determines ARR and any surplus/shortfall in recovery of the same is accounted as revenue.

Late Payment Surcharge
Late payment surcharge leviable as per the relevant contracts are recognised on actual realisation or accrued based on an assessment of certainty of realization supported by either an acknowledgement from customers or on receipt of favourable order from regulator / authorities.

No Late Payment Surcharge ('LPS') is charged for the initial 45 days from the date of receipt of invoice by customer. Thereafter, LPS is charged at the rate prescribed by the Power Purchase Agreement on the outstanding balance once the dues are received. Revenue in respect of late payment surcharge leviable as per the relevant contracts are recognised on actual realisation or accrued based on an assessment of certainty of realization supported by either an acknowledgement from customers or on receipt of favourable order from regulatory authorities.

Dividend and interest income
Dividend income from investments is recognized when the shareholder's right to receive payment has been established.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

		For Year ended 31st March,2020 ₹ Crores	For Year ended 31st March,2019 ₹ Crores
24.	**Revenue from Operations (Continue)**		
(a)	**Revenue from Power Supply**	3,214.68	2,860.16
	Cash Discount	(51.98)	(55.27)
	Income to be adjusted in future tariff determination (Net)	(421.88)	(29.28)
		2,740.82	2,775.61
(b)	**Other Operating Revenue**		
	Rental of Buildings	0.04	0.04
	Income in respect of Services Rendered	-	0.28
	Sale of Fly Ash	0.31	0.12
		0.35	0.44
		2,741.17	**2,776.05**

Note:-
The tariff to be charged from Long Term beneficiaries is determined by the Central Electricity Regulatory Commission (CERC) in accordance with the tariff regulations/norms notified by CERC. The tariff consists of two parts namely, capacity charge (for recovery of fixed cost based on plant availability) and energy charges (for recovery of fuel costs). The Company is raising invoices on long term beneficiaries as per the approved CERC tariff order. The Company has adjusted billed revenue for supply of power to long term beneficiaries on the basis of plant availability, actual Fixed cost and actual energy cost incurred by the Company in accordance with notified tariff regulation. Further, as and when tariff orders for truing up are received, adequate adjustments are carried out.

25.	**Other Income**		
(a)	**Interest Income**		
	On Financial Assets held at Amortised Cost		
	Interest on Income-tax Refund	-	0.25
	Interest on Inter - Corporate Deposit	0.13	-
	Other Interest	0.01	0.01
		0.14	0.26
(b)	**Gain on Investments**		
	Gain on sale of Current Investment measured at FVTPL	4.34	3.72
		4.34	3.72
(c)	**Other Non Operating Income**		
	Gain/(Loss) on Disposal of Property, Plant and Equipment (Net)	0.04	(0.03)
	Miscellaneous Income	3.02	2.46
	Late Payment Surcharge	20.79	58.64
		23.85	61.07
		28.33	**65.05**

Note:
Late payment surcharge represents amount claimable by the Company from one of its customers pursuant to a favourable order dated April 8, 2019 received from CERC.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

26. Employee Benefits Expenses

	For Year ended 31st March,2020 ₹ Crores	For Year ended 31st March,2019 ₹ Crores
Salaries and Wages	38.35	37.81
Contribution to Provident Fund	1.48	1.39
Contribution to Superannuation Fund	0.49	0.59
Retiring Gratuities	1.04	1.01
Leave Encashment Scheme	1.16	1.04
Pension Scheme	0.38	0.37
Staff Welfare Expenses	5.07	4.37
	47.97	46.58
Less:		
Employee Cost Capitalised	7.17	5.40
	7.17	5.40
	40.80	**41.18**

27. Depreciation and Amortisation expenses:

Depreciation on Tangible Assets (Refer Note 5A)	239.48	238.16
Depreciation on Right of use Assets (Refer Note 5B)	4.22	-
Amortisation on Intangible Assets (Refer Note 6)	0.12	0.08
	243.81	**238.24**

28. Finance Costs

Accounting Policy

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Interest income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognized in statement of profit and loss in the period in which they are incurred

(a) Interest Expense:		
Borrowings		
Interest on Debentures	87.25	87.63
Interest on Loans from banks	93.74	101.15
Interest on borrowings from related party (Refer Note 34)	2.48	0.02
Interest on Commercial Paper	14.99	13.15
Others		
Other Interest and Commitment Charges	0.16	0.61
	198.62	202.56
Less: Interest Capitalised	9.06	-
	189.56	202.56
(b) Other Borrowing Cost:		
Other Finance Costs	3.55	2.29
	3.55	2.29
	193.11	**204.85**

29. Other Expenses

Consumption of Stores, Oil, etc.	13.02	9.01
Rental of Land, Buildings etc.	0.22	4.36
Repairs and Maintenance -		
(i) To Buildings and Civil Works	5.59	4.69
(ii) To Machinery and Hydraulic Works	91.60	73.10
(iii) To Furniture, Vehicles, etc.	1.00	2.54
	98.19	80.33
Water Charges & Othes Taxes	16.23	9.92
Insurance	8.96	5.15
Other Operation Expenses	8.30	8.47
Ash Disposal Expenses	28.83	33.40
Transmission Charges	-	0.11
Travelling and Conveyance Expenses	2.29	3.15
Consultants' Fees	0.42	2.22
Auditor's Remuneration (Refer - i)	0.45	0.41
Cost of Services Procured	65.62	57.47
Security Expenses	7.24	6.96
Legal Charges	1.14	0.01
Corporate Social Responsibility Expenses (Refer - ii)	6.03	5.32
Miscellaneous Expenses	0.89	0.57
	257.83	**226.86**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

	For Year ended 31st March,2020 ₹ Crores	For Year ended 31st March,2019 ₹ Crores
(i) Payment to the Auditors		
Audit Fee & Limited Review	0.28	0.20
Tax Audit Fees	0.02	0.02
Other Services (Certification Fees)	0.08	0.15
Reimbursement of Expenses	0.06	0.04
	0.45	**0.41**
(ii) Corporate Social Responsibility Expenses		
(a) Amount required to be spent as per Sec 135 of the Companies Act 2013	6.03	5.27
(b) Amount spent by the Company		
i) Construction/acquisition of any asset	-	-
ii) On purposes other than above	6.03	5.32

30. Income taxes

Accounting Policy

Current Tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date in the countries where the Company operates and generates taxable income.

Current income tax relating to items recognised outside statement of profit and loss is recognised outside statement of profit and loss (either in other comprehensive income or in equity). Current tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

(i) Income tax recognised in profit and loss		
Current tax		
For the year	80.13	77.78
In respect of earlier years	0.45	0.02
	80.58	**77.80**
Deferred tax	118.39	126.53
MAT Credit	(80.13)	(118.50)
Income tax expense reported in the Statement of Profit and Loss	**118.84**	**85.83**

(ii) Reconciliation of tax expense as per the effective rate of tax and India's statutory rate of tax

Profit before tax	**456.66**	**358.72**
Applicable income tax rate	34.94%	34.94%
Income tax expense calculated at applicable rate	159.58	125.34
Temporary difference reversed during tax holiday period	7.91	(3.75)
On other permanent difference	(57.15)	1.98
Impact of change in Rate	-	-
Adjustment in respect of current income tax of previous years	0.45	0.02
Differential tax impact between MAT and Normal Tax	-	(40.72)
Other Adjustments	8.05	2.96
Total income tax expense	**118.84**	**85.83**

1. The tax rate used for the financial years 2019-20 and 2018-19 reconciliations above is the corporate tax rate of 34.94% and 34.94% respectively payable by the corporate entities in India on taxable profits under the Indian tax law.
2. The Company has to pay taxes based on higher of income tax on profit of the Company or MAT @17.472% and @21.55% of book profit for the years 2019-20 and 2018-19 respectively.
3. The rate used for calculation of deferred tax is @34.94% for FY 2019-20 & for FY 2018-19 being statutory enacted rates at respective Balance Sheet Dates.

(iii) Income tax recognised in other comprehensive income

Arising on income and expenses reclassified in other comprehensive income:		
Remeasurement of the defined benefit plan	0.00 *	0.17
Total income tax expense recognised in other comprehensive income	0.00	0.17
Bifurcation of the income tax recognised in other comprehensive income into:		
- Items that will not be reclassified to profit or loss	0.00 *	0.17
- Items that may be reclassified to profit or loss	0.00 *	-
	0.00	0.17

* Amount is lesser than the rounding off norms followed by the Company.

31. Commitments

Estimated amount of contracts remaining to be executed on capital account and not provided for	621.58	87.80
	621.58	**87.80**

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

32. **Contingent liabilities**

(a) The Company has received a demand of ₹ 45.00 crores from the Office of Assistant Commissioner, Dhanbad under the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 contending that the Company has to pay 1% of the Project Cost (estimated to be ₹ 4500.00 crores) as cess.

As per legal advice obtained by the Company, the Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 is applicable on cost of construction and not on supply of equipment, accordingly the Company had deposited an amount of ₹ 1.26 crores as cess for cost of construction and raised the demand on the concerned contractor / vendor. Further, the Company is of the view that any such demand if payable will be borne by the contractor/vendors. Accordingly, no provision has been made in the books of account.

(b) Claims against the Company not acknowledged as debts for demands raised by the office of the Zonal Jt. Director General Trade for revocation of grant of deemed export benefits which has been disputed by the Company ₹ 36.41 crores (31 March, 2019 : ₹ 36.41 crores).

(c) The proposed Social Security Code, 2019, when promulgated, would subsume labour laws including Employees' Provident Funds and Miscellaneous Provisions Act and amend the definition of wages on which the organisation and its employees are to contribute towards Provident Fund. The Company believes that there will be no significant impact on its contributions to Provident Fund due to the proposed amendments. There were many interpretative issues relating to the Supreme Court (SC) judgement dated 28th February, 2019 on Provident Fund (PF) as regards definition of PF wages and inclusion of certain allowances for the purpose of PF contribution, as well as effective date of its applicability. Having consulted and evaluated impact on its financial statement, the company has implemented the changes as per clarifications vide the Apex Court judgement dated 28 February 2019, with effect from 1st March 2019 i.e., immediate after pronouncement of the judgement, as part of statutory compliance. The company will evaluate its position and act, in case there is any other interpretation of the same issued in future either in form of Social Security Code or by authorities concerned under the Employees' Provident Funds and Miscellaneous Provisions

33. **Earnings per share (EPS)**

Accounting Policy

Basic earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares outstanding during the period. Diluted earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares considered for deriving basic earnings per equity share and also the weighted average number of equity shares that could have been issued upon conversion of all dilutive potential equity shares. The dilutive potential equity shares are adjusted for the proceeds receivable had the equity shares been actually issued at fair value (i.e.the average market value of the outstanding equity shares). Dilutive potential equity shares are deemed converted as of the beginning of the period, unless issued at a later date. Dilutive potential equity shares are determined independently for each period presented.

The number of equity shares and potentially dilutive equity shares are adjusted retrospectively for all periods presented for any share splits and bonus shares issues including for changes effected prior to the approval of the financial statements by the Board of Directors.

	For Year ended 31st March,2020 ₹ Crores	For Year ended 31st March,2019 ₹ Crores
Basic and diluted earnings per share (face value of ₹ 10 each)	2.24	1.81
	2.24	1.81

Basic and diluted earnings per share

The earnings and weighted average number of equity shares used in the calculation of basic and diluted earnings per share are as follows:

Profit After Tax	337.82	272.89
The weighted average number of equity shares for Basic and Diluted EPS	1,50,89,17,729	1,50,89,17,729

Note: There have been no other transactions involving Equity Shares or Potential Equity Shares between the Reporting date and the date of authorisation of these financial statements

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

34. Related Party Transactions

a. List of related parties

i. **Controlling Entity (CE)**

The Tata Power Company Limited (TPCL) (Holding Company)

ii. **Entity exercising significant influence (SI)**

Damodar Valley Corporation (DVC)

iii. **Fellow Subsidiaries**
(With whom the Company has entered transaction during the year)

Tata Power Trading Company Limited (TPTCL)
Coastal Gujarat Power Limited (CGPL)
Tata Power Solar System Ltd (TPSSL)
Tata Power Renewable Energy Limited (TPREL)
Walwhan Renewable Energy Private Limited (WREPL)

iv. **Directors & Key Managerial Personnel**

Ramesh Subramanyam (Chairman) (w.e.f. 2nd Aug 2019)
Ashok Sethi (Chairman) (till 30th April 2019)
Neera Saggi- (Director) (till 22 March 2020)
Narendra Nath Mishra (Director) (till 22 March 2020)
Purushottam Thakur (Director) (till 31st Jan 2020)
Krishnava Dutt (Director)
Anand Agarwal(Director)
Suvamay Halder (Director)
Bhola Nath Sah (Director) (w.e.f 2nd Aug 2019 to 31st December 2019)
Pulak Datta (Director) (till 30th April 2019)
Ashok Sinha (Director) (w.e.f 21st March 2020)
Rita Sinha (Director) (w.e.f 21st March 2020)
Vijay Namjoshi (Director) (w.e.f 1st February 2020)
Ramesh Jha (Chief Executive Officer)
Satish Kumar (Chief Financial Officer)
Poonam Shirke (Company Secretary)

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED

Notes to the Financial Statements for the year ended 31st March,2020

35. Related Party Transactions (Continue)

b. Transactions/balances outstanding with related parties

₹ Crores

Particulars	CE	SI	Fellow subsidiaries (FS)						KMP &	Total
	TPCL	DVC	TPTCL	CGPL	TPREL	WREPL	TPSSL	Subtotal(FS)	Directors	
i) Transactions for the year ended 31st March,2020										
Revenue from power supply	-	530.66	1,801.15	-	-	-	-	1,801.15	-	2,331.81
	-	(409.41)	(1,595.82)	-	-	-	-	(1,595.82)	-	(2,005.23)
Cash discount on power sales	-	-	32.51	-	-	-	-	32.51	-	32.51
	-	(0.64)	(35.76)	-	-	-	-	(35.76)	-	(36.40)
Interest income on ICD	-	-	-	-	0.13	-	-	0.13	-	0.13
	-	-	-	-	-	-	-	-	-	-
Late payment surcharge	-	20.79	-	-	-	-	-	-	-	20.79
	-	(58.64)	-	-	-	-	-	-	-	(58.64)
Electricity Charges	-	0.52	-	-	-	-	-	-	-	0.52
	-	(0.36)	-	-	-	-	-	-	-	(0.36)
Water charges	-	16.01	-	-	-	-	-	-	-	16.01
	-	(9.31)	-	-	-	-	-	-	-	(9.31)
Rent and hire charges	-	0.19	-	-	-	-	-	-	-	0.19
	-	(0.13)	-	-	-	-	-	-	-	(0.13)
Cost of Services Procured	59.69	-	-	-	-	-	-	-	-	59.69
	(57.71)	-	-	-	-	-	-	-	-	(57.71)
ICD Taken	200.00	-	-	310.00	-	-	-	310.00	-	510.00
	(47.04)	-	-	-	-	-	-	-	-	(47.04)
ICD Given	-	-	-	-	150.00	-	-	150.00	-	150.00
	(47.04)	-	-	-	-	-	-	-	-	(47.04)
Sale of property, plant and equipment	0.15	-	-	-	-	-	-	-	-	0.15
	-	-	-	-	-	-	(0.00)*	(0.00)*	-	-
Interest on loan	2.27	-	-	0.21	-	-	-	0.21	-	2.48
	(0.02)	-	-	-	-	-	-	-	-	(0.02)
Purchase of property, plant and equipment	0.17	-	-	0.00*	-	-	-	-	-	0.17
	-	-	-	(0.00)*	-	-	-	-	-	-
Reimbursement of expenses to the Company		0.21	0.65	-	-	-	-	0.65	-	0.86
	-	(0.12)	(1.24)	-	-	-	-	(1.24)	-	(1.36)
Reimbursement of expenses by the Company	2.35		-	-	-	-	-	-	-	2.35
	-	-	-	-	-	-	-	-	-	-
Service received related to CWIP	2.77	-	-	-	-	-	-	-	-	2.77
	(0.49)	-	-	-	-	-	-	-	-	(0.49)
Remuneration (includes sitting fees)	-	-	-	-	-	-	-	-	1.84	1.84
	-	-	-	-	-	-	-	-	(1.88)	(1.88)
Dividend Paid	214.84	75.48	-	-	-	-	-	-	-	290.32
	(107.42)	(37.74)	-	-	-	-	-	-	-	(145.16)
Interest on Loan to KMP*	-	-	-	-	-	-	-	-	0.00	0.00
	-	-	-	-	-	-	-	-	(0.00)	(0.00)
Loan repaid by KMP*	-	-	-	-	-	-	-	-	0.00	0.00
	-	-	-	-	-	-	-	-	(0.00)	(0.00)

Figures in brackets stated pertain to the year ended 31st March,2019

* Amount is lesser than the rounding off norms followed by the Company.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED

Notes to the Financial Statements for the year ended 31st March,2020

35. Related Party Transactions (Continue)

₹ Crores

Particulars	CE	SI	Fellow subsidiaries (FS)						KMP &	Total
	TPCL	DVC	TPTCL	CGPL	TPREL	WREPL	TPSSL	Subtotal[FS]	Directors	
ii) Balances outstanding as at 31st March,2020										
Trade receivables										
As at 31st March,2020		72.89	134.21	-	-	-	-	134.21	-	207.10
As at 31st March,2019	-	(136.28)	(128.35)	(0.35)	-	-	-	(128.69)	-	(264.97)
Unbilled revenue										
As at 31st March,2020	-	29.63	-2.24	-	-	-	-	-2.24	-	27.39
As at 31st March,2019	-	(95.13)	(0.91)	-	-	-	-	(0.91)	-	(96.04)
Dividend Payable										
As at 31st March,2020	-	-	-	-	-	-	-	-	-	-
As at 31st March,2019	(64.45)	(22.65)	-	-	-	-	-	-	-	(87.10)
Security deposits										
As at 31st March,2020	-	0.28	-	-	-	-	-	-	-	0.28
As at 31st March,2019	-	(0.20)	-	-	-	-	-	-	-	(0.20)
Other current assets-others										
As at 31st March,2020	-	-	-	-	-	-	-	-	-	-
As at 31st March,2019	-	(0.08)	-	-	-	-	-	-	-	(0.08)
Trade payables										
As at 31st March,2020	8.87	1.30	-	-	-	-	-	-	-	10.18
As at 31st March,2019	(7.09)	-	-	(0.00)	-	(0.02)	-	(0.03)	-	(7.11)
Letter of credit										
As at 31st March,2020	-	34.45	136.49	-	-	-	-	136.49	-	170.94
As at 31st March,2019	-	(32.60)	(62.07)	-	-	-	-	(62.07)	-	(94.67)
KMP (Loan Outstanding)										
As at 31st March,2020	-	-	-	-	-	-	-	-	0.01	0.01
As at 31st March,2019	-	-	-	-	-	-	-	-	(0.02)	(0.02)

Notes:

Figures in brackets stated pertain to the year ended 31st March,2019

All outstanding balances are unsecured.

All transactions with the related parties have been done at arms length.

Key Managerial Personnel are entitled to post-employment benefits and other long term employee benefits recognised as per Ind AS 19 - 'Employee Benefits' in the financial statements. As these employee benefits are lump sum amounts provided on the basis of actuarial valuation, the same is included above on payment basis.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

35. Financial Instruments

This section gives an overview of the significance of financial instruments for the company and provides additional information on balance sheet items that contain financial instruments.

The details of significant accounting policies, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised in respect of each class of financial asset, financial liability and equity instrument are disclosed in the financial statements.

35.1 Financial assets and liabilities

The carrying value and fair value of financial instruments by categories as of 31st March,2020 is as follows:

₹ Crores

Particulars	Fair Value through P&L	Fair Value through OCI	Amortised Cost	Total Carrying value	Total Fair Value
Assets					
Cash and Cash Equivalents	-	-	84.65	84.65	84.65
Trade Receivables	-	-	217.71	217.71	217.71
Investments	166.33	-	-	166.33	166.33
Unbilled Revenues	-	-	31.77	31.77	31.77
Loans	-	-	0.21	0.21	0.21
Other financial Assets	-	-	0.41	0.41	0.41
Total	**166.33**	**-**	**334.75**	**501.08**	**501.08**
Liabilities:					
Trade Payables	-	-	169.20	169.20	169.20
Fixed Rate Borrowings (Includes Current Maturities)	-	-	498.74	498.74	498.74
Floating Rate Borrowings (Includes Current Maturities)	-	-	1,575.10	1,575.10	1,575.10
Other Financial Liabilities	-	-	68.34	68.34	68.34
Total	**-**	**-**	**2,311.38**	**2,311.38**	**2,311.38**

The carrying value and fair value of financial instruments by categories as of 31st March,2019 is as follows:

Assets					
Cash and Cash Equivalents	-	-	0.10	0.10	0.10
Other balances with banks	-	-	-	-	-
Trade Receivables	-	-	362.99	362.99	362.99
Investments	-	-	-	-	-
Unbilled Revenues	-	-	98.79	98.79	98.79
Loans	-	-	0.27	0.27	0.27
Other Financial Assets	-	-	0.34	0.34	0.34
Total	**-**	**-**	**462.49**	**462.49**	**462.49**
Liabilities:					
Trade Payables	-	-	161.80	161.80	161.80
Fixed Rate Borrowings (Includes Current Maturities)	-	-	498.53	498.53	498.53
Floating Rate Borrowings (Includes Current Maturities)	-	-	1,909.61	1,909.61	1,909.61
Other Financial Liabilities	-	-	133.63	133.63	133.63
Total	**-**	**-**	**2,703.57**	**2,703.57**	**2,703.57**

The management assessed that the fair value of cash and cash equivalents, other balances with bank, trade receivables, loans,unbilled revenues, trade payables, other financial assets and liabilities approximate their carrying amounts largely due to the short term maturities of these instruments.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties. The following methods and assumptions were used to estimate the fair values.

Fair value hierarchy

The fair value hierarchy is based on inputs to valuation techniques that are used to measure fair value that are either observable or unobservable and consists of the following three levels:

Quoted prices in an active market (Level 1): Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Valuation techniques with observable inputs (Level 2): Inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Valuation techniques with significant unobservable inputs (Level 3): Inputs are not based on observable market data (unobservable inputs). Fair values are determined in whole or in part using a valuation model based on assumptions that are neither supported by prices from observable current market transactions in the same instrument nor are they based on available market data.

The following table provides the fair value measurement hierarchy of the Company's assets and liabilities.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

	Date of valuation	Fair value hierarchy as at 31st March 2020			
		Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
FVTPL financial investments (Quoted Mutual funds)	31st March, 2020	166.33	-	-	166.33
		166.33	**-**	**-**	**166.33**
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March, 2020	-	498.74	-	498.74
Floating rate borrowings	31st March, 2020	-	1575.10	-	1575.10
Total		-	**2,073.84**	-	**2,073.84**

	Date of valuation	Fair value hierarchy as at 31st March , 2019			
		Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
FVTPL financial investments	31st March, 2019	-	-	-	-
		-	-	-	-
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March, 2019	-	498.53	-	498.53
Floating rate borrowings	31st March, 2019	-	1909.61	-	1,909.61
Total		-	**2,408.14**	-	**2,408.14**

There has been no transfer between level 1 and level 2 during the year

35.2 Capital Management & Gearing Ratio

For the purpose of the Company's capital management, capital includes issued equity capital and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's capital management is to maximize the value for shareholders.

The Company manages its capital structure and makes adjustments in light of changes in economic conditions and the requirements of the financial covenants. From time to time, the Company reviews its policy related to dividend payment to shareholders, return capital to shareholders or fresh issue of shares. The Company monitors capital using gearing ratio, which is net debt divided by total capital plus net debt. The Company's policy is to keep the gearing ratio around 50%. The Company includes within net debt, interest bearing loans and borrowings, less cash and bank balances, excluding discontinued operations as detailed in the notes below.

The Company's capital management is intended to create value for shareholders by facilitating the meeting of its long-term and short-term goals. Its Capital structure consists of net debt (borrowings as detailed in notes below) and total equity.

Gearing ratio

The gearing ratio at the end of the reporting year was as follows:

		₹ crore
	As at 31st March,2020	***As at 31st March,2019***
Debt (i)	*2,073.84*	*2,408.14*
Less: Cash and Bank balances	*84.65*	*0.10*
Net debt	1,989.19	*2,408.04*
Total Capital (ii)	*2,068.43*	*2,080.61*
Capital and net debt	**4,057.62**	***4,488.65***
Gearing ratio (%)	49.02	*53.65*

(i) Debt is defined as Non-current borrowings (including current maturities) and Current borrowings (excluding derivative, financial guarantee contracts and contingent considerations) and interest accrued on Non-current and Current borrowings.

(ii) Equity is defined as Equity share capital and other equity including reserves and surplus.

In order to achieve this overall objective, the Company's capital management, amongst other things, aims to ensure that it meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the bank to immediately call loans and borrowings. There have been no significant breaches in the financial covenants of any interest-bearing loans and borrowing in the current year.

No changes were made in the objectives, policies or processes for managing capital during the years ended 31st March, 2020 and 31st March, 2019.

Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

35. Financial Instruments

35.3 Financial risk management objectives and policies

The Company's principal financial liabilities, comprise borrowings, trade and other payables and other financial liabilities. The main purpose of these financial liabilities is to finance the Company's operations and to provide guarantees to support its operations. The Company's principal financial assets include investments, loans, trade and other receivables, cash and cash equivalents, other bank balances, unbilled receivables and other financial assets that derive directly from its operations.

The Company is exposed to market risk, credit risk and liquidity risk. The Company's senior management oversees the management of these risks. The Company's senior management is supported by a risk committee that reviews the financial risks and the appropriate financial risk governance framework for the Company. The Company's financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with the Company's policies and risk objectives. The risk management polices is approved by the board of directors, which is summarized below.

35.3.1 Market risk management

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risk: currency risk, interest rate risk and equity price risk. The impact of equity price risk and currency risk is not material. Financial instruments affected by market risk are loans and borrowings.

The sensitivity analysis in the following sections relate to the position as at 31st March, 2020 and 31st March, 2019.

a) Foreign currency risk management

(i) The year end foreign currency exposures of the Company is Nil (31 March, 2019: Nil)

(ii) The Company did not have any long term contract including derivative contract for which there were any material foreseeable losses.

b) Interest rate risk management

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The company's exposure to the risk of changes in market interest rates relates primarily to the company's long-term debt obligations with floating interest rates.

The Company manages its interest rate risk by having a balanced portfolio of fixed and variable rate loans and borrowings.The exposure of the Company's borrowings to interest rate changes at the end of the reporting period are as follows :

Particulars	31st March,2020		31st March,2019	
	Balance	Percentage	Balance	Percentage
Fixed Rate Borrowings (Includes Current Maturities)	498.74	24%	498.53	21%
Floating Rate Borrowings (Includes Current Maturities)	1,575.10	76%	1,909.61	79%
Total	**2,073.84**		**2,408.14**	

Interest rate sensitivity:

The sensitivity analysis below have been determined based on exposure to interest rates for term loans and debentures at the end of the reporting period and the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period in case of term loans and debentures that have floating rates.

If the interest rates had been 50 basis points higher or lower and all the other variables were held constant, the effect on Interest expense for the respective financial years and consequent effect on Company's profit in that financial year would have been as below:

Particulars	31st March,2020		As of 31st March, 2019	
	50 bps increase	50 bps decrease	*50 bps increase*	*50 bps decrease*
Interest expense on loan	(+) ₹ 7.82	(-) ₹ 7.82	(+) ₹ 7.27	(-) ₹ 7.27
Effect on profit before tax	(-) ₹ 7.82	(+) ₹ 7.82	(-) ₹ 7.27	(+) ₹ 7.27

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

35.3.2 Credit risk management

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (i.e.primarily trade receivables and unbilled revenue) and from its financing activities including loans, foreign exchange transactions and other financial instruments.

Collateral held as security

The Company holds collateral i.e. letter of credit and bank guarantee to partly secure its outstanding trade receivables. Credit risk associated with receivables is mitigated because the receivables are partly secure.

₹ crore

	31st March,2020	31st March,2019
Trade Receivables	217.71	362.99
Loans	0.21	0.27
Other Financial Assets	0.41	0.34
Unbilled Revenue	31.77	98.79
Total	**250.10**	***462.39***

Refer Note 13 for credit risk and other information in respect of trade receivables. Other receivables as stated above are due from the parties under normal course of the business and as such the Company believes exposure to credit risk to be minimal.

35.3.3 Liquidity risk management

Liquidity risk is the risk that the company will encounter difficulty in meeting obligation, associated with financial liabilities that are settled by delivering cash or another financial asset.

The Company manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities. The Company has access to a sufficient variety of sources of funding. Having regards to the nature of the business wherein the Company is able to generate fixed cash flows over a period of time and to optimize the cost of funding, the Company, from time to time, funds its long -term investment from short-term sources. The short-term borrowings can be rollforward or, if required, can be refinanced from long term borrowings.

	Up to 1 year	1 to 5 years	5+ years	Total	Carrying Amount
31st March,2020					
Non-Derivatives					
Borrowings #	1,009.39	1,301.89	295.52	**2,606.80**	**2,101.89**
Trade Payables	169.20	-	-	**169.20**	**169.20**
Other Financial Liabilities	28.41	11.88	-	**40.29**	**40.29**
Total Non-Derivative Liabilities	**1,207.00**	**1,313.77**	**295.52**	**2,816.29**	**2,311.38**
31st March,2019					
Borrowings #	352.79	1,912.60	221.76	**2,487.15**	**1,947.16**
Trade Payables	161.80	-	-	**161.80**	**161.80**
Other Financial Liabilities	311.96	9.29	-	**321.25**	**321.25**
Total Non-Derivative Liabilities	**826.55**	**1,921.89**	**221.76**	**2,970.20**	**2,430.21**

The table has been drawn up based on the undiscounted contractual maturities of the financial liabilities including interest that will be paid on those liabilities upto the maturity of the instruments,

35.4 Commodity price risk

The operating activity of the company involves generation of power and therefore requires continuous supply of coal. The company has entered into fuel supply agreements with Central Coalfields Limited and Bharat Coking Coal Limited and any price fluctuation is passed on to the customers

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

36. India and other global markets experienced significant disruption in operations resulting from uncertainty caused by the worldwide coronavirus pandemic. Considering that the entity is in the business of essential services, management believes that there is not much of an impact likely due to this pandemic. However, the Company is closely monitoring developments, its operations, liquidity and capital resources and is actively working to minimize the impact of this unprecedented situation.

37. There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

38. **Segment Reporting**

The Company is mainly engaged in the business of generation and selling of power in India. Based on the information reported to the chief operating decision maker (CODM) for the purpose of resource allocation and assessment of performance, there are no reportable segments in accordance with the requirements of Indian Accounting Standard 108- 'Operating Segments', notified under the Companies (Indian Accounting Standards) Rules, 2015.

39. **Mega power status**

The Company had applied to the Ministry of Power, Government of India along with necessary documents for grant of Mega Power Status to the Company's 1050 MW Maithon Right Bank Thermal Power Plant. Pending receipt of the mega power certificate, the Company remains liable to pay excise and customs duty on its receipts of goods and materials wherever applicable. Accordingly, the Company had paid excise duty to its vendors aggregating to ₹ 120.24 crores (31 March, 2019: ₹ 120.24 crores) upto 31 March, 2020. Out of total payment of excise duty to suppliers ₹ 119.11 crores (net of receipts) had been capitalised and the balance amount of ₹ 1.13 crores is included in capital work-in-progress as at 31 March, 2020.

40. **Significant Events after the Reporting Period**

There were no significant adjusting event that occurred subsequent to the reporting period.

41. Previous year's figures are regrouped / rearranged, where necessary, to confirm to the current year's presentation.

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 27 APR 2020

For and on behalf of the Board,

Ramesh Subramanyam
Chairman
Place: Mumbai
Date: 27th Apr, 2020

Suvamay Halder
Director
Place: Kolkata
Date:

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date:

Satish Kumar
Chief Financial Officer
Place: Dhanbad
Date:

Poonam Shirke
Company Secretary
Place: Mumbai
Date:

MAITHON POWER LTD. MAITHON

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

INDEPENDENT AUDITOR'S REPORT

To the Members of Maithon Power Limited

Report on the Audit of the Ind AS Financial Statements

Opinion

We have audited the accompanying Ind AS financial statements of Maithon Power Limited ("the Company"), which comprise the Balance sheet as at March 31 2021, the Statement of Profit and Loss, including the statement of Other Comprehensive Income, the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and notes to the Ind AS financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid Ind AS financial statements give the information required by the Companies Act, 2013, as amended ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2021, its profit including other comprehensive income, its cash flows and the changes in equity for the year ended on that date.

Basis for Opinion

We conducted our audit of the Ind AS financial statements in accordance with the Standards on Auditing (SAs), as specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Ind AS Financial Statements' section of our report. We are independent of the Company in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Ind AS financial statements.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Ind AS financial statements for the financial year ended March 31, 2021. These matters were addressed in the context of our audit of the Ind AS financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have determined the matters described below to be the key audit matters to be communicated in our report. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the Ind AS financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the Ind AS financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying Ind AS financial statements.

S R Batliboi & Co. LLP Kolkata

Key audit matters	How our audit addressed the key audit matter
Accrual of Recoverable from Beneficiaries/Payable to Beneficiaries for items which are subject matter of true up in tariff orders *(as described in note 21 of the Ind AS financial statements)*	
The Company's revenue recognition is guided by the tariff norms prescribed by the Central Electricity Regulatory Commission (CERC) guidelines and the tariff orders passed based on these regulations. Consequently, Recoverable from Beneficiaries/Payable to Beneficiaries is recognized for items which are subject matter of true up in tariff orders to be notified in future years. Judgement is exercised by management in estimating recoverability / payability of such other assets and liabilities in the books. As on 31st March 2021, the Company is carrying an amount of Rs. 227.48 crores as Payable to Beneficiaries (Net of Recoverable from Beneficiaries of Rs 38.44 crores) which is material to the financial statements of the Company. Considering the judgements involved in the estimates of various elements of capital and operational costs used in the computation of revenue as per applicable regulations and the amount involved we have determined this to be a key audit matter.	Following procedures have been performed to address this key audit matter:- 1. We have tested the design and operating effectiveness of key controls related to the estimation and recoverability of such Recoverable from Beneficiaries/Payable to Beneficiaries. 2. We have evaluated the estimation by management of recognition of these Recoverable from Beneficiaries/Payable to Beneficiaries with reference to Tariff Regulations and the tariff orders of earlier years on similar matters and also the underlying records of the Company. 3. We discussed with management to understand their assessment on each of the qualitative factors and ensured consistency of the management's explanation with the underlying documentation, rules and regulations. 4. We have re-calculated the workings obtained from the management to check the arithmetical accuracy of the calculations. 5. We have also checked the adequacy of the disclosure on these matters in the financial statements of the Company. 6. We have also obtained necessary management representation.
Recoverability of MAT Credit Entitlement in future *(as described in note 20c of the Ind AS financial statements)*	
The Company does not have taxable income owing to unabsorbed depreciation and benefits of section 80IA of Income Tax Act, 1961 and therefore it has been paying Minimum Alternate Tax (MAT) under the relevant provisions of the Income Tax Act, 1961. The Act also provides that such MAT paid can be carried forward (MAT credit entitlement) for set off against regular tax payable in subsequent fifteen years period. Such MAT credit entitlements are recognized when it is probable that normal taxable profit will be available against which these MAT credits can be utilized. The Company's ability to recognize these MAT credit assets is assessed by management at the end of each reporting	Following procedures have been performed to address this key audit matter:- 1. We have tested the design and operating effectiveness of key controls related to the computation and recognition of such MAT credit. 2. We have assessed the methodology applied by the Company with current accounting standards and applicable taxation laws along with the future business forecast of taxable profits. 3. We have assessed the likelihood of the Company to utilize the available MAT credit entitlements in the future with underlying projections and assumptions relating to future estimated profits, future capitalization and depreciation allowance thereon and future estimates of taxable income. 4. We have tested the arithmetical accuracy of the future taxability workings prepared by the management.

S R Batliboi & Co. Kolkata

Key audit matters	How our audit addressed the key audit matter
period, taking into account forecasts of future taxable profits and the law and jurisdiction of the land in force. The assumptions on these projections are determined by management. At March 31, 2021, MAT credit entitlement recognized in the Company's financial statements amounts to Rs. 418.68 crores. Given the degree of judgment involved in making a forecast of the profitability of the Company and the materiality of the amounts involved, we considered this to be a key audit matter.	5. We have also checked the adequacy of the disclosure on these matters in the financial statements of the Company. 6. We have also obtained necessary management representation.

We have determined that there are no other key audit matters to communicate in our report.

Information Other than the Financial Statements and Auditor's Report Thereon

The Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Annual report, but does not include the Ind AS financial statements and our auditor's report thereon.

Our opinion on the Ind AS financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Ind AS financial statements, our responsibility is to read the other information and, in doing so, consider whether such other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management for the Ind AS Financial Statements

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation of these Ind AS financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act read with [the Companies (Indian Accounting Standards) Rules, 2015, as amended. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the Ind AS financial statements, management is responsible for assessing the Company's ability

S R Batliboi & Co. LLP Kolkata

to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those Board of Directors are also responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Ind AS Financial Statements

Our objectives are to obtain reasonable assurance about whether the Ind AS financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Ind AS financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Ind AS financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Ind AS financial statements, including the disclosures, and whether the Ind AS financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

S R Batliboi & Co. LLP Kolkata

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the Ind AS financial statements for the financial year ended March 31, 2021 and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2016 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the "Annexure 1" a statement on the matters specified in paragraphs 3 and 4 of the Order.
2. As required by Section 143(3) of the Act, we report that:

   (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

   (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books;

   (c) The Balance Sheet, the Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account;

   (d) In our opinion, the aforesaid Ind AS financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;

   (e) On the basis of the written representations received from the directors as on March 31, 2021 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2021 from being appointed as a director in terms of Section 164 (2) of the Act;

   (f) With respect to the adequacy of the internal financial controls with reference to these Ind AS financial statements and the operating effectiveness of such controls, refer to our separate Report in "Annexure 2" to this report;

   (g) In our opinion, the managerial remuneration for the year ended March 31, 2021 has been paid / provided by the Company to its directors in accordance with the provisions of section 197 read with Schedule V to the Act;

   (h) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended in our opinion and to the best of our information and according to the explanations given to us:

      i. The Company has disclosed the impact of pending litigations on its financial position in its Ind AS financial statements – Refer Note 32 to the Ind AS financial statements;

      ii. The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses;



S.R. BATLIBOI & CO. LLP
Chartered Accountants

iii. There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Kamal Agarwal
Partner
Membership Number: 058652
UDIN: 21058652AAAABA2308
Place of Signature: Kolkata
Date: April 16, 2021

S R Batliboi & Co. LLP Kolkata

S.R. BATLIBOI & CO. LLP
Chartered Accountants

"ANNEXURE 1" TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE FINANCIAL STATEMENTS OF MAITHON POWER LIMTED

(i)

(a) The Company has maintained proper records showing full particulars, including quantitative details and situation of fixed assets.

(b) All fixed assets have not been physically verified by the management during the year but there is a regular programme of verification which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. No material discrepancies were noticed on such verification.

(c) According to the information and explanation given to us and the records examined by us and based on the examination of the registered sale deed/transfer deed/conveyance deed provided to us, we report that, the title deeds, comprising of all the immovable properties of land which are freehold, are in the name of the Company as at the balance sheet date, except the following:

Type of Land	Area	Amount in crores	Remarks
Raiyati Land (Free hold) located at Maithon, Jharkhand.	564.67 acres	159.80	The title deed to the Private land is in the name of Damodar Valley Corporation (DVC). Pending transfer of title as per the shareholders agreement, the Company had entered into an Indenture deed with DVC on 5 December, 2008, which provided inter-alia, lease of private land for a period of 35 years (and extendable for another 35 years at the option of the Company).
Railway Land (Freehold Land) located at Maithon, Jharkhand.	66.74 acres	137.12	The title deed to the Private land is in the name of Damodar Valley Corporation (DVC). As required by the shareholders agreement, DVC is in the process of transferring title in these lands in favour of the Company as per applicable laws of the State of Jharkhand.
GM land and Forest land (Leasehold) located at Maithon, Jharkhand	220.01 acres	25.44	The Company has made payments to Government of Jharkhand in the earlier years for acquisition of this land on lease and is in the process of execution of lease agreement from Government of Jharkhand.

S R Batliboi & Co. LLP Kolkata

GM land (Leasehold) located at Maithon, Jharkhand	40.95 acres	7.12	DVC had acquired this land on lease from the State of Jharkhand with the right to use them for the project and the lease is pending transfer in the name of the Company by DVC.

(ii) The management has conducted physical verification of inventory at reasonable intervals during the year and no material discrepancies were noticed on such physical verification.

(iii) According to the information and explanations given to us, the Company has not granted any loans, secured or unsecured to Companies, firms, Limited Liability Partnerships or other parties covered in the register maintained under section 189 of the Companies Act, 2013. Accordingly, the provisions of clause 3(iii)(a), (b) and (c) of the Order are not applicable to the Company and hence not commented upon.

(iv) In our opinion and according to the information and explanations given to us, there are no loans, investments, guarantees, and securities given in respect of which provisions of section 185 and 186 of the Companies Act 2013 are applicable and hence not commented upon.

(v) According to the information and explanation given to us the Company has not accepted any deposits within the meaning of Sections 73 to 76 of the Act and the Companies (Acceptance of Deposits) Rules, 2014 (as amended). Accordingly, the provisions of clause 3(v) of the Order are not applicable.

(vi) We have broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section 148(1) of the Companies Act, 2013, related to the generation of electricity, and are of the opinion that prima facie, the specified accounts and records have been made and maintained. We have not, however, made a detailed examination of the same.

(vii)

(a) The Company is regular in depositing with appropriate authorities undisputed statutory dues including provident fund, employees' state insurance, income-tax, sales-tax, service tax, duty of custom, duty of excise, value added tax, goods and service tax, cess and other statutory dues applicable to it.

(b) According to the information and explanations given to us, no undisputed amounts payable in respect of provident fund, employees' state insurance, income-tax, service tax, sales-tax, duty of custom, duty of excise, value added tax, goods and service tax, cess and other statutory dues were outstanding, at the year end, for a period of more than six months from the date they became payable.

(c) According to the information and explanations given to us, there are no dues of income tax, sales-tax, service tax, customs duty, excise duty, value added tax , goods and service tax and cess which have not been deposited on account of any dispute.

(viii) In our opinion and according to the information and explanations given to us by the management, the Company has not defaulted in repayment of loans or borrowing to a financial institution, bank or government or dues to debenture holders. The Company did not have any outstanding loans or borrowing in respect of financial institution and government.

S R Batliboi & Co. LLP Kolkata

(ix) According to the information and explanations given by the management, the Company has not raised any money by way of initial public offer / further public offer. The Company has utilized the money raised by way of debt instruments in the nature of non-convertible debentures and term loan for the purposes for which they were raised.

(x) Based upon the audit procedures performed for the purpose of reporting the true and fair view of the financial statements and according to the information and explanations given by the management, we report that no fraud by the company or no fraud / material fraud on the Company by the officers and employees of the Company has been noticed or reported during the year.

(xi) According to the information and explanations given by the management, the managerial remuneration has been paid / provided in accordance with the requisite approvals mandated by the provisions of section 197 read with Schedule V to the Companies Act, 2013.

(xii) In our opinion, the Company is not a Nidhi company. Therefore, the provisions of clause 3(xii) of the order are not applicable to the Company and hence not commented upon.

(xiii) According to the information and explanations given by the management, transactions with the related parties are in compliance with section 177 and 188 of Companies Act, 2013 where applicable and the details have been disclosed in the notes to the financial statements, as required by the applicable accounting standards.

(xiv) According to the information and explanations given to us and on an overall examination of the balance sheet, the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review and hence, reporting requirements under clause 3(xiv) are not applicable to the company and, not commented upon.

(xv) According to the information and explanations given by the management, the Company has not entered into any non-cash transactions with directors or persons connected with him as referred to in section 192 of Companies Act, 2013.

(xvi) According to the information and explanations given to us, the provisions of section 45-IA of the Reserve Bank of India Act, 1934 are not applicable to the Company.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Kamal Agarwal
Partner
Membership Number: 058652
Place of Signature: Kolkata
Date: April 16, 2021

S R Batliboi & Co. LLP Kolkata

S.R. BATLIBOI & CO. LLP
Chartered Accountants

ANNEXURE 2 TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE IND AS FINANCIAL STATEMENTS OF MAITHON POWER LIMTED

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of Maithon Power Limited ("the Company") as of March 31, 2021 in conjunction with our audit of the Ind AS financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's Management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India. These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditor's Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting with reference to these Ind AS financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing as specified under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting with reference to these Ind AS financial statements was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls over financial reporting with reference to these Ind AS financial statements and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting with reference to these Ind AS financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the internal financial controls over financial reporting with reference to these Ind AS financial statements.

Meaning of Internal Financial Controls Over Financial Reporting With Reference to these Financial Statements

A Company's internal financial control over financial reporting with reference to these Ind AS financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting

S R Batliboi & Co. Kolk

and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting with reference to these Ind AS financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls Over Financial Reporting With Reference to these Ind AS Financial Statements

Because of the inherent limitations of internal financial controls over financial reporting with reference to these Ind AS financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting with reference to these Ind AS financial statements to future periods are subject to the risk that the internal financial control over financial reporting with reference to these Ind AS financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, adequate internal financial controls over financial reporting with reference to these Ind AS financial statements and such internal financial controls over financial reporting with reference to these Ind AS financial statements were operating effectively as at March 31, 2021, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Kamal Agarwal
Partner
Membership Number: 058652
Place of Signature: Kolkata
Date: April 16, 2021

S R Batliboi & Co. LLP
Kolkata

MAITHON POWER LIMITED
Balance Sheet as at 31st March,2021

	Notes	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
Assets			
Non-current Assets			
(a) Property Plant and Equipment	5	3,611.61	3,217.73
(b) Capital Work-in-Progress		95.94	476.39
(c) Intangible Assets	6	0.45	0.37
(d) Financial Assets			
(i) Loans	7	0.16	0.19
(ii) Other Financial Assets	8	0.50	0.41
(e) Non-current Tax Assets (Net)	9	10.66	7.66
(f) Other Non-current Assets	10	70.00	38.46
Total Non-current Assets		3,789.32	3,741.21
Current Assets			
(a) Inventories	11	149.73	205.49
(b) Financial Assets			
(i) Loans	7	200.02	0.02
(ii) Investments	12	161.74	166.33
(iii) Trade Receivables	13	30.14	217.71
(iv) Unbilled Revenue		40.61	31.77
(v) Cash and Cash Equivalents	14	67.34	84.65
(vi) Other Financial Assets	8	1.09	-
(c) Other Current Assets	10	38.66	154.27
Total Current Assets		689.33	860.24
Total Assets		**4,478.65**	**4,601.45**
Equity and Liabilities			
Equity			
(a) Equity Share Capital	15	1,508.92	1,508.92
(b) Other Equity	16	691.47	559.51
Total Equity		2,200.39	2,068.43
Liabilities			
Non-current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	17	1,563.35	1,247.03
(ii) Other Financial Liabilities	18	18.47	11.88
(b) Provisions	19	8.28	8.76
(c) Deferred Tax Liabilities (Net)	20	2.44	52.60
(d) Other Non-current Liabilities	21	16.97	16.97
Total Non-current Liabilities		1,609.51	1,337.24
Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	22	15.00	15.00
(ii) Trade Payables			
(a) Total outstanding dues of micro enterprises and small enterprises	23	4.23	0.24
(b) Total outstanding dues of creditors other than micro enterprises and small enterprises		120.75	168.96
(iii) Other Financial Liabilities	18	295.52	868.27
(b) Provisions	19	0.35	0.37
(c) Current Tax Liabilities (Net)	9	0.93	1.18
(d) Other Current Liabilities	21	231.97	141.76
Total Current Liabilities		668.75	1,195.78
Total Liabilities		2,278.26	2,533.02
Total Equity and Liabilities		**4,478.65**	**4,601.45**
See accompanying notes to the Ind AS Financial Statements	1-40		

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 16th April, 2021

For and on behalf of the Board,

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 16th April, 2021

Joydeep Mukherjee
Director
Place: Kolkata
Date: 16th April, 2021

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date: 16th April, 2021

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 16th April, 2021

Poonam Shirke
Company Secretary
Place: Mumbai
Date: 16th April, 2021

MAITHON POWER LIMITED

Statement of Profit and Loss for the year ended 31st March,2021

		Notes	For Year ended 31st March,2021 ₹ Crores	For Year ended 31st March,2020 ₹ Crores
(I)	Revenue from Operations	24	2,503.38	2,741.17
(II)	Other Income	25	17.15	28.33
(III)	**Total Income**		**2,520.53**	**2,769.50**
(IV)	**Expenses**			
	Cost of Power Purchased		1.18	1.78
	Cost of Fuel Consumed		1,500.33	1,575.51
	Employee Benefits Expense	26	40.27	40.80
	Depreciation and Amortisation Expense	27	246.07	243.81
	Finance Cost	28	136.09	193.11
	Other Expenses	29	280.11	257.83
	Total Expenses		**2,204.05**	**2,312.84**
(V)	**Profit Before Tax**		**316.48**	**456.66**
(VI)	**Tax Expense**			
	Current Tax		55.63	80.13
	Adjustment of tax relating to earlier year		-	0.45
	Deferred Tax		(50.17)	38.26
	Income Tax Expense	30	**5.46**	**118.84**
(VII)	**Profit for the year**		**311.02**	**337.82**
(VIII)	**Other Comprehensive Income**			
	Add/(Less):			
	(i) Items that will not be reclassified to profit and loss			
	(a) Remeasurement of the Defined Benefit Plans		1.14	0.00 *
	(ii) Tax relating to items that will not be reclassified to Profit & Loss			
	(a) Current Tax		(0.20)	0.00 *
	Total Other Comprehensive Income (Net of taxes)		**0.94**	**0.00**
(IX)	**Total Comprehensive Income for the year**		**311.96**	**337.82**
(X)	**Earnings Per Equity Share (Face Value ₹ 10/- Per Share)**	33		
	Basic & Diluted (₹)		2.06	2.24

* Amount is lesser than the rounding off norms followed by the Company.

See accompanying notes to the Ind AS Financial Statements **1-40**

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: **301003E/E300005**

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 16th April, 2021

S R Batliboi & Co. LLP Kolkata

For and on behalf of the Board,

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 16th April, 2021

MAITHON POWER LIMITED

Joydeep Mukherjee
Director
Place: Kolkata
Date: 16th April, 2021

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date: 16th April, 2021

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 16th April, 2021

Poonam Shirke
Company Secretary
Place: Mumbai
Date: 16th April, 2021

MAITHON POWER LIMITED
Statement of Changes in Equity for the year ended 31st March,2021

A. Equity Share Capital

		₹ Crores
Equity Shares of ₹ 10 each issued, subscribed and fully paid	No. of Shares	Amount
Balance as at 1st April,2019	1,50,89,17,729	1,508.92
Balance as at 31st March,2020	1,50,89,17,729	1,508.92
Balance as at 1st April,2020	1,50,89,17,729	1,508.92
Balance as at 31st March,2021	1,50,89,17,729	1,508.92

B. Other Equity

			₹ Crores
	Reserves and Surplus		
	Debenture Redemption Reserve	Retained Earnings	Total
Balance as at 1st April,2019	**94.76**	**476.93**	**571.69**
Profit for the year	-	337.82	337.82
Other Comprehensive Income for the year (Net of Tax)	-	0.00 *	0.00 *
Total Comprehensive Income	-	**337.82**	**337.82**
Dividend Paid	-	(290.32)	(290.32)
Dividend Distribution Tax	-	(59.68)	(59.68)
Transfer to Debenture Redemption Reserve	34.29	(34.29)	-
	34.29	**(384.29)**	**(350.00)**
Balance as at 31st March,2020	**129.05**	**430.46**	**559.51**
Balance as at 1st April,2020	**129.05**	**430.46**	**559.51**
Profit for the year	-	311.02	311.02
Other Comprehensive Income for the year (Net of Tax)	-	0.94	0.94
Total Comprehensive Income	-	**311.96**	**311.96**
Dividend Paid	-	(180.00)	(180.00)
	-	**(180.00)**	**(180.00)**
Balance as at 31st March,2021	**129.05**	**562.42**	**691.47**

* Amount is lesser than the rounding off norms followed by the Company.

See accompanying notes to the Ind AS Financial Statements

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 16th April, 2021

For and on behalf of the Board,

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 16th April, 2021

Joydeep Mukherjee
Director
Place: Kolkata
Date: 16th April, 2021

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date: 16th April, 2021

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 16th April, 2021

Poonam Shirke
Company Secretary
Place: Mumbai
Date: 16th April, 2021

MAITHON POWER LIMITED
Statement of Cash Flows for the year ended 31st March,2021

Particulars	For Year ended 31st March,2021 ₹ Crores	For Year ended 31st March,2020 ₹ Crores
A. Cash Flow from Operating Activities		
Profit before Taxes	316.48	456.66
Adjustments to reconcile profit before tax to net cash flows		
Depreciation and Amortisation Expenses	246.07	243.81
Finance Costs	136.09	193.11
Interest Income	(5.96)	(0.14)
Late Payment Surcharge	-	(20.79)
(Gain) / Loss on disposal of Property, Plant and Equipment (Net)	0.01	(0.04)
Gain on sale/fair valuation of Current Investment measured at FVTPL	(7.76)	(4.34)
Operating Profit before Working Capital Changes	**684.93**	**868.27**
Working Capital Adjustments		
Trade Receivable	187.57	145.28
Unbilled Revenue	(8.84)	67.02
Inventories	55.77	12.97
Other Current Assets	115.62	208.69
Other Non Current Financial Assets	(0.05)	(0.01)
Trade Payables	(44.24)	7.40
Other Current Liabilities	90.21	138.01
Other Current Financial liabilities	2.21	(0.43)
Current provisions	1.13	(4.99)
Non-Current provisions	(0.48)	3.56
Cash Generated from Operations	**1,083.83**	**1,445.77**
Income Taxes Paid	(59.09)	(89.89)
Net Cash flow from Operating Activities	**1,024.74**	**1,355.88**
B. Cash Flow from Investing Activities		
Capital expenditure on Property, Plant and Equipment, including capital advances	(244.44)	(154.64)
Proceeds from sale of Property, Plant and Equipment	0.03	0.05
Purchase of Current Investments	(2,405.22)	(2,309.53)
Proceeds from sale of Current Investments	2,417.58	2,147.54
Interest Received	4.88	0.14
Late Payment Surcharge received	-	20.79
Inter corporate deposits Given	(200.00)	-
Net Cash used in Investing Activities	**(427.17)**	**(295.65)**
C. Cash Flow from Financing Activities		
Proceeds from Non Current Borrowings	524.00	250.00
Repayment of Non Current Borrowings	(817.91)	(141.10)
Proceeds from Current Borrowings	110.00	2,478.80
Repayment of Current Borrowings	(110.00)	(2,924.78)
Interest Paid	(140.97)	(183.60)
Dividend Paid	(180.00)	(377.42)
Dividend Distribution Tax	-	(77.58)
Net Cash used in Financing Activities	**(614.88)**	**(975.68)**
Net (Decrease)/Increase in Cash and Cash Equivalents	(17.31)	84.55
Cash and Cash Equivalents as at 1st April (Opening Balance)	84.65	0.10
Cash and Cash Equivalents as at 31st March (Closing Balance)	**67.34**	**84.65**

Cash and Cash Equivalents include:

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
(i) Balances with banks in Current Accounts	67.34	84.65
	67.34	84.65

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number:301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 16th April, 2021

S R Batliboi & Co LLP Kolkata

For and on behalf of the Board,

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 16th April, 2021

Joydeep Mukherjee
Director
Place: Kolkata
Date: 16th April, 2021

MAITHON POWER LIMITED

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date: 16th April, 2021

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 16th April, 2021

Poonam Shirke
Company Secretary
Place: Mumbai
Date: 16th April, 2021

1. **Corporate Information**

MAITHON POWER LIMITED ('the Company'), has been set up pursuant to an agreement entered into between The Tata Power Company Limited (TPCL) and Damodar Valley Corporation (DVC) with 74% and 26% shareholding respectively, to operate and maintain Electric power generating stations. The Company has set up a thermal power generation plant (comprising of two units of 525 MW each namely 'Unit I and Unit II') at Maithon, Jharkhand with a total capacity of 1050 MW. Unit I and Unit II of the project were commissioned on 1 September, 2011 and 24 July, 2012 respectively. The registered office of the Company is Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400009, Maharashtra, India.

The financial statements have been approved for issue in accordance with a resolution of the directors on 16th April, 2021

2. **Significant Accounting Policies**

2.1 Basis of preparation and presentation

The financial statements of the Company have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 (as amended from time to time) and presentation requirements of Division II of Schedule III to the Companies Act, 2013, (Ind AS compliant Schedule III).

The financial statements have been prepared on a historical cost basis except for certain financial assets and liabilities measured at fair value (refer accounting policy regarding financial instruments)

Accounting Policy are consistent with earlier years unless stated otherwise.

3. **Summary of Significant Accounting Policies**

3.1 Leases

At inception of contract, the Company assesses whether the Contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. At inception or on reassessment of a contract that contains a lease component, the Company allocates consideration in the contract to each lease component on the basis of their relative stand alone price.

Company as a lessee

i) Right - of - use - assets

The Company recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, lease payments made at or before the commencement date less any lease incentives received and estimate of costs to dismantle. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

- Land: 05 to 35 years

The right-of-use assets are also subject to impairment in accordance with Ind AS 36 "Impairment of assets". The Company presents right-of-use assets that do not meet the definition of investment property in 'Property, plant and equipment'.

ii) Lease Liabilities

At the commencement date of the lease, the Company recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. In calculating the present value of lease payments, the Company uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable.

After the commencement date , the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. The carrying amount is remeasured when there is a change in future lease payments arising from a change in index or rate. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset. The Company's lease liabilities are included in Interest-bearing loans and borrowings.

iii) Short term leases and leases of low value of assets

The Company applies the short-term lease recognition exemption to its short-term leases (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption that are considered to be low value. Lease payments on short-term leases and leases of low value assets are recognised as expense on a straight-line basis over the lease term.

As a lessor

Leases in which the company does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms. Contingent rents are recognised as revenue in the period in which they are earned.

3.2 Foreign Currencies

The functional currency of the Company is Indian rupee (₹)

Income and expenses in foreign currencies are recorded at exchange rates prevailing on the date of the transaction. Foreign currency denominated monetary assets and liabilities are translated at the exchange rate prevailing on the balance sheet date and exchange gains and losses arising on settlement and restatement are recognized in the statement of profit and loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognised in OCI or profit or loss are also recognised in OCI or profit or loss, respectively).

Exchange differences on monetary items are recognized in profit or loss in the period in which they arise except for exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

3.3 Current Vs Non Current

The Company presents assets and liabilities in the balance sheet based on current/ non-current classification. An asset is treated as current when it is:

- Expected to be realised or intended to be sold or consumed in normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realised within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is treated as current when :

- it is expected to be settled in normal operating cycle,
- it is held primarily for the purpose of trading,
- it is due to be settled within twelve months after the reporting period, or
- there is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period.

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The Company has identified twelve months as its operating cycle.

3.4 Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in statement of profit and loss.

3.5 Financial Assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace. Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), or fair value through profit or loss. The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them.

3.5.1 Financial assets at amortised cost

A 'financial asset' is measured at the amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and

b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. The EIR amortisation is included in finance income in the profit or loss.

3.5.2 Financial assets at fair value through other comprehensive income(FVTOCI)

A 'financial asset' is classified as at the FVTOCI if both of the following criteria are met:

a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset's contractual cash flows represent SPPI.

On initial recognition, the Company makes an irrevocable election on an instrument-by-instrument basis to present the subsequent changes in fair value in other comprehensive income pertaining to investments in equity instruments, other than equity instruments which are held for trading. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instruments through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on sale of the investments.

3.5.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Company irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading.
Other financial assets are measured at fair value through profit or loss unless it is measured at amortised cost or at fair value through other comprehensive income on initial recognition. The transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognized in statement of profit or loss.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

3.5.4 Derecognition of Financial Assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the Company's balance sheet) when:

i) the right to receive cash flows from the asset have expired, or
ii) the Company has transferred its right to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its right to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Company continues to recognise the transferred asset to the extent of the Company's continuing involvement. In that case, the Company also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

3.5.5 Impairment of financial assets

The Company assesses at each date of balance sheet whether a financial asset or a group of financial assets is impaired. Ind AS 109 requires expected credit losses to be measured through a loss allowance. The Company recognises lifetime expected losses for all contract assets and / or all trade receivables that do not constitute a financing transaction. For all other financial assets, expected credit losses are measured at an amount equal to the 12 month expected credit losses or at an amount equal to the life time expected credit losses if the credit risk on the financial asset has increased significantly since initial recognition.

3.6 Financial Liabilities

All financial liabilities are recognised initially at fair value and in case of loans and borrowings and payables, net of directly attributable transaction cost.
For purposes of subsequent measurement, financial liabilities are classified in two categories:
a) Financial liabilities at fair value through profit or loss
b) Financial liabilities at amortised cost (loans and borrowings)

3.6.1 Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Gains or losses on liabilities held for trading are recognised in the profit or loss. The Company has not designated any financial liability as at fair value through profit or loss.

3.6.2 Financial liabilities at amortised cost (Loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process. The EIR amortisation is included as finance costs in the statement of profit and loss.

3.6.3 Derecognition of Financial Liabilities

A Financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified , such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability . The difference in the respective carrying amounts is recognised in the statement of profit and loss.

3.7 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

3.8 Dividend Distribution to equity shareholders of the Company

The Company recognises a liability to make dividend distributions to its equity holders when the distribution is authorised and the distribution is no longer at the discretion of the Company . As per the corporate laws in India, a distribution is authorised when it is approved by the shareholders. A corresponding amount is recognised directly in equity.
In case of Interim Dividend, the liability is recognised on its declaration by the Board of Directors.

4. Critical accounting estimates and judgements

In the application of the Company's accounting policies, the management of the Company is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods. Detailed information about each of these estimates and judgements is included in relevant notes together with information about the basis of calculation for each affected line item in the financial statements.

The areas involving critical estimates or judgements are:

a) Estimation of current tax and deferred tax expense (including Minimum alternate tax credit) - Note 20 and Note 30
b) Recoverable from Beneficiaries / Payable to Beneficiaries(Net) - Note 21
c) Estimation on recoverability of Late Payment Surcharge (LPS) – Note 25
d) Estimation of defined benefit obligations- Note 19
e) Judgement to estimate the amount of provision required or to determine required disclosure related to litigation and claims against the Company - Note 32.

Estimates and judgement are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the Company and that are believed to be reasonable under the circumstances.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

5. Property, Plant and Equipment

5.1 Accounting Policy

Property, plant and equipment is stated at cost less accumulated depreciation and accumulated impairment losses, if any. Cost includes purchase price (net of trade discount and rebates) and any directly attributable cost of bringing the asset to its working condition for its intended use and for qualifying assets, borrowing costs capitalised in accordance with Ind AS 23. Capital work in progress is stated at cost, net of accumulated impairment loss, if any. Other Indirect Expenses incurred relating to project, net of income earned during the project development stage prior to its intended use, are considered as pre-operative expenses and disclosed under Capital Work-in-Progress. When significant parts of plant and equipment are required to be replaced at intervals, the Company depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in the statement of profit and loss as incurred.

5.2 Subsequent Cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate assel, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably. All other repair and maintenance costs are recognized in profit or loss as incurred.

5.3 Depreciation

Depreciation commences when the assets are ready for the intended use.

Depreciation on property, plant and equipment in respect of electricity business of the Company is covered under Part B of Schedule II of the Companies Act, 2013, has been provided on the straight line method at the rates using the methodology required by relevant provisions of Central Electricity Regulatory Commission.

Depreciation on all other assets is recognised on the cost of assets (other than freehold land) less their residual values over their estimated useful lives, using the straight-line method

5.5 Useful lives of tangible assets:

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis. The Company, based on technical assessment made by technical expert and management estimate, depreciates certain items of building, plant and equipments over estimated useful lives which are different from the useful life prescribed in Schedule II to the Companies Act, 2013. The management believes that these estimated useful lives are realistic and reflect fair approximation of the period over which the assets are likely to be used.

Type of Asset	Useful Lives
Buildings-Plant	25 Years
Buildings-Others	25 Years
Plant and Equipment	25 Years
Computer	3 Years
Furniture and Fixtures	5 to 10 years
Office Equipment	5 to 10 years
Motor vehicles etc	5 Years
Railway Sidings & Overhead Electrification	25 Years

5.6 Derecognition of tangible assets

An item of Property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipments is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the statement of profit and loss.

5.7 Impairment of tangible and intangible assets

The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets of or Group of assets.

When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Impairment losses of tangible and intangible assets are recognised in the statement of profit and loss.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

5. Property, Plant and Equipment (Continued)

₹ Crores

(A) Owned Assets

Description	Freehold Land	Buildings - Plant	Buildings - Others	Railway sidings	Plant and Equipment	Overhead Electrification	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation										
Balance as at 1st April,2020	298.64	253.86	178.57	-	4,299.58	-	13.90	7.07	2.72	5,054.34
Additions	1.27	9.44	0.87	492.84	84.42	47.39	0.18	0.19	-	636.60
Disposals	-	-	-	-	(0.22)	-	(0.01)	-	(0.05)	(0.28)
Balance as at 31st March,2021	299.91	263.30	179.44	492.84	4,383.78	47.39	14.07	7.26	2.67	5,690.66
Accumulated depreciation										
Balance as at 1st April,2020	-	61.47	33.38	-	1,792.07	-	10.07	6.50	2.21	1,905.70
Depreciation Expense (Refer Note 27)	-	8.72	5.93	-	225.12	-	0.98	0.06	0.22	241.03
Disposal of assets	-	-	-	-	(0.18)	-	(0.01)	-	(0.05)	(0.24)
Balance as at 31st March,2021		70.19	39.31	-	2,017.01	-	11.04	6.56	2.38	2,146.49
Net carrying amount										
As at 31st March,2021	299.91	193.11	140.13	492.84	2,366.77	47.39	3.03	0.70	0.29	3,544.17
As at 31st March,2020	298.64	192.39	145.19	-	2,507.51	-	3.83	0.57	0.51	3,148.64

₹ Crores

Description	Freehold Land	Buildings - Plant	Buildings - Others	Railway sidings	Plant and Equipment	Overhead Electrification	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation										
Balance as at 1st April,2019	298.64	251.11	177.94	-	4,252.89	-	13.58	6.98	2.88	*5,004.02*
Additions	-	2.75	0.63	-	47.21	-	0.32	0.09	-	*51.00*
Disposals	-	-	-	-	(0.52)	-	-	-	(0.16)	*(0.68)*
Balance as at 31st March,2020	*298.64*	*253.86*	*178.57*	-	*4,299.58*	-	*13.90*	*7.07*	*2.72*	*5,054.34*
Accumulated depreciation										
Balance as at 1st April,2019	-	53.06	27.49	-	1,569.10	-	8.89	6.30	2.02	*1,666.86*
Depreciation Expense (Refer Note 27)	-	8.41	5.90	-	223.44	-	1.18	0.22	0.34	*239.49*
Disposal of assets	-	-	-	-	(0.48)	-	-	-	(0.15)	*(0.63)*
Balance as at 31st March,2020	-	*61.47*	*33.38*	-	*1,792.07*	-	*10.07*	*6.50*	*2.21*	*1,905.70*
Net carrying amount										
As at 31st March,2020	***298.64***	***192.39***	***145.19***	-	***2,507.51***	-	***3.83***	***0.57***	***0.51***	***3,148.64***
As at 31st March,2019	***298.64***	***198.05***	***150.45***	-	***2,683.79***	-	***4.69***	***0.68***	***0.86***	***3,337.16***

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

5. Property, Plant and Equipment (Continued)

Note:

(a) The Plant land of 1,110 acres comprising Private land (565.67 acres), Gair Mazura (GM) land (114.95 acres), Forest land (238.39 acres) and Jungle Jhaar Land (191.67 acre) was identified and acquired by Damodar Valley Corporation (DVC) exclusively for the Maithon Right Bank Thermal Power Project.
The title to the private land measuring 565.67 acres, acquired for Maithon Right Bank Thermal Power Project for setting up a Power Generation Plant, is in the name of DVC. As per the Shareholders Agreement, the title is to be transferred to the Company. Pending transfer of title as stated above, the Company had entered into an Indenture Deed with DVC on 5 December, 2008, which provided inter-alia, lease of private land for a period of 35 years (and extendable for another 35 years at the option of the Company) and provision to create security in favour of Lenders and transfer this land to the Company at the cost at which it was acquired subject to approval of the Government of the State of Jharkhand. Subsequently, the Company had created security in favour of Lenders on 17 July, 2017, as per the terms of the loan agreement and accordingly the lease rent has been fixed at ₹ 1 per annum.
The expenditure in connection with private land including land compensation and rehabilitation and resettlement expenses has been capitalised as freehold land.

(b) Railway infrastructure land of 134 acres comprising Private land (70 acres), Gair Mazura (GM) land (28.34 acres) and Eastern Railway land (35.27 acres) was identified exclusively for the Railway Corridor of Maithon Right Bank Thermal Power Project.
DVC has acquired Private land (66.74 acres). As per the shareholders agreement, the title / lease of these lands is to be transferred to the Company. DVC is in the process of transferring title / lease in these lands in favour of the Company as per applicable laws of the State of Jharkhand. The Company has directly acquired 3.36 acres in name of the Company.
The expenditure in connection with private land including land compensation and rehabilitation and resettlement expenses has been capitalised as freehold land.

(c) The Company has elected to fair value its freehold land and use that fair value in its opening Ind AS Balance Sheet as at 1 April, 2015 as deemed cost. Accordingly, the freehold land is carried at fair value of ₹ 296.22 crores and carrying amount reported under previous GAAP was ₹ 172.71 crores. Accordingly an amount of ₹ 123.51 crores has been credited to retained earnings as at 1 April, 2015 (transition date).

(d) Freehold land with a carrying amount of ₹ 299.91 crores (as at 31 March, 2020 - ₹ 298.64 crores) has been mortgage to secure borrowings of the Company (see note 17).

(e) Railway Infrastructure of ₹ 597.48 crores has been capitalised on 28th March 2021.

(B) Right - of - use - assets

Description	ROU-Land	Total
		₹ Crores
Cost		
Balance as on 1st April,2020	98.78	98.78
Additions	3.27	3.27
Balance as at 31st March,2021	**102.05**	**102.05**
Accumulated depreciation		
Balance as on 1st April,2020	29.69	29.69
Depreciation Expense (Refer Note 27)	4.92	4.92
Balance as at 31st March,2021	**34.61**	**34.61**
Net carrying amount		
As at 31st March,2021	**67.44**	**67.44**
As at 1st April, 2020	**69.09**	**69.09**

Description	ROU-Land	Total
		₹ Crores
Cost		
Balance as on 1st April 2019	98.78	98.78
Balance as at 31st March,2020	**98.78**	**98.78**
Accumulated depreciation		
Balance as on 1st April 2019	25.47	25.47
Depreciation Expense (Refer Note 27)	4.22	4.22
Balance as at 31st March,2020	**29.69**	**29.69**
Net carrying amount		
As at 31st March,2020	**69.09**	**69.09**
As at 1st April, 2019	**73.31**	**73.31**

Lessee

The Company has lease contracts for various items of plant, machinery, land, vehicles and other equipment used in its operations. Leases of land generally have lease terms between 05 and 35 years. Expenses related to leases of low value asset has been charged to statement of profit and loss account as lease rent amounting ₹0.66 crores during the current year (31st March 2020 - ₹0.68 crores). (Refer note 3.1)

Note:

(a) Out of Plant land of 1,110 acres, DVC had acquired GM Land (114.95 acres), Forest land (238.39 acres) and Jungle Jhaar Land (191.67 acre) from the State of Jharkhand with the right to use them for the project. As per the Shareholders Agreement, the lease is to be transferred to the Company. Pending transfer of lease in the name of the Company by DVC, the Company had entered into a License Agreement with DVC on 18 January, 2008 for use of these lands initially for a period of five years and which is to be automatically renewed thereafter. The Company has received demand for 191.67 acres of Jungle Jhar (Forest Land) from Government of Jharkhand and has made payment of requisite amount and is in process of execution of lease from Government of Jharkhand directly in the name of Company.
The expenditure in connection with GM land and Forest land has been included in Right of Use Assets.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

(b) Out of Railway infrastructure land of 134 acres, DVC has acquired GM land (17.78 acres). As per the shareholders agreement, the title / lease of these lands is to be transferred to the Company. DVC is in the process of transferring title / lease of these lands in favour of the Company as per applicable laws of the State of Jharkhand. The Company has directly paid requisite amount for balance GM Land (10.56 acres) and is in process of execution of lease agreement from Government of Jharkhand directly in the name of Company.
The Company has acquired 35.27 acres (14.274 hectares) through lease from Eastern Railway (ER) as required for the construction of railway infrastructure. The said land has been licensed for five years by the ER in favour of your Company with a provision of successive renewal.
The expenditure in connection with GM land and Eastern Railway land has been included in Right of Use Assets.

Net Carrying Amount	As at 31st March 2021	As at 31st March
(A) Owned Assets	3,544.17	3,148.64
(B) Right - of - use - assets	67.44	69.09
Total Property, Plant & Equipment	**3,611.61**	**3,217.73**

6. Other Intangible Assets

6.1. Accounting Policy

Intangible assets acquired separately
Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses, If any.

6.2. Subsequent Cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably.

6.3. Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset is measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

6.4. Amortisation of intangible assets

Intangible assets with finite lives are amortised over the useful economic life on straight line basis and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life is reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

Estimated useful lives of the intangible assets are as follows:

Type of Asset	Useful Lives
Computer Software	5 years

₹ Crores

Description	Computer software	Total
Cost		
Balance as at 1st April,2020	1.06	1.06
Additions	0.20	0.20
Balance as at 31st March,2021	**1.26**	**1.26**
Accumulated amortisation		
Balance as at 1st April,2020	0.69	0.69
Amortisation expense (Refer Note 27)	0.12	0.12
Balance as at 31st March,2021	**0.81**	**0.81**
Net Book Value		
As at 31st March,2021	**0.45**	**0.45**
As at 31st March,2020	**0.37**	**0.37**

Description	Computer software	Total
Cost		
Balance as at 1st April,2019	1.06	1.06
Balance as at 31st March, 2019	**1.06**	**1.06**
Accumulated amortisation		
Balance as at 1st April,2019	0.57	0.57
Amortisation expense (Refer Note 27)	0.12	0.12
Balance as at 31st March, 2019	**0.69**	**0.69**
Net Book Value		
As at 31st March,2020	**0.37**	**0.37**
As at 31st March,2019	**0.49**	***0.49***

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

MAITHON POWER LIMITED
Notes to the Ind AS Financial Statements for the year ended 31st March,2021

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
7. Loans		
Unsecured and considered good unless otherwise stated		
Non-current		
Loans to Employees Including loans due by officers of the Company - ₹ 0.06 Crores (As at March 31, 2020 - ₹ 0.01 Crores)	0.16	0.19
	0.16	**0.19**
Current		
Loan to Related Party	200.00	-
Other Loans		
Loans to Employees Including loans due by officers of the Company - ₹ 0.00 Crores* (As at March 31, 2020 - ₹ 0.00 Crores)* * Amount is lesser than the rounding off norms followed by the Company.	0.02	0.02
	200.02	**0.02**
8. Other Financial Assets		
Unsecured and considered good unless otherwise stated		
Non-current		
Security Deposit		
With related parties (Refer note 34)	0.28	0.28
With Others	0.21	0.12
With bank in deposit accounts* * Under lien with District Mining Authority, Jharkhand	0.01	0.01
	0.50	**0.41**
Current		
Inter-corporate Deposits	1.09	-
	1.09	**-**
9. Tax Assets / Liabilities		
Non-current tax assets		
Advance Income-tax (Net)	10.66	7.66
	10.66	**7.66**
Current tax liabilities		
Income Tax Payable (Net)	0.93	1.18
	0.93	**1.18**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

MAITHON POWER LIMITED
Notes to the Ind AS Financial Statements for the year ended 31st March,2021

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
10. Other Assets		
(Unsecured, considered good)		
Non-current		
(i) Capital Advances	53.26	21.72
(ii) Claims Receivable from Suppliers	16.74	16.74
	70.00	**38.46**
Current		
(i) Other		
Prepaid Expenses	12.52	0.70
Advances to Vendors	26.00	153.57
Other Advances	0.14	-
	38.66	154.27
	38.66	**154.27**

11. Inventories

Inventories are stated at the lower of cost and net realisable value. Cost of inventory includes cost of purchase and other costs incurred in bringing the inventories to their present location and condition. Costs of inventories are determined on weighted average basis. Finished goods and work in progress: cost includes cost of direct materials and labour and a proportion of manufacturing overheads based on the normal operating capacity, but excluding borrowing costs. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale. Unserviceable/damaged stores and spares are identified and written down based on technical evaluation.

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
(a) Raw Materials (lower of cost and net realisable value)		
Fuel	89.58	154.37
Fuel-in-Transit	4.96	1.52
(b) Stores and Spares		
Stores and Spare Parts	55.16	49.60
(c) Loose Tools	0.03	-
	149.73	**205.49**

12. Current Investments

Investments carried at Fair Value through Profit and Loss			
Mutual Funds (Quoted)			
i.	ICICI Prudential Liquid Fund - Direct Plan - Growth 18,03,377.071 Units (31st March, 2020: Nil Units)	54.96	-
ii.	KOTAK Liquid Fund Direct Plan Growth 1,31,649.324 Units (31st March 2020: Nil Units)	54.75	-
iii.	NIPPON India Liquid Fund - Direct Plan - Growth Plan - Growth Option 1,03,379.411 Units (31st March 2020: Nil Units)	52.03	-
iv.	SBI Liquid Fund - Direct Plan - Growth Nil Units (31st March 2020: 1,73,658.926 Units)	-	53.99
v.	Kotak Overnight Fund - Direct Plan Growth Nil Units (31st March 2020: 2,72,086.479 Units)	-	59.00
vi.	Axis Liquid Fund - Direct growth Nil Units (31st March 2020: 2,24,837.986 Units)	-	49.56
vii.	TATA Liquid Fund Direct Growth Nil Units (31st March 2020: 12,124.351 Units)	-	3.78
		161.74	166.33

Notes:

1. Aggregate Market Value of Quoted Investments	161.74	166.33
2. Aggregate Carrying Value of Quoted Investments	161.74	166.33

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
13. Trade Receivables		
Current Trade Receivables		
Secured Considered good	27.49	177.32
Unsecured Considered good	2.65	40.39
	30.14	**217.71**

The average credit period for the Company's receivable from its sale of power is 60 days. As per the relevant provisions of the CERC Regulations, penal interest @ 18% pa is claimable from the customers as Late payment Surcharge (LPS).

No trade or other receivable are due from directors or other officers of the company either severally or jointly with any other person. No trade or other receivable are due from firms or private companies respectively in which any director is a partner, a director or a member

Age of Receivables

Within credit period	24.21	187.59
1-90 days past due	-	19.32
91-182 days past due	-	1.31
More than 182 days past due	5.93	9.49
	30.14	217.71

14. Cash and cash equivalents

Accounting Policy

Cash and cash equivalents in the Balance Sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value. Cash and cash equivalents include balances with banks which are unrestricted for withdrawal and usage.

For the purpose of the statement of cash flows, cash and cash equivalents consist of cash at bank, cash/cheques on hand and short-term deposits, as defined above as they are considered an integral part of the Company's cash management.

(i) Balances with Banks:		
In Current Accounts	67.34	84.65
Cash and Cash Equivalents as per Balance Sheet	**67.34**	**84.65**
Cash and Cash Equivalents as per Statement of Cash Flows	**67.34**	**84.65**

Reconciliation of liabilities from Financing Activities

₹ Crores

Particulars	As at 31st March,2020	Cash flows		Non Cash Transactions	As at 31st March,2021
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	2,058.84	524.00	(817.91)	(1.52)	1,763.41
Current Borrowings (excluding Bank Overdraft)	15.00	110.00	(110.00)	-	15.00
Total	**2,073.84**	**634.00**	**(927.91)**	**(1.52)**	**1,778.41**

₹ Crores

Particulars	As at 31st March, 2019	Cash flows		Non Cash Transactions	As at 31st March,2020
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	1,947.16	250.00	(141.10)	2.78	2,058.84
Current Borrowings (excluding Bank Overdraft)	460.98	2,478.80	(2,924.78)	-	15.00
Total	**2,408.14**	**2,728.80**	**(3,065.88)**	**2.78**	**2,073.84**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

MAITHON POWER LIMITED
Notes to the Ind AS Financial Statements for the year ended 31st March,2021

15. Equity - Share Capital

	As at 31st March,2021		As at 31st March,2020	
	Number	₹ Crores	Number	₹ Crores
Authorised				
Equity Shares of ₹ 10/- each	2,00,00,00,000	2,000.00	2,00,00,00,000	2,000.00
		2,000.00		2,000.00
Issued, Subscribed and Paid-up Capital				
Equity shares of ₹ 10 each fully paid up	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

(i) **Reconciliation of the shares outstanding at the beginning and at the end of the reporting year**

	As at 31st March,2021		As at 31st March,2020	
	Number	₹ Crores	Number	₹ Crores
Equity Shares				
At the beginning of the year and at the end of the year	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

Terms/rights attached to Equity Shares

The Company has issued only one class of Equity Shares having a par value of ₹ 10/- per share. Each holder of Equity Shares is entitled to one vote per share. The final dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting.

In the event of liquidation of the Company, the holders of Equity Shares will be entitled to receive remaining assets of the Company, after distribution of all preferential amounts. The distribution will be in proportion to the number of Equity Shares held by the shareholders.

(ii) **Details of shareholders holding more than 5% shares in the Company and shares held by holding Company**

	As at 31st March,2021		As at 31st March,2020	
	Number	% Holding	Number	% Holding
Equity Shares of ₹10/- each fully paid				
The Tata Power Company Limited (the holding Company)	1,11,65,99,120	74%	1,11,65,99,120	74%
Damodar Valley Corporation	39,23,18,609	26%	39,23,18,609	26%

16. Other Equity

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
(i) Debenture Redemption Reserve (DRR)		
As at the beginning of the year	129.05	94.76
Add: Amount transferred from Retained Earnings	-	34.29
As at the end of the year	**129.05**	**129.05**
(ii) Retained Earnings		
As at the beginning of the year	430.46	476.93
Add: Remeasurement of Defined Benefit Obligation (Net of Tax)	0.94	0.00
Profit for the year	311.02	337.82
Less: Dividend Paid	180.00	290.32
Dividend Distribution Tax	-	59.68
Transfer to Debenture Redemption Reserve	-	34.29
Movement for the year	131.96	(46.47)
As at the end of the year	**562.42**	**430.46**
	691.47	**559.51**

Note:

1 On 30th June, 2020, Interim dividend of ₹0.40 per share (3.98%) aggregating ₹60 Crore was declared and paid to the holders of the fully paid equity shares on 1st July, 2020.

2 On 29th September, 2020, Interim dividend of ₹0.40 per share (3.98%) aggregating ₹60 Crore was declared and paid to the holders of the fully paid equity shares on 1st October, 2020.

3 On 30th December, 2020, Interim dividend of ₹0.40 per share (3.98%) aggregating ₹60 Crore was declared and paid to the holders of the fully paid equity shares on 30th December, 2020.

* Amount is lesser than the rounding off norms followed by the Company.

Nature and purpose of reserves:

Debenture Redemption Reserve

The Company was required to create a Debenture Redemption Reserve out of the profits which are available for payment of dividend for the purpose of redemption of debentures. Pursuant to Companies (Share Capital and Debentures) Amendment Rules, 2019 dated 16th August, 2019, the Company is not required to create Debenture Redemption Reserve (DRR). Accordingly, the Company has not created DRR during the year and DRR created till previous years will be transferred to retained earnings on redemption of debentures.

Retained Earnings

Retained Earnings are the profits of the Company earned till date net of appropriations.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

MAITHON POWER LIMITED
Notes to the Ind AS Financial Statements for the year ended 31st March,2021

17. Non-current Borrowings	As at 31st March,2021 ₹ Crores		As at 31st March,2020 ₹ Crores	
	Non-current	Current Maturities*	Non-current	Current Maturities*
Secured - At Amortised Cost				
(i) Redeemable Non-Convertible Debentures (See Note I, II & III below)	1,029.27	165.00	997.03	-
(ii) Term Loans from Banks (See Note IV & V below)				
(a) Union Bank of India	93.07	4.43		
(b) Axis Bank	441.01	30.63	250.00	
(c) State Bank of India	-	-	-	811.81
	534.08	35.06	250.00	811.81
	1,563.35	200.06	1,247.03	811.81

* (Refer Note 18)

I. Redeemable Non-Convertible Debentures issued on 30th November 2015

(a) The Company has issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹10.00 lakhs each on 30 November, 2015 at par. The debentures have been issued for the part-refinancing of the outstanding term loan from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures have been secured in favour of the debenture trustee by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land) of the issuer, both present and future.

(c) These debentures carry a floating rate which is base rate of HDFC Bank Limited plus 15 basis points. Interest is payable on the 30th of November each year.

II. Redeemable Non-Convertible Debentures issued on 9th February 2017

(a) The Company has issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹50.00 Lakhs on 9 February, 2017 at par respectively. The debentures have been issued for the part-refinancing of the outstanding term loan from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures have been secured by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land), all movable properties and assets, all the bank accounts, all current assets, all intangible assets, both present and future.
Assignment by way of security over letter of credit, performance bonds or guarantees provided by any person, all the rights, title, interest, benefits, claims and demands, whatsoever of the Issuer in each of the Project Documents, all Insurance Contracts/proceeds under Insurance Contracts, in relation to the Project of the issuer.
The above security will at all times, rank pari-passu inter se the Existing Lenders and the Debenture holders.

(c) The debentures carry a fixed rate of interest of 8% per annum. Interest is payable on the 9th of February each year.

The Company will have to take a prior written no-objection certificate from the debentureholders in the event it intends to create a security over the above secured properties in favour of its working capital lenders over and above ₹ 1000.00 crores.

III. Redeemable Non-Convertible Debentures issued on 24th December 2020

(a) The Company has issued ₹ 199.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹10.00 Lakhs each on 24th December, 2020 at par respectively. The debentures have been issued for the part-repayment of the existing term loan availed from SBI. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These Debentures have been secured by Security as mentioned in above para II-(b)

(c) The debentures carry a fixed coupon rate of 6.25% per annum. Interest is payable in 24th of December each year.

IV Term Loan from Axis Bank & Union Bank of India

(a) The Company has entered into a Loan Agreement of ₹ 500 Crore for Railway Infra with Axis Bank on 28th January, 2020. AXIS bank has down sell borrowings of ₹ 150 Crs to Union Bank of India with same terms & condition on 6th January 2021.

(b) These loan have been secured by Securily as mentioned in above para II-(b)

(c) Interest rate term loan is Axis bank 12 Month MLCR plus 25 basis points.

V. Term Loans from Axis Bank (Refinancing)

(a) The Company has entered into a Loan Agreement of ₹ 225 Crore with Axis Bank on 29th December, 2020 for the part-refinancing of the outstanding term loan from SBI.

(b) These loan have been secured by Securily as mentioned in above para II-(b)

(c) Interest rate term loan is Axis Bank 12 month MCLR plus 5 basis points.

Terms of Repayment As at 31st March,2021

Particulars		Amount Outstanding	Repayments						
			FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27 to FY 30-31	FY 30-31 & onwards
(i)	Non-Convertible Debentures issued on 30th Nov , 2015	500.00	165.00	165.00	170.00	-	-	-	-
(ii)	Non-Convertible Debentures issued on 09th Feb , 2017	500.00	-	100.00	100.00	100.00	100.00	100.00	0.00
(iii)	Non-Convertible Debentures issued on 24th Dec , 2020	199.00	-	-	39.80	59.70	99.50	-	-
(iv)	Term Loan - Axis Bank	252.50	11.48	22.95	22.95	22.95	22.95	114.77	34.43
(v)	Term Loan - Union Bank of India	97.50	4.43	8.86	8.86	8.86	8.86	44.32	13.30
(vi)	Term Loan - Axis Bank (Refinancing)	220.21	19.15	19.15	19.15	19.15	19.15	95.74	28.72
Less: Impact of recognition of borrowings at amortised cost using EIR		5.80							
Total		1,763.41							

Terms of Repayment As at 31st March,2020

Particulars		Amount Outstanding	Repayments						
			FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26 to FY 29-30	FY 30-31 & onwards
(i)	Non-Convertible Debentures issued on 30th Nov , 2015	500.00	-	165.00	165.00	170.00	-	-	-
(ii)	Non-Convertible Debentures issued on 09th Feb , 2017	500.00	-	-	100.00	100.00	100.00	200.00	-
(iii)	Term Loan - SBI	811.81	811.81	-	-	-	-	-	-
(iv)	Term Loan - Axis Bank	250.00	-	11.36	22.73	22.73	22.73	113.64	56.82
Less: Impact of recognition of borrowings at amortised cost using EIR		2.96							
Total		2,058.84							

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
18. Other Financial Liabilities		
Non-current		
Payables towards Purchase of Property, Plant and Equipment	18.47	11.88
	18.47	**11.88**
Current		
(a) Current Maturities of Long-term Debt (Refer Note 17)	200.06	811.81
(b) Interest accrued but not due on Borrowings	23.19	28.05
(c) Payables towards Purchase of Property,Plant and Equipment	68.00	27.86
(d) Security Deposits from Others	1.69	0.55
(e) Other Financial Liabilities	2.58	-
	295.52	**868.27**

19. Provisions

Accounting Policy

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of time value of money is material)

Present obligations arising under onerous contracts are recognised and measured as provisions with charge to statement of profit and loss. An onerous contract is considered to exist where the Company has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Defined contribution plans
Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

Defined benefits plans
The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liabilities and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the balance sheet with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods. Past service costs are recognised in the statement of profit and loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Company recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liabilities or asset. The Company recognises the following changes in the net defined benefit obligation as an expense in the statement of profit and loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non routine settlements; and
- Net interest expense or income.

A liability for a termination benefit is recognised at the earlier of when the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs.

The cost of the defined benefit gratuity plan and other post-employment medical benefits and the present value of the gratuity obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases and mortality rates. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

The parameter most subject to change is the discount rate. In determining the appropriate discount rate for plans operated in India, the management considers the interest rates of government bonds. The mortality rate is based on publicly available mortality tables. Those mortality tables tend to change only at interval in response to demographic changes. Future salary increases and gratuity increases are based on expected future inflation rates.

Current and other non-current employee benefits
A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of current employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other non-current employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date.

S R Batliboi & Co. LLP Kolkata
POWER LIMITED

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
19. Provisions		
Non-Current		
Compensated Absences	5.15	5.58
Post-Employment Medical Benefits	0.91	0.97
Other Defined Benefit Plans	1.28	1.41
Other Employee Benefits	0.94	0.80
	8.28	**8.76**
Current		
Compensated Absences	0.20	0.22
Other Defined Benefit Plans	0.13	0.15
Other Employee Benefits	0.02	-
	0.35	**0.37**

Employee Benefit Plans

19.1 Defined Contribution plan

The Company makes Provident Fund and Superannuation Fund contributions to defined contribution retirement benefit plans for eligible employees. The provident fund plan is operated by the Regional Provident Fund Commissioner. The Superannuation fund is managed by LIC of India. Under the schemes, the Company is required to contribute a specified percentage of the payroll costs to fund the benefits. The only obligation of the Company with respect to the retirement benefit scheme is to make the specified contributions.

The Company has recognized ₹ 1.37 crores (31st March, 2020 ₹ 1.48 crores) for provident fund contributions and ₹ 0.45 crores (31st March, 2020 ₹ 0.49 crores) for superannuation contributions in the Statement of Profit and Loss. The contributions payable to these plans by the Company are at rates specified in the rules of the schemes.

19.2 Defined benefit plans

(i) Unfunded

Post-Employment Medical Benefits
The Company provides certain post-employment health care benefits to superannuated employees at some of its locations. In terms of the plan, the retired employees can avail free medical check-up and medicines at Company's facilities.

Pension
The Company operates a defined benefit pension plan for employees who have completed 15 years of continuous service. The plan provides benefits to members in the form of a pre-determined lumpsum payment on retirement. Executive Director, on retirement, is entitled to pension payable for life including HRA benefit. The level of benefit is approved by the Board of Directors of the Company from time to time.

Ex-Gratia Death Benefit
The Company has a defined benefit plan granting ex-gratia in case of death during service. The benefit consists of a pre-determined lumpsum amount along with a sum determined based on the last drawn basic salary per month and the length of service.

Retirement Gift
The Company has a defined benefit plan granting a pre-determined sum as retirement gift on superannuation of an employee.

(ii) Funded

Gratuity Plan
The Company has a defined benefit gratuity plan. The gratuity plan is primarily governed by the Payment of Gratuity Act, 1972. Employees who are in continuous service for a period of five years are eligible for gratuity. The level of benefits provided depends on the member's length of service and salary at the retirement, withdrawal, resignation or death of an employee. The gratuity plan is funded plan. The gratuity fund is managed by Aditya Birla Sun Life Insurance Company Limited. The fund has the form of a trust and is governed by Trustees appointed by the Company. The Trustees are responsible for the administration of the plan assets and for the definition of the investment strategy in accordance with the regulations. The funds are deployed in recognized insurer managed funds in India. The Company does not fully fund the liability and maintains a target level of funding to be maintained over a period of time based on estimates of expected gratuity payments.

The Plan assets include investments in G-Sec Bonds and accordingly exposed to financial risk.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

(iii) Risks associated with Plan Provisions

Risks associated with the plan provisions are actuarial risks. These risks are: - (i) investment risk, (ii) interest risk (discount rate risk), (iii) mortality risk and (iv) salary risk.

Investment risk	The present value of the defined benefit plan liability is calculated using a discount rate determined by reference to Government Bonds Yield. If plan liability is funded and return on plan assets is below this rate, it will create a plan deficit.
Interest rate risk (discount rate risk)	A decrease in the bond interest rate (discount rate) will increase the plan liability; however , this will be partially offset by an increase in the return on the plan debt investments.
Mortality risk	The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after the employment. Indian Assured Lives Mortality (2006-08) ultimate table has been used in respect of the above. An increase in the life expectancy of the plan participants such as, an increase in the salary of the plan participants will increase the plan's liability.
Salary escalation risk	The present value of the defined benefit plan liability is calculated with the assumption of salary increase rate of plan participants in future. Deviation in the rate of increase of salary in future for plan participants from the rate of increase in salary used to determine the present value of obligation will have a bearing on the plan's liability.
Demographic risk	This is the risk of variability of results due to unsystematic nature of decrements that include mortality, withdrawal, disability and retirement. The effect of these decrements on the defined benefit obligations is not straight forward and depends upon the combination of salary increase, discount rate and vesting criterion.
Medical Inflation rate risk	Higher than expected increase in salary and medical cost will increase the defined benefit obligation.
Change in Leave Balances	This is the risk of variability of results due to a significant variation from expected accumulation of leave balances. All other aspects remaining same, higher than expected increase in the leave balances will increase the defined benefit obligation.

(iv) The principal assumptions used for the purposes of the actuarial valuations were as follows:

S. No.	Particulars	Refer note below	As at 31st March, 2021	As at 31st March, 2020
i.	Discount rate (p.a)	1	6.60%	6.50%
ii.	Salary escalation rate (p.a)	2		
	Management		7.00%	7.00%
	Non-Management		5.00%	5.00%
iii.	Retirement Age		60 years	60 years
iv.	Mortality Table		Indian Assured Lives Mortality (2006-08) Ult	Indian Assured Lives Mortality (2006-08) Ult
v.	Withdrawal Rate			
	Management: 21-44 years		6.00%	6.00%
	45 years and above		2.00%	2.00%
	Non-Management		0.50%	0.50%
vi.	Rate of Gold Inflation		8.00%	8.00%
vii.	Rate of Medical inflation (p.a)		8.00%	8.00%

Note:
1. The discount rate is based on the prevailing market yields of Indian Government securities as at the balance sheet date for the estimated term of obligations
2. The gratuity plan is funded
3. The estimates of future salary increases considered take into account the inflation, seniority, promotion and other relevant factors.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

19.3 The amounts recognized in the financial statements and the movements in the net defined benefit obligations over the year are as follows:

i. Amounts recognized in the Statement of Profit and Loss in respect of the funded defined benefits plans are as follows:

Particulars	For Year ended 31st March,2021 ₹ crores	For Year ended 31st March, 2020 ₹ crores
Current service cost	1.16	1.06
Net interest on net defined liability / (asset)	(0.04)	(0.02)
Components of defined benefit costs recognized in profit or loss	**1.12**	**1.04**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March,2021 ₹ crores	For Year ended 31st March, 2020 ₹ crores
Actuarial (gain)/Loss due to DBO Experience	(0.45)	(0.32)
Actuarial (gain)/Loss due to assumption changes	(0.12)	0.75
Actuarial (gain)/loss arising during period	(0.57)	0.42
Return on plan assets (greater)/less than discounting rate	0.04	(0.03)
Component of defined benefit costs recognized in Other Comprehensive Income	**(0.52)**	**0.40**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. The amount included in the Balance Sheet arising from the entity's obligation in respect of its defined benefits plans as follows:

Particulars	For Year ended 31st March,2021 ₹ Crores	For Year ended 31st March,2020 ₹ Crores
Present value of funded defined benefit obligation	(11.72)	(12.42)
Fair value of plan assets	13.66	12.87
Funded status surplus/(deficit)	**1.94**	**0.45**

iv. Movement in the fair value of the defined benefit obligation:

Particulars	For Year ended 31st March,2021 ₹ crores	For Year ended 31st March, 2020 ₹ crores
Opening defined benefit obligation	12.42	11.00
Current service cost	1.16	1.06
Interest cost on defined benefit obligation	0.80	0.81
Acquisitions (credit) / cost	(1.81)	(0.79)
Actuarial (gains) / loss arising from changes in demographic assumptions	-	(0.35)
Actuarial (gains) / loss arising from changes in experience	(0.45)	(0.32)
Actuarial (gains) / loss arising from changes in financial assumption	(0.12)	1.10
Benefits paid directly by the company	(0.28)	(0.09)
Closing defined benefit obligations	**11.72**	**12.42**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

v. Movement in the fair value of the plan assets are as follows:

Particulars	For Year ended 31st March,2021 ₹ Crores	For Year ended 31st March,2020 ₹ Crores
Opening fair value of plan assets	12.87	10.46
Interest income on plan assets	0.84	0.83
Employer contributions	-	1.55
Return on plan assets (greater)/less than discounting rate	(0.04)	0.03
Benefits paid	-	-
Closing fair value of plan assets	**13.66**	**12.87**

Note:

1) The plan assets of the Company managed through a trust are managed by Birla Sun Life Insurance (BSLI) Company Limited. The details of investments relating to these assets are not shown by BSLI. Hence, the composition of each major category of plan assets, the percentage or amount that each major category constitutes to the fair value of the total plan assets has not been disclosed.

2) The Company expects to make a contribution of ₹ Nil (as at 31 March, 2020: Nil) to defined benefit plan during the next financial year.

vi. Sensitivity analysis

Significant actuarial assumptions for the determination of the defined benefit obligation are discount rate, expected salary increase and mortality. The sensitivity analysis below have been determined based on reasonably possible changes of the assumptions occurring at the end of the reporting period, while holding all other assumptions constant.

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

Particulars	31st March,2021 ₹ Crores		31st March,2020 ₹ Crores	
	Increase	Decrease	Increase	Decrease
Discount Rate (-/+0.5%)	0.61	-0.56	0.68	-0.63
Salary Growth Rate (+/-0.5%)	0.60	-0.56	0.68	-0.63
Withdrawal Rate (-/+ 5%)	0.00	-0.77	0.00	-0.93

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit liability recognized in the Balance sheet.

There was no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

vii. The expected maturity analysis of defined benefit obligation is as follows:

Time Period	31st March,2021 ₹ Crores	31st March,2020 ₹ Crores
Within 1 year	0.42	0.43
Between 1-2 years	0.48	0.63
Between 2-3 years	0.96	0.54
Between 3-4 years	1.15	1.02
Between 4-5 years	1.87	1.23
Beyond 5 years	8.05	9.52

Particulars	31st March,2021	31st March,2020
The weighted average duration of the defined benefit plan obligation represents average duration for active members	7.4 years	7.4 years

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

19.4 Other Defined benefit plans

The amounts recognized in the financial statements and the movements in the net defined benefit obligations over the year are as follows:

i. Amounts recognized in the Statement of Profit and Loss in respect of these defined benefits plans are as follows:

Particulars	For Year ended 31st March,2021 ₹ crores	For Year ended 31st March, 2020 ₹ crores
Current service cost	0.80	0.99
Past Service Cost	-	0.19
Net interest expenses	0.57	0.70
Actuarial (Gain)/ Loss	0.11	(1.20)
Components of defined benefit costs recognized in profit or loss	**1.48**	**0.68**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March,2021 ₹ crores	For Year ended 31st March, 2020 ₹ crores
Actuarial (gain)/Loss due to Defined Benefit Obligation Experience	(0.58)	(1.56)
Actuarial (gain)/Loss due to assumption Changes	(0.04)	(0.04)
Component of defined benefit costs recognized in Other Comprehensive Income	**(0.62)**	**(1.60)**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. Reconciliation of Net Balance Sheet Position

Particulars	For Year ended 31st March,2021 ₹ crores	For Year ended 31st March, 2020 ₹ crores
Opening Net defined benefit asset/ (liability)	**(9.13)**	**(9.46)**
Current service cost	(0.80)	(0.99)
Past service cost	-	(0.19)
Net interest on net defined benefit liability/ (asset)	(0.57)	(0.70)
Amount recognized in OCI	0.62	0.39
Actuarial Gains/ (Losses)	(0.11)	1.20
Employer contributions	-	-
Benefit paid directly by the Company	0.64	0.35
Acquisitions credit/ (cost)	0.71	0.26
Closing Net defined benefit asset/ (liability)	**(8.63)**	**(9.13)**

Iv. Sensitivity analysis

Particulars	31st March,2021 ₹ crores		31st March, 2020 ₹ crores	
	Increase	Decrease	Increase	Decrease
Discount Rate (-/+0.5%)	0.55	(0.50)	0.61	(0.55)
Salary Growth Rate (+/-0.5%)	0.33	(0.31)	0.38	(0.35)
Withdrawal Rate (-/+ 5%)	-	(1.91)	-	(2.11)
Gold Inflation Rate (+/- 5%)	0.07	(0.06)	0.06	(0.05)
Medical Inflation Rate (+/- 5%)	0.13	(0.11)	0.15	(0.12)
Mortality Rate (+/- 5%)	0.05	(0.05)	-	-

vi. The expected maturity analysis of defined benefit obligations

Time Period	31st March,2021 ₹ crores	31st March, 2020 ₹ crores
Within 1 year	0.37	0.38
Between 1-2 years	0.40	0.50
Between 2-3 years	0.73	0.45
Between 3-4 years	0.54	0.76
Between 4-5 years	0.79	0.60
Beyond 5 years	4.16	4.53

Particulars	31st March,2021	31st March, 2020
The weighted average duration of the Post Retirement Medical Benefit represents average duration for active members	17.20 years	16.81 years

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

20. Deferred Tax Assets / Liabilities (Net)

Accounting Policy

Deferred Tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

For operations carried out under tax holiday period (80IA benefits of Income Tax Act, 1961), deferred tax assets or liabilities, if any, have been established for the tax consequences of those temporary differences between the carrying values of assets and liabilities and their respective tax bases that reverse after the tax holiday ends.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss (either in other comprehensive income or in equity). Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the relevant entity intends to settle its current tax assets and liabilities on a net basis.

Deferred tax assets include Minimum Alternative Tax (MAT) paid in accordance with the tax laws in India, which is likely to give future economic benefits in the form of availability of set off against future income tax liability. Accordingly, MAT is recognised as deferred tax asset in the balance sheet when the asset can be measured reliably and it is probable that the future economic benefit associated with the asset will be realised. The Company reviews the "MAT credit entitlement" asset at each reporting date and writes down the asset to the extent that it is no longer probable that it will pay normal tax during the specified period.

In the situations where one or more units of the Company are entitled to a tax holiday under the tax law, no deferred tax (asset or liability) is recognized in respect of temporary differences which reverse during the tax holiday period, to the extent the concerned unit's gross total income is subject to the deduction during the tax holiday period. Deferred tax in respect of temporary differences which reverse after the tax holiday period is recognized in the year in which the temporary differences originate. However, the Company restricts recognition of deferred tax assets to the extent it is probable that sufficient future taxable income will be available against which such deferred tax assets can be realized. For recognition of deferred taxes, the temporary differences which originate first are considered to reverse first.

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

MAT Credit Entitlement

Minimum alternate tax (MAT) paid in a year is charged to the statement of profit and loss as current tax for the year. The deferred tax asset is recognised for MAT credit available only to the extent that it is probable that the Company will pay normal income tax during the specified period, i.e., the period for which MAT credit is allowed to be carried forward. In the year in which the Company recognizes MAT credit as an asset, it is created by way of credit to the statement of profit and loss and shown as part of deferred tax asset. The Company reviews the "MAT credit entitlement" asset at each reporting date.

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
Deferred Tax Liabilities (Net)	421.12	421.99
Less: MAT Credit entitlement	418.68	369.39
Deferred Tax Liabilities (Net)	**2.44**	**52.60**

For Year ended 31st March,2021

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive income	Closing balance
MAT credit entitlement	**369.39**	**49.29**	-	**418.68**
Deferred Tax Liabilities (Net) in relation to:				
Property, plant and equipment	421.99	(0.66)	-	421.33
Borrowings	-	2.03		2.03
Investments	-	(0.35)		(0.35)
Provision for compensated absences	-	(1.89)		(1.89)
	421.99	**(0.87)**	-	**421.12**
Total	**52.60**	**(50.16)**		**2.44**

For Year ended 31st March,2020

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive income	Closing balance
MAT credit entitlement	**289.26**	**80.13**	-	**369.39**
Deferred Tax Liabilities (Net) in relation to:				
Property, plant and equipment	423.36	(1.37)	-	421.99
Provision for compensated absences	(1.52)	1.52	-	-
Unabsorbed depreciation	(118.23)	118.23	-	-
	303.60	**118.39**	-	**421.99**
Total	**14.34**	**38.26**		**52.60**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

Note:

a. Deferred tax assets and liabilities are being offset as they relate to taxes on income levied by the same governing taxation laws.

b. The Company is entitled for availing the tax benefit under section 80IA of the Income-tax Act, 1961, with effect from the financial year 2016-17 for 10 years. Deferred tax liabilities as at 31 March, 2021, reflect the quantum of tax liabilities accrued upto the period end but payable after the expiry of the tax holiday period.

c. The Company has recognised MAT credit entitlement of ₹ 418.68 crores as at March 31, 2021 (as at March 31, 2020: ₹ 369.39 crores). Basis the existing tax laws and the projections of future profitability considering definitive Power purchase agreements which are completely tied up with the plant capacity, the management is confident of earning taxable profits each year and will be able to utilise the entire amount of MAT credit entitlement recognised in the financial Statement.

	As at 31st March,2021 ₹ Crores	As at 31st March,2020 ₹ Crores
21. Other Liabilities		
Non-current		
Consumers' Benefit Account	16.97	16.97
	16.97	**16.97**
Current		
Payable to Beneficiaries (Net) (Refer Note 24)	227.48	135.20
Statutory Liabilities	4.49	6.37
Other Liabilities	-	0.19
	231.97	**141.76**
22. Current Borrowings		
Secured - At Amortised Cost		
From Banks		
(a) Short term loan from Bank	15.00	15.00
	15.00	**15.00**
	15.00	**15.00**

Note:

i. The Company has entered into 'Working Capital Facility Agreement' with State Bank of India, Axis Bank, Kotak Mahindra Bank and HDFC Bank for availing fund for managing working capital requirement.

ii Security offered to State Bank of India secured by way of first pari-passu charge on movable and immovable assets of the Company present and future, with other term loan and working capital lenders.

iii Kotak Mahindra Bank working capital facilities is secured by way of first hypothecation charge on all the existing and future current assets of the borrower on pari passu with other secured lenders of the borrower.

iv HDFC Bank working capital facilities is secured by way of pari passu charge on current assets along with other term loan and working capital lenders.

v Axis Bank working capital facilities is secured by way of pari passu charge on current assets along with other term loan and working capital lenders.

23. MSME Disclosure

Micro and small enterprises under the Micro, Small and Medium Enterprises Development Act, 2006:

The principal amount and the interest due thereon remaining unpaid to any supplier as at the end of each accounting year		
(a) Principal amount remaining unpaid	4.23	0.24
(b) Interest* due thereon	-	-
(c) The amount of Interest* paid along with the amounts of the payment made to the supplier beyond the appointed day	-	-
(d) The amount of Interest* due and payable for the year	-	-
(e) The amount of Interest* accrued and remaining unpaid	-	-
(f) The amount of further interest* due and payable even in the succeeding years, until such date when the interest* dues as above are actually paid	-	-
	4.23	**0.24**

* Amounts unpaid to Micro and Small Enterprises vendors on account of retention money have not been considered for the purpose of interest calculation.

S R Batliboi & Co LLP Kolkata

MAITHON POWER LIMITED

24. Revenue from Operations

Accounting Policy

Revenue recognition
Revenue from contracts with customers is recognised when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.

Description of performance obligations are as follows :

Sale of Power - Generation (Thermal)
Revenue from sale of power is recognised net of cash discount over time for each unit of electricity delivered.

Contract price determined as per tariff regulations
The Company as per the prevalent tariff regulations is required to recover its Annual Revenue Requirement ('ARR') comprising of expenditure on account of fuel cost, operations and maintenance expenses, financing costs, taxes and assured return on regulator approved equity with additional incentive for operational efficiencies. Accordingly, rate per unit is determined using input method based on the Company's efforts to the satisfaction of a performance obligation to deliver power. As per tariff regulations, the Company determines ARR and any surplus/shortfall in recovery of the same is accounted as revenue.

Late Payment Surcharge
Late payment surcharge leviable as per the relevant contracts are recognised on actual realisation or accrued based on an assessment of certainty of realization supported by either an acknowledgement from customers or on receipt of favourable order from regulator / authorities.

No Late Payment Surcharge ('LPS') is charged for the initial 45 days from the date of receipt of invoice by customer. Thereafter, LPS is charged at the rate prescribed by the Power Purchase Agreement on the outstanding balance once the dues are received. Revenue in respect of late payment surcharge leviable as per the relevant contracts are recognised on actual realisation or accrued based on an assessment of certainty of realization supported by either an acknowledgement from customers or on receipt of favourable order from regulatory authorities.

Dividend and interest income
Dividend income from investments is recognized when the shareholder's right to receive payment has been established.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

S R Batliboi Kolkata

MAITHON POWER LIMITED

		For Year ended 31st March,2021 ₹ Crores	For Year ended 31st March,2020 ₹ Crores
24.	**Revenue from Operations (Continue)**		
(a)	Revenue from Power Supply	2,646.30	3,214.68
	Cash Discount	(50.75)	(51.98)
	Income to be adjusted in future tariff determination (Net)	(92.28)	(421.88)
		2,503.27	2,740.82
(b)	Other Operating Revenue		
	Rental of Buildings	0.04	0.04
	Sale of Fly Ash	0.07	0.31
		0.11	0.35
		2,503.38	**2,741.17**

Note:-
The tariff to be charged from Long Term beneficiaries is determined by the Central Electricity Regulatory Commission (CERC) in accordance with the tariff regulations/norms notified by CERC. The tariff consists of two parts namely, capacity charge (for recovery of fixed cost based on plant availability) and energy charges (for recovery of fuel costs). The Company is raising invoices on long term beneficiaries as per the approved CERC tariff order. The Company has adjusted billed revenue for supply of power to long term beneficiaries on the basis of plant availability, actual Fixed cost and actual energy cost incurred by the Company in accordance with notified tariff regulation. Further, as and when tariff orders for truing up are received, adequate adjustments are carried out.

25.	**Other Income**		
(a)	**Interest Income**		
	On Financial Assets held at Amortised Cost		
	Interest on Banks Deposits	0.09	-
	Interest on Inter - Corporate Deposit	5.86	0.13
	Other Interest	0.01	0.01
		5.96	0.14
(b)	**Gain on Investments**		
	Gain on sale/fair valuation of Current Investment measured at FVTPL	7.76	4.34
		7.76	4.34
(c)	**Other Non Operating Income**		
	Gain/(Loss) on Disposal of Property, Plant and Equipment (Net)	(0.01)	0.04
	Miscellaneous Income	3.44	3.02
	Late Payment Surcharge	-	20.79
		3.43	23.85
		17.15	**28.33**

Note:
Late payment surcharge represents amount claimable by the Company from one of its customers pursuant to a favourable order dated April 8, 2019 received from CERC.

S R Batliboi & Co. Kolkata

MAITHON POWER LIMITED

26. Employee Benefits Expenses

	For Year ended 31st March,2021 ₹ Crores	For Year ended 31st March,2020 ₹ Crores
Salaries and Wages	37.22	38.35
Contribution to Provident Fund	1.37	1.48
Contribution to Superannuation Fund	0.45	0.49
Retiring Gratuities	1.12	1.04
Leave Encashment Scheme	0.90	1.16
Pension Scheme	0.65	0.38
Staff Welfare Expenses	4.33	5.07
	46.04	47.97
Less:		
Employee Cost Capitalised	5.77	7.17
	5.77	7.17
	40.27	**40.80**

27. Depreciation and Amortisation expenses:

Depreciation on Owned Assets (Refer Note 5A)	241.03	239.49
Depreciation on Right of use Assets (Refer Note 5B)	4.92	4.22
Amortisation on Intangible Assets (Refer Note 6)	0.12	0.12
	246.07	**243.81**

28. Finance Costs

Accounting Policy

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Interest income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognized in statement of profit and loss in the period in which they are incurred

(a) Interest Expense:		
Borrowings		
Interest on Debentures	84.03	87.25
Interest on Loans from banks	74.94	93.74
Interest on borrowings from related party (Refer Note 34)	-	2.48
Interest on Commercial Paper	-	14.99
Others		
Other Interest and Commitment Charges	0.18	0.16
	159.15	198.62
Less: Interest Capitalised	24.75	9.06
	134.40	189.56
(b) Other Borrowing Cost:		
Other Finance Costs	1.69	3.55
	1.69	3.55
	136.09	**193.11**

29. Other Expenses

Consumption of Stores, Oil, etc.	9.79	13.02
Rental of Land, Buildings etc.	0.20	0.22
Repairs and Maintenance -		
(i) To Buildings and Civil Works	4.53	5.59
(ii) To Machinery and Hydraulic Works	102.51	91.60
(iii) To Furniture, Vehicles, etc.	2.11	1.00
Water Charges & Othes Taxes	18.12	16.23
Insurance	7.87	8.96
Other Operation Expenses	6.89	8.30
Ash Disposal Expenses	37.20	28.83
Transmission Charges	0.12	-
Travelling and Conveyance Expenses	2.08	2.29
Consultants' Fees	0.93	0.42
Auditor's Remuneration (Refer - i)	0.46	0.45
Cost of Services Procured	70.69	65.62
Security Expenses	8.35	7.24
Legal Charges	0.48	1.14
Corporate Social Responsibility Expenses (Refer - ii)	6.92	6.03
Miscellaneous Expenses	0.86	0.89
	280.11	**257.83**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	For Year ended 31st March,2021 ₹ Crores	For Year ended 31st March,2020 ₹ Crores
(i) Payment to the Auditors		
Audit Fee & Limited Review	0.34	0.28
Tax Audit Fees	0.02	0.02
Other Services (Certification Fees)	0.09	0.08
Reimbursement of Expenses	0.01	0.06
	0.46	**0.45**
(ii) Corporate Social Responsibility Expenses		
(a) Amount required to be spent as per Sec 135 of the Companies Act 2013	6.92	6.03
(b) Amount spent by the Company		
i) Construction/acquisition of any asset	-	-
ii) On purposes other than above	6.92	6.03

30. Income taxes

Accounting Policy

Current Tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date in the countries where the Company operates and generates taxable income.

Current income tax relating to items recognised outside statement of profit and loss is recognised outside statement of profit and loss (either in other comprehensive income or in equity). Current tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

(i) Income tax recognised in profit and loss

Current tax		
For the year	55.63	80.13
In respect of earlier years	-	0.45
	55.63	**80.58**
Deferred tax	(0.87)	118.39
MAT Credit	(49.30)	(80.13)
Income tax expense reported in the Statement of Profit and Loss	**5.46**	**118.84**

(ii) Reconciliation of tax expense as per the effective rate of tax and India's statutory rate of tax

Profit before tax	**316.48**	**456.66**
Applicable income tax rate	34.94%	34.94%
Income tax expense calculated at applicable rate	110.59	159.58
Temporary difference reversed during tax holiday period.	19.11	9.02
On other permanent difference	(126.95)	(57.15)
Adjustment in respect of current income tax of previous years	-	0.45
Other Adjustments	2.71	6.94
Total Income tax expense	**5.46**	**118.84**

1. The tax rate used for the financial years 2020-21 and 2019-20 reconciliations above is the corporate tax rate of 34.94% and 34.94% respectively payable by the corporate entities in India on taxable profits under the Indian tax law.
2. The Company has to pay taxes based on higher of income tax on profit of the Company or MAT @17.472% of book profit for the years 2020-21 and 2019-20 respectively.
3. The rate used for calculation of deferred tax is @34.94% for FY 2020-21 & for FY 2019-20 being statutory enacted rates at respective Balance Sheet Dates.

(iii) Income tax recognised in other comprehensive income

Arising on income and expenses reclassified in other comprehensive income:		
Remeasurement of the defined benefit plan*	0.00	0.00
Total income tax expense recognised in other comprehensive income	0.00	0.00
Bifurcation of the income tax recognised in other comprehensive income into:		
- Items that will not be reclassified to profit or loss	0.00	0.00
- Items that may be reclassified to profit or loss	-	0.00
	0.00	0.00

* Amount is lesser than the rounding off norms followed by the Company.

31. Commitments

Estimated amount of contracts remaining to be executed on capital account and not provided for	457.39	621.58
	457.39	**621.58**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

32. **Contingent liabilities**

(a) The Company has received a demand of ₹ 45.00 crores from the Office of Assistant Commissioner, Dhanbad under the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 contending that the Company has to pay 1% of the Project Cost (estimated to be ₹ 4500.00 crores) as cess.

As per legal advice obtained by the Company, the Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 is applicable on cost of construction and not on supply of equipment, accordingly the Company had deposited an amount of ₹ 1.26 crores as cess for cost of construction and raised the demand on the concerned contractor / vendor. Further, the Company is of the view that any such demand if payable will be borne by the contractor/vendors. Accordingly, no provision has been made in the books of account.

(b) Claims against the Company not acknowledged as debts for demands raised by the office of the Zonal Jt. Director General Trade for revocation of grant of deemed export benefits which has been disputed by the Company ₹ 36.41 crores (31 March, 2020 : ₹ 36.41 crores).

(c) The Code on Social Security 2020 has been notified in the Official Gazette on 29th September, 2020. The effective date from which the changes are applicable is yet to be notified and the rules are yet to be framed. Impact if any of the change will be assessed and accounted in the period in which said Code becomes effective and the rules framed thereunder are notified

33. **Earnings per share (EPS)**

Accounting Policy

Basic earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares outstanding during the period. Diluted earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares considered for deriving basic earnings per equity share and also the weighted average number of equity shares that could have been issued upon conversion of all dilutive potential equity shares. The dilutive potential equity shares are adjusted for the proceeds receivable had the equity shares been actually issued at fair value (i.e.the average market value of the outstanding equity shares). Dilutive potential equity shares are deemed converted as of the beginning of the period, unless issued at a later date. Dilutive potential equity shares are determined independently for each period presented.

The number of equity shares and potentially dilutive equity shares are adjusted retrospectively for all periods presented for any share splits and bonus shares issues including for changes effected prior to the approval of the financial statements by the Board of Directors.

	For Year ended 31st March,2021 ₹ Crores	For Year ended 31st March,2020 ₹ Crores
Basic and diluted earnings per share (face value of ₹ 10 each)	2.06	2.24
Basic and diluted earnings per share	**2.06**	**2.24**

The earnings and weighted average number of equity shares used in the calculation of basic and diluted earnings per share are as follows:

Profit After Tax	311.02	337.82
The weighted average number of equity shares for Basic and Diluted EPS	1,50,89,17,729	1,50,89,17,729

Note:
There have been no other transactions involving Equity Shares or Potential Equity Shares between the Reporting date and the date of authorisation of these financial statements.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

MAITHON POWER LIMITED
Notes to the Ind AS Financial Statements for the year ended 31st March,2021

34 Related Party Transactions

a List of related parties

i. **Controlling Entity (CE)**

The Tata Power Company Limited (TPCL) (Holding Company)

ii. **Entity exercising significant influence (SI)**

Damodar Valley Corporation (DVC)

iii. **Fellow Subsidiaries**
(With whom the Company has entered transaction during the reporting period)

Tata Power Trading Company Limited (TPTCL)
Coastal Gujarat Power Limited (CGPL)
Tata Power Renewable Energy Limited (TPREL)

iv. **Directors & Key Managerial Personnel**
Ramesh Subramanyam (Chairman) (till 16th October 2020)
Vijay Namjoshi (Chairman) (w.e.f 1st February 2020)
Anand Agarwal(Director) (till 8th January 2021)
Anandakumar Prabhakaran (Director) (w.e.f 18th December 2020)
Suvamay Halder (Director) (till 21st December 2020)
Mahesh Mishra (Director) (w.e.f 23rd June 2020)
Ramesh Narayan (Director) (w.e.f 8th February 2021)
Joydeep Mukherjee (Director) (w.e.f 8th February 2021)
Krishnava Dutt (Director)
Ashok Sinha (Director)
Rita Sinha (Director)
Ramesh Jha (Chief Executive Officer)
Satish Kumar (Chief Financial Officer) (till 31st December 2020)
Kajal Kumar Singh (Chief Financial Officer) (w.e.f 15th January 2021)
Poonam Shirke (Company Secretary)
Ashok Sethi (Chairman) (till 30th April 2019)
Neera Saggi (Director) (till 22nd March 2020)
Narendra Nath Mishra (Director) (till 22nd March 2020)
Purushottam Thakur (Director) (till 31st January 2020)
Bhola Nath Sah (Director) (till 31st December 2019)
Pulak Datta (Director) (till 30th April 2019)

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

MAITHON POWER LIMITED
Notes to the Ind AS Financial Statements for the year ended 31st March,2021

34. Related Party Transactions (Continue)

b. Transactions/balances outstanding with related parties

₹ Crores

i) Transactions for the year ended 31st March,2021

Particulars	CE	SI	Fellow subsidiaries (FS)				Subtotal	KMP &	Total
	TPCL	DVC	TPTCL	CGPL	TPREL	TPSSL	(FS)	Directors	
Revenue from power supply	-	269.06	1,503.92	-	-	-	1,503.92	-	1,772.98
	-	(530.66)	(1,801.15)	-	-	-	(1,801.15)	-	(2,331.81)
Cash discount on power sales	-	-	-32.25	-	-	-	-32.25	-	-32.25
	-	-	(32.51)	-	-	-	(32.51)	-	(32.51)
Reimbursement of RRAS/SCED/Others Refund	-	8.56	7.85	-	-	-	7.85	-	16.40
	-	-	-	-	-	-	-	-	-
Interest income on ICD	5.86	-	-	-	-	-	-	-	5.86
	-	-	-	-	(0.13)	-	(0.13)	-	(0.13)
Late payment surcharge	-	-	-	-	-	-	-	-	-
	-	(20.79)	-	-	-	-	-	-	(20.79)
Electricity Charges	-	0.45	-	-	-	-	-	-	0.45
	-	(0.52)	-	-	-	-	-	-	(0.52)
Water charges	-	17.74	-	-	-	-	-	-	17.74
	-	(16.01)	-	-	-	-	-	-	(16.01)
Rent and hire charges	-	0.19	-	-	-	-	-	-	0.19
	-	(0.19)	-	-	-	-	-	-	(0.19)
Cost of Services Procured	63.86	-	-	-	-	-	-	-	63.86
	(59.69)	-	-	-	-	-	-	-	(59.69)
ICD Taken	-	-	-	-	-	-	-	-	-
	(200.00)	-	-	(310.00)		-	(310.00)	-	(510.00)
ICD Given	475.00	-	-	-		-	-	-	475.00
	-	-	-	-	(150.00)	-	(150.00)	-	(150.00)
ICD Refund	-275.00	-	-	-	-	-	-	-	-275.00
	-	-	-	-	-	-	-	-	-
Sale of property, plant and equipment	-	-	-	-	-	-	-	-	-
	(0.15)	-	-	-	-	-	-	-	(0.15)
Interest on loan	-	-	-	-	-	-	-	-	-
	(2.27)	-	-	(0.21)	-	-	(0.21)	-	(2.48)
Purchase of property, plant and equipment*	-	-	-	-	-	-	-	-	-
	(0.17)	-	-	0.00	-	-	0.00	-	(0.17)
Reimbursement of expenses to the Company	-	0.10	0.38	-	-	-	0.38	-	0.48
	-	(0.21)	(0.65)	-	-	-	(0.65)	-	(0.86)
Reimbursement of expenses by the Company	2.08	-	-	-	-	-	-	-	2.08
	(2.35)	-	-	-	-	-	-	-	(2.35)
Service received related to CWIP	12.31	-	-	-	-	-	-	-	12.31
	(2.77)	-	-	-	-	-	-	-	(2.77)
Remuneration (includes sitting fees)	-	-	-	-	-	-	-	2.08	2.08
	-	-	-	-	-	-	-	(1.84)	(1.84)
Dividend Paid	133.20	46.80	-	-	-	-	-	-	180.00
	(214.84)	(75.48)	-	-	-	-	-	-	(290.32)
Interest on Loan to KMP*	-	-	-	-	-	-	-	0.00	0.00
	-	-	-	-	-	-	-	(0.00)	0.00
Loan repaid by KMP*	-	-	-	-	-	-	-	0.00	0.00
	-	-	-	-	-	-	-	(0.00)	0.00

Figures in brackets stated pertain to the year ended 31st March, 2020
* Amount is lesser than the rounding off norms followed by the Company.

MAITHON POWER LIMITED

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

Notes to the Ind AS Financial Statements for the year ended 31st March 2021

34. Related Party Transactions (Continued)

ii) Balances outstanding as at 31st March 2021

₹ Crores

Particulars	CE	SI	Fellow subsidiaries (FS)				Subtotal	KMP &	Total
	TPCL	DVC	TPTCL	CGPL	TPREL	TPSSL	(FS)	Directors	
Trade receivables*									
As at 31st March 2021	-	23.54	0.79	-	-	-	0.79	-	24.33
As at 31st March 2020	-	(72.89)	(134.21)	-	-	-	(134.21)	-	(207.10)
Loans given (including Interest thereon)									
As at 31st March 2021	201.09	-	-	-	-	-	-	-	201.09
As at 31st March 2020	-	-	-	-	-	-	-	-	-
Unbilled revenue									
As at 31st March 2021	-	33.04	0.71	-	-	-	0.71	-	33.75
As at 31st March 2020	-	(29.63)	(-2.24)	-	-	-	(-2.24)	-	(27.39)
Security deposits									
As at 31st March 2021	-	0.28	-	-	-	-	-	-	0.28
As at 31st March 2020	-	(0.28)	-	-	-	-	-	-	(0.28)
Trade payables									
As at 31st March 2021	7.44	1.95	0.02	-	-	0.17	0.19	-	9.58
As at 31st March 2020	(8.87)	(1.30)	-	-	-	-	-	-	(10.18)
Letter of credit (LC)									
As at 31st March 2021	-	36.34	134.80	-	-	-	134.80	-	171.14
As at 31st March 2020	-	(34.45)	(136.49)	-	-	-	(136.49)	-	(170.94)
KMP (Loan Outstanding)									
As at 31st March 2021	-	-	-	-	-	-	-	-	-
As at 31st March 2020	-	-	-	-	-	-	-	(0.01)	(0.01)

Notes:

(i) Figures in brackets stated pertain to the year ended 31st March 2020

(ii) Trade Receivable & Unbilled Revenue are secured to the extent LC amount and balance outstanding are unsecured.

(iii) All transactions with the related parties have been done at arms length.

(iv) 'Key Managerial Personnel are entitled to post-employment benefits and other long term employee benefits recognised as per Ind AS 19 - 'Employee Benefits' in the financial statements. As these employee benefits are lump sum amounts provided on the basis of actuarial valuation, the same is included above on payment basis.

* Amount is lesser than the rounding off norms followed by the Company.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

35. Financial Instruments

This section gives an overview of the significance of financial instruments for the company and provides additional information on balance sheet items that contain financial instruments.

The details of significant accounting policies, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised in respect of each class of financial asset, financial liability and equity instrument are disclosed in the financial statements.

35.1 Financial assets and liabilities

The carrying value and fair value of financial instruments by categories as of 31st March,2021 is as follows:

₹ Crores

Particulars	Fair Value through P&L	Fair Value through OCI	Amortised Cost	Total Carrying value	Total Fair Value
Assets					
Cash and Cash Equivalents	-	-	67.34	67.34	67.34
Trade Receivables	-	-	30.14	30.14	30.14
Investments	161.74	-	-	161.74	161.74
Unbilled Revenues	-	-	40.61	40.61	40.61
Loans	-	-	200.18	200.18	200.18
Other financial Assets	-	-	1.59	1.59	1.59
Total	**161.74**	**-**	**339.86**	**501.60**	**501.60**
Liabilities:					
Trade Payables	-	-	124.98	124.98	124.98
Fixed Rate Borrowings (Includes Current Maturities)	-	-	712.74	712.74	712.74
Floating Rate Borrowings (Includes Current Maturities)	-	-	1,065.67	1,065.67	1,065.67
Other Financial Liabilities	-	-	113.93	113.93	113.93
Total	**-**	**-**	**2,017.32**	**2,017.32**	**2,017.32**

The carrying value and fair value of financial instruments by categories as of 31st March,2020 is as follows:

Assets					
Cash and Cash Equivalents	-	-	84.65	84.65	84.65
Trade Receivables	-	-	217.71	217.71	217.71
Investments	166.33	-	-	166.33	166.33
Unbilled Revenues	-	-	31.77	31.77	31.77
Loans	-	-	0.21	0.21	0.21
Other Financial Assets	-	-	0.41	0.41	0.41
Total	**166.33**	**-**	**334.75**	**501.08**	**501.08**
Liabilities:					
Trade Payables	-	-	169.20	169.20	169.20
Fixed Rate Borrowings (Includes Current Maturities)	-	-	498.74	498.74	498.74
Floating Rate Borrowings (Includes Current Maturities)	-	-	1,575.10	1,575.10	1,575.10
Other Financial Liabilities	-	-	68.34	68.34	68.34
Total	**-**	**-**	**2,311.38**	**2,311.38**	**2,311.38**

The management assessed that the fair value of cash and cash equivalents, other balances with bank, trade receivables, loans,unbilled revenues, trade payables, other financial assets and liabilities approximate their carrying amounts largely due to the short term maturities of these instruments.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties. The following methods and assumptions were used to estimate the fair values.

Fair value hierarchy

The fair value hierarchy is based on inputs to valuation techniques that are used to measure fair value that are either observable or unobservable and consists of the following three levels:

Quoted prices in an active market (Level 1): Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Valuation techniques with observable inputs (Level 2): Inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Valuation techniques with significant unobservable inputs (Level 3): Inputs are not based on observable market data (unobservable inputs). Fair values are determined in whole or in part using a valuation model based on assumptions that are neither supported by prices from observable current market transactions in the same instrument nor are they based on available market data.

The following table provides the fair value measurement hierarchy of the Company's assets and liabilities.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	Date of valuation	Fair value hierarchy as at 31st March,2021			
		Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
Investments carried at Fair Value through Profit and Loss (Quoted Mutual Funds)	31st March,2021	161.74	-	-	161.74
		161.74	**-**	**-**	**161.74**
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March,2021	-	712.74	-	712.74
Floating rate borrowings	31st March,2021	-	1065.67	-	1065.67
Total		**-**	**1,778.41**	**-**	**1,778.41**

	Date of valuation	Fair value hierarchy as at 31st March,2020			
		Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
Investments carried at Fair Value through Profit and Loss (Quoted Mutual Funds)	31st March,2020	166.33	-	-	166.33
		166.33	**-**	**-**	**166.33**
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March,2020	-	498.74	-	498.74
Floating rate borrowings	31st March,2020	-	1575.10	-	1,575.10
Total		**-**	**2,073.84**	**-**	**2,073.84**

There has been no transfer between level 1 and level 2 during the year

35.2 Capital Management & Gearing Ratio

For the purpose of the Company's capital management, capital includes issued equity capital and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's capital management is to maximize the value for shareholders.

The Company manages its capital structure and makes adjustments in light of changes in economic conditions and the requirements of the financial covenants. From time to time, the Company reviews its policy related to dividend payment to shareholders, return capital to shareholders or fresh issue of shares. The Company monitors capital using gearing ratio, which is net debt divided by total capital plus net debt. The Company's policy is to keep the gearing ratio around 50%. The Company includes within net debt, interest bearing loans and borrowings, less cash and bank balances, excluding discontinued operations as detailed in the notes below.

The Company's capital management is intended to create value for shareholders by facilitating the meeting of its long-term and short-term goals. Its Capital structure consists of net debt (borrowings as detailed in notes below) and total equity.

Gearing ratio

The gearing ratio at the end of the reporting year was as follows:

		₹ crore
	As at 31st March,2021	***As at 31st March,2020***
Debt (i)	*1,778.41*	*2,073.84*
Less: Cash and Bank balances	*67.34*	*84.65*
Net debt	**1,711.07**	***1,989.19***
Total Capital (ii)	*2,200.39*	*2,068.43*
Capital and net debt	**3,911.46**	***4,057.62***
Gearing ratio (%)	43.75	*49.02*

(i) Debt is defined as Non-current borrowings (including current maturities) and Current borrowings (excluding derivative, financial guarantee contracts and contingent considerations) and interest accrued on Non-current and Current borrowings.

(ii) Equity is defined as Equity share capital and other equity including reserves and surplus.

In order to achieve this overall objective, the Company's capital management, amongst other things, aims to ensure that it meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the bank to immediately call loans and borrowings. There have been no significant breaches in the financial covenants of any interest-bearing loans and borrowing in the current year.

No changes were made in the objectives, policies or processes for managing capital during the years ended 31st March, 2021 and 31st March, 2020.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

35. Financial Instruments

35.3 Financial risk management objectives and policies

The Company's principal financial liabilities, comprise borrowings, trade and other payables and other financial liabilities. The main purpose of these financial liabilities is to finance the Company's operations and to provide guarantees to support its operations. The Company's principal financial assets include investments, loans, trade and other receivables, cash and cash equivalents, other bank balances, unbilled receivables and other financial assets that derive directly from its operations.

The Company is exposed to market risk, credit risk and liquidity risk. The Company's senior management oversees the management of these risks. The Company's senior management is supported by a risk committee that reviews the financial risks and the appropriate financial risk governance framework for the Company. The Company's financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with the Company's policies and risk objectives. The risk management polices is approved by the board of directors, which is summarized below.

35.3.1 Market risk management

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risk: currency risk, interest rate risk and equity price risk. The impact of equity price risk and currency risk is not material. Financial instruments affected by market risk are loans and borrowings.

The sensitivity analysis in the following sections relate to the position as at 31st March, 2021 and 31st March, 2020.

a) Foreign currency risk management

(i) The year end foreign currency exposures of the Company is Nil (31 March, 2020: Nil)

(ii) The Company did not have any long term contract including derivative contract for which there were any material foreseeable losses.

b) Interest rate risk management

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to the risk of changes in market interest rates relates primarily to the company's long-term debt obligations with floating interest rates.

The Company manages its interest rate risk by having a balanced portfolio of fixed and variable rate loans and borrowings.The exposure of the Company's borrowings to interest rate changes at the end of the reporting period are as follows :

Particulars	31st March,2021		31st March,2020	
	Balance	Percentage	Balance	Percentage
Fixed Rate Borrowings (Includes Current Maturities)	712.74	40%	498.74	24%
Floating Rate Borrowings (Includes Current Maturities)	1,065.67	60%	1,575.10	76%
Total	**1,778.41**		**2,073.84**	

Interest rate sensitivity:

The sensitivity analysis below have been determined based on exposure to interest rates for term loans and debentures at the end of the reporting period and the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period in case of term loans and debentures that have floating rates.

If the interest rates had been 50 basis points higher or lower and all the other variables were held constant, the effect on Interest expense for the respective financial years and consequent effect on Company's profit in that financial year would have been as below:

Particulars	31st March,2021		31st March,2020	
	50 bps increase	50 bps decrease	*50 bps increase*	*50 bps decrease*
Interest expense on loan	(+) ₹ 5.33	(-) ₹ 5.33	(+) ₹ 7.82	(-) ₹ 7.82
Effect on profit before tax	(-) ₹ 5.33	(+) ₹ 5.33	(-) ₹ 7.82	(+) ₹ 7.82

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

35.3.2 Credit risk management

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (i.e.primarily trade receivables and unbilled revenue) and from its financing activities including loans, foreign exchange transactions and other financial instruments.

Collateral held as security

The Company holds collateral i.e. letter of credit and bank guarantee to partly secure its outstanding trade receivables. Credit risk associated with receivables is mitigated because the receivables are partly secure.

₹ crore

	31st March,2021	31st March,2020
Trade Receivables	30.14	217.71
Loans	200.18	0.21
Other Financial Assets	1.59	0.41
Unbilled Revenue	40.61	31.77
Total	**272.52**	***250.10***

Refer Note 13 for credit risk and other information in respect of trade receivables. Other receivables as stated above are due from the parties under normal course of the business and as such the Company believes exposure to credit risk to be minimal.

35.3.3 Liquidity risk management

Liquidity risk is the risk that the company will encounter difficulty in meeting obligation, associated with financial liabilities that are settled by delivering cash or another financial asset.

The Company manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities. The Company has access to a sufficient variety of sources of funding. Having regards to the nature of the business wherein the Company is able to generate fixed cash flows over a period of time and to optimize the cost of funding, the Company, from time to time, funds its long -term investment from short-term sources. The short-term borrowings can be rollforward or, if required, can be refinanced from long term borrowings.

	Up to 1 year	1 to 5 years	5+ years	Total	Carrying Amount
31st March,2021					
Non-Derivatives					
Borrowings #	339.92	1,331.55	452.43	**2,123.90**	**1,801.60**
Trade Payables	124.98	-	-	**124.98**	**124.98**
Other Financial Liabilities	72.27	18.47	-	**90.74**	**90.74**
Total Non-Derivative Liabilities	**537.17**	**1,350.02**	**452.43**	**2,339.62**	**2,017.32**
31st March,2020					
Borrowings #	1,009.39	1,301.89	295.52	**2,606.80**	**2,101.89**
Trade Payables	169.20	-	-	**169.20**	**169.20**
Other Financial Liabilities	28.41	11.88	-	**40.29**	**40.29**
Total Non-Derivative Liabilities	**1,207.00**	**1,313.77**	**295.52**	**2,816.29**	**2,311.38**

The table has been drawn up based on the undiscounted contractual maturities of the financial liabilities including interest that will be paid on those liabilities upto the maturity of the instruments,

35.4 Commodity price risk

The operating activity of the company involves generation of power and therefore requires continuous supply of coal. The company has entered into fuel supply agreements with Central Coalfields Limited and Bharat Coking Coal Limited and any price fluctuation is passed on to the customers

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

36. There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

37. **Segment Reporting**

The Company is mainly engaged in the business of generation and selling of power in India. Based on the information reported to the chief operating decision maker (CODM) for the purpose of resource allocation and assessment of performance, there are no reportable segments in accordance with the requirements of Indian Accounting Standard 108- 'Operating Segments', notified under the Companies (Indian Accounting Standards) Rules, 2015.

38. **Mega power status**

The Company had applied to the Ministry of Power, Government of India along with necessary documents for grant of Mega Power Status to the Company's 1050 MW Maithon Right Bank Thermal Power Plant. Pending receipt of the mega power certificate, the Company remains liable to pay excise and customs duty on its receipts of goods and materials wherever applicable. Accordingly, the Company had paid excise duty to its vendors aggregating to ₹ 120.24 crores (31 March, 2020: ₹ 120.24 crores) upto 31 March, 2021. The total payment of excise duty to suppliers has been capitalized as at 31st March, 2021.

39. **Significant Events after the Reporting Period**

There were no significant adjusting event that occurred subsequent to the reporting period.

40. Previous year's figures are regrouped / rearranged, where necessary, to confirm to the current year's presentation.

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 16th April, 2021

For and on behalf of the Board,

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 16th April, 2021

Joydeep Mukherjee
Director
Place: Kolkata
Date: 16th April, 2021

Ramesh Jha
Chief Executive Officer
Place: Dhanbad
Date: 16th April, 2021

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 16th April, 2021

Poonam Shirke
Company Secretary
Place: Mumbai
Date: 16th April, 2021

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata - 700 016, India
Tel : +91 33 6134 4000

INDEPENDENT AUDITOR'S REPORT

To the Members of Maithon Power Limited

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of Maithon Power Limited ("the Company"), which comprise the Balance sheet as at March 31 2022, the Statement of Profit and Loss, including the statement of Other Comprehensive Income, the Statement of cash flows and the Statement of Changes in Equity for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required by the Companies Act, 2013, as amended ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2022, its profit including other comprehensive income, its cash flows and the changes in equity for the year ended on that date.

Basis for Opinion

We conducted our audit of the financial statements in accordance with the Standards on Auditing (SAs), as specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of our report. We are independent of the Company in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the financial year ended March 31, 2022. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have determined the matters described below to be the key audit matters to be communicated in our report. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

S.R. Batliboi & Co. LLP Kolkata

Key audit matters	How our audit addressed the key audit matter
Accrual of Recoverable from Beneficiaries/Payable to Beneficiaries for items which are subject matter of true up in tariff orders *(as described in note 24 of the financial statements)*	
The Company's revenue recognition is guided by the tariff norms prescribed by the Central Electricity Regulatory Commission (CERC) guidelines and the tariff orders passed based on these regulations. Consequently, Recoverable from Beneficiaries/Payable to Beneficiaries is recognized for items which are subject matter of true up in tariff orders to be notified in future years. Judgement is exercised by management in estimating recoverability / payability of such other assets and liabilities in the books. As on 31st March 2022, the Company is carrying an amount of Rs. 221.53 crores as Payable to Beneficiaries (Net of Recoverable from Beneficiaries of Rs 21.84 crores) which is material to the financial statements of the Company. Considering the judgements involved in the estimates of various elements of capital and operational costs used in the computation of revenue as per applicable regulations and the amount involved we have determined this to be a key audit matter.	Following procedures have been performed to address this key audit matter:- 1. We have tested the design and operating effectiveness of key controls related to the estimation and recoverability of such Recoverable from Beneficiaries/Payable to Beneficiaries. 2. We have evaluated the estimation by management of these Recoverable from Beneficiaries/Payable to Beneficiaries with reference to Tariff Regulations and the tariff orders of earlier years, including the orders received during the year, on similar matters and also the underlying records of the Company. 3. We discussed with management to understand their assessment on each of the qualitative factors and ensured consistency of the management's explanation with the underlying documentation, rules and regulations. 4. We have re-calculated the workings obtained from the management to check the arithmetical accuracy of the calculations. 5. We have also checked the adequacy of the disclosure on these matters in the financial statements of the Company. 6. We have also obtained necessary management representation.
Recoverability of MAT Credit Entitlement in future *(as described in note 23c of the financial statements)*	
The Company does not have taxable income owing to benefits of section 80IA of Income Tax Act, 1961 and therefore it has been paying Minimum Alternate Tax (MAT) under the relevant provisions of the Income Tax Act, 1961. The Act also provides that such MAT paid can be carried forward (MAT credit entitlement) for set off against regular tax payable in subsequent fifteen years period. Such MAT credit entitlements are recognized when it is probable that	Following procedures have been performed to address this key audit matter:- 1. We have tested the design and operating effectiveness of key controls related to the computation and recognition of such MAT credit. 2. We have assessed the methodology applied by the Company with current accounting standards and applicable taxation laws along with the future business forecast of taxable profits. 3. We have assessed the likelihood of the Company to utilize the available MAT credit entitlements in the future with underlying projections and assumptions relating to future estimated profits, future

S.R. Batliboi & Co. LLP Kolkata

Key audit matters	How our audit addressed the key audit matter
normal taxable profit will be available against which these MAT credits can be utilized. The Company's ability to recognize these MAT credit assets is assessed by management at the end of each reporting period, taking into account forecasts of future taxable profits and the law and jurisdiction of the land in force. The assumptions on these projections are determined by management. At March 31, 2022, MAT credit entitlement recognized in the Company's financial statements amounts to Rs. 463.23 crores. Given the degree of judgment involved in making a forecast of the profitability of the Company and the materiality of the amounts involved, we considered this to be a key audit matter.	capitalization and depreciation allowance thereon and future estimates of taxable income. 4. We have tested the arithmetical accuracy of the future taxability workings prepared by the management. 5. We have also checked the adequacy of the disclosure on these matters in the financial statements of the Company. 6. We have also obtained necessary management representation.

Information Other than the Financial Statements and Auditor's Report Thereon

The Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Annual report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether such other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management for the Financial Statements

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation of these financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act read with the Companies (Indian Accounting Standards) Rules, 2015, as amended. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness



of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those Board of Directors are also responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.



We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements for the financial year ended March 31, 2022 and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2020 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the "Annexure 1" a statement on the matters specified in paragraphs 3 and 4 of the Order.
2. As required by Section 143(3) of the Act, we report that:

   (a) Except of matters reported in clause (xi)(c) of Annexure 1 referred above, we have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

   (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books;

   (c) The Balance Sheet, the Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account;

   (d) In our opinion, the aforesaid financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;

   (e) On the basis of the written representations received from the directors as on March 31, 2022 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2022 from being appointed as a director in terms of Section 164 (2) of the Act;

   (f) With respect to the adequacy of the internal financial controls with reference to these financial statements and the operating effectiveness of such controls, refer to our separate Report in "Annexure 2" to this report;

   (g) In our opinion, the managerial remuneration for the year ended March 31, 2022 has been paid / provided by the Company to its directors in accordance with the provisions of section 197 read with Schedule V to the Act;



(h) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended in our opinion and to the best of our information and according to the explanations given to us:

i. The Company has disclosed the impact of pending litigations on its financial position in its financial statements – Refer Note 35 to the financial statements;

ii. The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses;

iii. There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

iv. a) The management has represented that, to the best of its knowledge and belief, no funds have been advanced or loaned or invested (either from borrowed funds or share premium or any other sources or kind of funds) by the company to or in any other person or entity, including foreign entities ("Intermediaries"), with the understanding, whether recorded in writing or otherwise, that the Intermediary shall, whether, directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the company ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries;

b) The management has represented that, to the best of its knowledge and belief, no funds have been received by the company from any person or entity, including foreign entities ("Funding Parties"), with the understanding, whether recorded in writing or otherwise, that the company shall, whether, directly or indirectly, lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries; and

c) Based on such audit procedures that were considered reasonable and appropriate in the circumstances, nothing has come to our notice that has caused us to believe that the representations under sub-clause (a) and (b) contain any material misstatement.

v. No dividend has been declared or paid during the year by the Company.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Kamal Agarwal
Partner
Membership Number: 058652
UDIN: 22058652AHGWGN4613
Place of Signature: Kolkata
Date: April 19, 2022

S R Batliboi & Co. LLP Kolkata

Annexure '1' referred to in paragraph under the heading "Report on other legal and regulatory requirements" of our report of even date

Re: Maithon Power Limited ("the Company")

In terms of the information and explanations sought by us and given by the company and the books of account and records examined by us in the normal course of audit and to the best of our knowledge and belief, we state that:

(i)(a)(A) The Company has maintained proper records showing full particulars, including quantitative details and situation of Property, Plant and Equipment.

(i)(a)(B) The Company has maintained proper records showing full particulars of intangibles assets.

(i)(b) The Company has verified part of its Property Plant and Equipment during the year in accordance with its regular programme of verification of these assets whereby all the assets are physically verified over a period of 3 years which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. No material discrepancies were noticed on such verification.

(i)(c) The title deeds of immovable properties (other than properties where the Company is the lessee and the lease agreements are duly executed in favour of the lessee) disclosed in note 5.7 to the financial statements included in Property, Plant and Equipment are held in the name of the Company, except the following:

Description of Property	Amount in INR crores	Held in the name of	Whether promoter, director or their relative or employee	Period held – indicate range, where appropriate	Reason for not being held in the name of Company
Raiyati Land (Free hold) located at Maithon, Jharkhand.	159.80	Damodar Valley Corporation (DVC)	Promoter	December 2008	The process of Mutation in the name of Damodar Valley Corporation (DVC) is yet to be completed, due to which the title deed in the name of the company is pending to be transferred.
Railway Land (Freehold Land) located at Maithon, Jharkhand.	137.12	DVC	Promoter	October 2008 to March 2015	
Forest land (Leasehold) located at Maithon, Jharkhand	12.40	DVC	Promoter	May 2008	The draft lease agreement for execution of lease is awaited from the government and hence the lease deed is yet to be registered in the name of the Company.

S.R. Batliboi & Co. LLP Kolkata

Description of Property	Amount in INR crores	Held in the name of	Whether promoter, director or their relative or employee	Period held – indicate range, where appropriate	Reason for not being held in the name of Company
GM land-Plant (Leasehold) located at Maithon, Jharkhand	7.06	DVC	Promoter	July 2010	The Company is yet to receive a demand from the Government of Jharkhand for execution of lease and hence the lease deed in the name of the Company is yet to be registered.
GM land-Railway (Leasehold) located at Maithon, Jharkhand	5.91	DVC	Promoter	July 2010	

(i)(d) The Company has not revalued its Property, Plant and Equipment (including Right of use assets) or intangible assets during the year ended March 31, 2022.

(i)(e) As represented to us by the management, there are no proceedings initiated or are pending against the Company for holding any benami property under the Prohibition of Benami Property Transactions Act, 1988 and rules made thereunder.

(ii)(a) The management has conducted physical verification of inventory at reasonable intervals during the year and no material discrepancies were noticed on such physical verification. In our opinion the coverage and the procedure of such verification by the management is appropriate.

(ii)(b) As disclosed in note 25 to the financial statements, the Company has been sanctioned working capital limits in excess of Rs. five crores in aggregate from banks during the year on the basis of security of current assets of the Company. The quarterly returns/statements filed by the Company with such banks are in agreement with the books of accounts of the Company. The Company does not have any sanctioned working capital limits from financial institutions.



(iii)(a) During the year the Company has not provided advances in the nature of loans, stood guarantee or provided security to companies, firms, Limited Liability Partnerships or any other parties. The Company has provided loan to a company as follows:

Particulars	Amount in INR crores
Aggregate amount granted/ provided during the year	
- Subsidiaries - Joint Ventures - Associates - Others	800.00
Balance outstanding as at balance sheet date in respect of above cases - Subsidiaries - Joint Ventures - Associates - Others	450.00

(iii)(b) During the year the Company has not provided guarantees and security and not granted advances in the nature of loans to companies, firms, Limited Liability Partnerships or any other parties. The investments made and the terms and conditions of the loans granted are not prejudicial to the Company's interest.

(iii)(c) The Company has not granted advances in the nature of loans to companies, firms, Limited Liability Partnerships or any other parties. The Company has granted loans during the year to a company where the schedule of repayment of principal and payment of interest has been stipulated and the repayment or receipts are regular.

(iii)(d) There are no amounts of loans and advances in the nature of loans granted to companies, firms, limited liability partnerships or any other parties which are overdue for more than ninety days.

(iii)(e) There were no loans or advance in the nature of loan granted to companies, firms, Limited Liability Partnerships or any other parties which was fallen due during the year, that have been renewed or extended or fresh loans granted to settle the overdues of existing loans given to the same parties.

(iii)(f) The Company has not granted any loans or advances in the nature of loans, either repayable on demand or without specifying any terms or period of repayment to companies, firms, Limited Liability Partnerships or any other parties. Accordingly, the requirement to report on clause 3(iii)(f) of the Order is not applicable to the Company.

(iv) There are no loans, investments, guarantees, and security in respect of which provisions of sections 185 and 186 of the Companies Act, 2013 are applicable and accordingly, the requirement to report on clause 3(iv) of the Order is not applicable to the Company.

(v) The Company has neither accepted any deposits from the public nor accepted any amounts which are deemed to be deposits within the meaning of sections 73 to 76 of the Companies Act, 2013 and the rules made thereunder, to the extent applicable. Accordingly, the requirement to report on clause 3(v) of the Order is not applicable to the Company.



(vi) We have broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section 148(1) of the Companies Act, 2013, related to the generation of electricity, and are of the opinion that prima facie, the specified accounts and records have been made and maintained. We have not, however, made a detailed examination of the same.

(vii)(a) The Company is regular in depositing with appropriate authorities undisputed statutory dues including goods and services tax, provident fund, employees' state insurance, income-tax, sales-tax, service tax, duty of customs, duty of excise, value added tax, cess and other statutory dues applicable to it. According to the information and explanations given to us and based on audit procedures performed by us, no undisputed amounts payable in respect of these statutory dues were outstanding, at the year end, for a period of more than six months from the date they became payable.

(vii)(b) There are no dues of goods and services tax, provident fund, employees' state insurance, income tax, sales-tax, service tax, customs duty, excise duty, value added tax, cess and other statutory dues which have not been deposited on account of any dispute.

(viii) As represented to us by the management, the Company has not surrendered or disclosed any transaction, previously unrecorded in the books of account, in the tax assessments under the Income Tax Act, 1961 as income during the year. Accordingly, the requirement to report on clause 3(viii) of the Order is not applicable to the Company.

(ix)(a) The Company has not defaulted in repayment of loans or other borrowings or in the payment of interest thereon to any lender.

(ix)(b) As represented to us by the management, the Company has not been declared wilful defaulter by any bank or financial institution or government or any government authority.

(ix)(c) Term loans were applied for the purpose for which the loans were obtained.

(ix)(d) On an overall examination of the financial statements of the Company, no funds raised on short-term basis have been used for long-term purposes by the Company.

(ix)(e) and (f) The Company does not have any subsidiary, associate or joint venture. Accordingly, the requirement to report on clause 3(ix)(e) and (f) of the Order is not applicable to the Company.

(x)(a) The Company has not raised any money during the year by way of initial public offer / further public offer (including debt instruments) hence, the requirement to report on clause 3(x)(a) of the Order is not applicable to the Company.

(x)(b) The Company has not made any preferential allotment or private placement of shares /fully or partially or optionally convertible debentures during the year under audit and hence, the requirement to report on clause 3(x)(b) of the Order is not applicable to the Company.

(xi)(a) As represented to us by the management, no fraud/ material fraud by the Company or no fraud / material fraud on the Company has been noticed or reported during the year.



(xi)(b) During the year, no report under sub-section (12) of section 143 of the Companies Act, 2013 has been filed by cost auditor/ secretarial auditor or by us in Form ADT – 4 as prescribed under Rule 13 of Companies (Audit and Auditors) Rules, 2014 with the Central Government.

(xi)(c) We have taken into consideration the whistle blower complaints received by the Company during the year while determining the nature, timing and extent of audit procedures.

(xii) The Company is not a nidhi Company as per the provisions of the Companies Act, 2013. Therefore, the requirement to report on clauses 3(xii)(a), (b) and (c) of the Order is not applicable to the Company.

(xiii) Transactions with the related parties are in compliance with sections 177 and 188 of Companies Act, 2013 where applicable and the details have been disclosed in the notes to the financial statements, as required by the applicable accounting standards.

(xiv)(a) The Company has an internal audit system commensurate with the size and nature of its business.

(xiv)(b) The internal audit reports of the Company issued till the date of the audit report, for the period under audit have been considered by us.

(xv) The Company has not entered into any non-cash transactions with its directors or persons connected with its directors and hence requirement to report on clause 3(xv) of the Order is not applicable to the Company.

(xvi)(a) The provisions of section 45-IA of the Reserve Bank of India Act, 1934 (2 of 1934) are not applicable to the Company. Accordingly, the requirement to report on clause (xvi)(a) of the Order is not applicable to the Company.

(xvi)(b) The Company has not conducted any Non-Banking Financial or Housing Finance activities without obtained a valid Certificate of Registration (CoR) from the Reserve Bank of India as per the Reserve Bank of India Act, 1934.

(xvi)(c) The Company is not a Core Investment Company as defined in the regulations made by Reserve Bank of India. Accordingly, the requirement to report on clause 3(xvi) of the Order is not applicable to the Company.

(xvi)(d) As represented to us by the management, the Group has 6 Core Investment Companies as a part of the Group.

(xvii) The Company has not incurred cash losses in the current financial year and in the immediately preceding financial year.

(xviii) There has been no resignation of the statutory auditors during the year and accordingly requirement to report on Clause 3(xviii) of the Order is not applicable to the Company.



(xix) On the basis of the financial ratios disclosed in note 38 to the financial statements, ageing and expected dates of realization of financial assets and payment of financial liabilities, other information accompanying the financial statements, our knowledge of the Board of Directors and management plans and based on our examination of the evidence supporting the assumptions, nothing has come to our attention, which causes us to believe that any material uncertainty exists as on the date of the audit report that Company is not capable of meeting its liabilities existing at the date of balance sheet as and when they fall due within a period of one year from the balance sheet date. We, however, state that this is not an assurance as to the future viability of the Company. We further state that our reporting is based on the facts up to the date of the audit report and we neither give any guarantee nor any assurance that all liabilities falling due within a period of one year from the balance sheet date, will get discharged by the Company as and when they fall due.

(xx)(a) In respect of other than ongoing projects, there are no unspent amounts that are required to be transferred to a fund specified in Schedule VII of the Companies Act (the Act), in compliance with second proviso to sub section 5 of section 135 of the Act. This matter has been disclosed in note 32 to the financial statements.

(xx)(b) The Company has not transferred the amount remaining unspent in respect of ongoing projects, to a Special Account, till the date of the report. However, the period for such transfer i.e., thirty days from the end of the financial year as permitted under sub section (6) of section 135 of the Companies Act, has not elapsed till the date of our report.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005



per Kamal Agarwal
Partner
Membership Number: 058652
UDIN: 22058652AHGWGN4613
Place of Signature: Kolkata
Date: April 19, 2022

S.R. BATLIBOI & CO. LLP
Chartered Accountants

ANNEXURE 2 TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE FINANCIAL STATEMENTS OF MAITHON POWER LIMTED

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls with reference to financial statements of Maithon Power Limited ("the Company") as of March 31, 2022 in conjunction with our audit of the financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's Management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India ("ICAI"). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditor's Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls with reference to these financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing, as specified under section 143(10) of the Act, to the extent applicable to an audit of internal financial controls, both issued by ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls with reference to these financial statements was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls with reference to these financial statements and their operating effectiveness. Our audit of internal financial controls with reference to financial statements included obtaining an understanding of internal financial controls with reference to these financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls with reference to these financial statements.

Meaning of Internal Financial Controls With Reference to these Financial Statements

A company's internal financial controls with reference to financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

S.R. Batliboi & Co. LLP Kolkata

A company's internal financial controls with reference to financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls With Reference to Financial Statements

Because of the inherent limitations of internal financial controls with reference to financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls with reference to financial statements to future periods are subject to the risk that the internal financial control with reference to financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, adequate internal financial controls with reference to financial statements and such internal financial controls with reference to financial statements were operating effectively as at March 31, 2022, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note issued by the ICAI.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005



per Kamal Agarwal
Partner
Membership Number: 058652
UDIN: 22058652AHGWGN4613
Place of Signature: Kolkata
Date: April 19, 2022

MAITHON POWER LIMITED
Balance Sheet as at 31st March, 2022

Particulars	Notes	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
Assets			
Non-current Assets			
(a) Property, Plant and Equipment	5	3,320.37	3,544.17
(b) Capital Work-in-Progress	6	206.86	95.94
(c) Other Intangible Assets	7	0.30	0.45
(d) Right of Use Assets	8	65.60	67.44
(e) Financial Assets			
(i) Loans	9	0.11	0.16
(ii) Other Financial Assets	10	13.49	0.50
(f) Deferred Tax Assets	23	35.61	-
(g) Non-current Tax Assets (Net)	11	10.67	10.66
(h) Other Non-current Assets	12	69.61	70.00
Total Non-current Assets		3,722.62	3,789.32
Current Assets			
(a) Inventories	13	212.72	149.73
(b) Financial Assets			
(i) Loans	9	450.02	200.02
(ii) Investments	14	65.55	161.74
(iii) Trade Receivables	15	60.03	27.49
(iv) Unbilled Revenue		45.41	40.61
(v) Cash and Cash Equivalents	16	12.01	67.34
(vi) Other Financial Assets	10	2.74	1.09
(c) Other Current Assets	12	126.99	38.66
Total Current Assets		975.47	686.68
Total Assets		**4,698.09**	**4,476.00**
Equity and Liabilities			
Equity			
(a) Equity Share Capital	17	1,508.92	1,508.92
(b) Other Equity	18	971.97	691.47
Total Equity		2,480.89	2,200.39
Liabilities			
Non-current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	19	1,334.73	1,563.35
(ii) Lease Liabilities	20	3.24	-
(iii) Other Financial Liabilities	21	6.39	18.47
(b) Provisions	22	8.08	8.28
(c) Deferred Tax Liabilities (Net)	23	-	2.44
(d) Other Non-current Liabilities	24	49.93	14.32
Total Non-current Liabilities		1,402.37	1,606.86
Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	25	325.06	215.06
(ii) Trade Payables	26		
(a) Total outstanding dues of micro enterprises and small		3.61	4.23
(b) Total outstanding dues of creditors other than micro enterprises and small enterprises		190.10	120.75
(iii) Other Financial Liabilities	21	97.85	95.46
(b) Provisions	22	0.48	0.35
(c) Current Tax Liabilities (Net)	11	2.08	0.93
(d) Other Current Liabilities	24	195.65	231.97
Total Current Liabilities		814.83	668.75
Total Liabilities		2,217.20	2,275.61
Total Equity and Liabilities		**4,698.09**	**4,476.00**

See accompanying notes to the Financial Statements

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: **301003E/E300005**

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 19th April, 2022

For and on behalf of the Board,

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 19th April, 2022

Joydeep Mukherjee
Director
Place: Kolkata
Date: 19th April, 2022

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 19th April, 2022

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 19th April, 2022

Mona Purandare
Company Secretary
Place: Mumbai
Date: 19th April, 2

MAITHON POWER LIMITED

Statement of Profit and Loss for the year ended 31st March, 2022

		Notes	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
(I)	Revenue from Operations	27	2,782.38	2,503.38
(II)	Other Income	28	22.28	17.15
(III)	**Total Income**		**2,804.66**	**2,520.53**
(IV)	**Expenses**			
	Cost of Power Purchased		2.18	1.18
	Cost of Fuel Consumed		1,772.84	1,500.33
	Employee Benefits Expense	29	44.96	40.27
	Depreciation and Amortisation Expense	30	272.14	246.07
	Finance Costs	31	137.29	136.09
	Other Expenses	32	282.62	280.11
	Total Expenses		**2,512.03**	**2,204.05**
(V)	**Profit before Tax for the year**		**292.63**	**316.48**
(VI)	**Tax Expense**			
	Current Tax		51.13	55.63
	Adjustment of tax relating to earlier year		(0.99)	-
	Deferred Tax		(38.04)	(50.17)
	Tax Expense	33	**12.10**	**5.46**
(VII)	**Profit for the year**		**280.53**	**311.02**
(VIII)	**Other Comprehensive Income**			
	Add/(Less):			
	(i) Items that will not be reclassified to profit and loss			
	(a) Remeasurement of the Defined Benefit Plans		(0.04)	1.14
	(ii) Tax relating to items that will not be reclassified to Profit & Loss			
	(a) Current Tax		0.01	(0.20)
	Total Other Comprehensive Income (Net of taxes)		**(0.03)**	**0.94**
(IX)	**Total Comprehensive Income for the year**		**280.50**	**311.96**
(X)	**Earnings Per Equity Share (Face Value ₹ 10/- Per Share)**	36		
	Basic & Diluted (₹)		1.86	2.06

See accompanying notes to the Financial Statements

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: **301003E/E300005**

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 19th April, 2022

For and on behalf of the Board,

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 19th April, 2022

Joydeep Mukherjee
Director
Place: Kolkata
Date: 19th April, 2022

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 19th April, 2022

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 19th April, 2022

Mona Purandare
Company Secretary
Place: Mumbai
Date: 19th April, 2022

MAITHON POWER LIMITED

Statement of Cash Flows for the year ended 31st March, 2022

Particulars	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
A. Cash Flow from Operating Activities		
Profit before Taxes	**292.63**	**316.48**
Adjustments to reconcile profit before tax to net cash flows		
Depreciation and Amortisation Expenses	272.14	246.07
Finance Costs	137.30	136.09
Interest Income	(13.97)	(5.96)
(Gain) / Loss on disposal of Property, Plant and Equipment (Net)	0.07	0.01
Gain on sale/fair valuation of Current Investment measured at FVTPL	(4.32)	(7.76)
	391.22	**368.45**
Operating profit before changes in Operating Assets & Liabilities	**683.85**	**684.93**
Adjustments for (increase) / decrease in Operating Assets:		
Trade Receivables	(29.90)	187.57
Unbilled Revenue	(4.79)	(8.84)
Inventories	(63.01)	55.77
Other Current Assets	(88.33)	115.62
Other Non-Current Assets	(15.85)	-
Other Non Current Financial Assets	(12.99)	(0.05)
Non-Current Financial Assets - Loans	0.04	-
Adjustments for increase / (decrease) in Operating Liabilities:		
Trade Payables	68.74	(44.24)
Other Non Current Liabilities	32.96	-
Other Current Liabilities	(36.31)	90.21
Other Current Financial liabilities	37.43	2.21
Lease Liability	3.20	-
Current provisions	0.09	1.13
Non-Current provisions	(0.20)	(0.48)
	(108.92)	**398.90**
Cash Generated from Operations	**574.93**	**1,083.83**
Income Taxes Paid	(48.99)	(59.09)
Net Cash flow from Operating Activities	**525.94**	**1,024.74**
B. Cash Flow from Investing Activities		
Capital expenditure on Property, Plant and Equipment and Other Intangible assets (including capital advances)	(182.48)	(244.44)
Proceeds from sale of Property, Plant and Equipment	-	0.03
Purchase of Current Investments	2,248.25	(2,405.22)
Proceeds from sale of Current Investments	(2,147.74)	2,417.58
Interest Received	12.32	4.88
Inter corporate deposits Given	(800.00)	(200.00)
Inter corporate deposits Repaid	550.00	-
Net Cash used in Investing Activities	**(319.65)**	**(427.17)**
C. Cash Flow from Financing Activities		
Proceeds from Non Current Borrowings	100.00	524.00
Repayment of Non Current Borrowings	(204.62)	(817.91)
Proceeds from Current Borrowings	33.80	110.00
Repayment of Current Borrowings	(48.80)	(110.00)
Interest Paid	(142.00)	(140.97)
Dividend Paid		(180.00)
Net Cash from/(used in) Financing Activities	**(261.62)**	**(614.88)**
Net (Decrease)/Increase in Cash and Cash Equivalents	(55.33)	(17.31)
Cash and Cash Equivalents as at 1st April (Opening Balance)	67.34	84.65
Cash and Cash Equivalents as at 31st March (Closing Balance)	**12.01**	**67.34**

Cash and Cash Equivalents include:	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
(i) Balances with banks in Current Accounts	12.01	67.34
	12.01	**67.34**

Note:-The above cash flow has been prepared under the "Indirect Method" as set out in Indian Accounting Standard (Ind AS) 7 - statement of cash flows.

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: **301003E/E300005**

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 19th April, 2022

S.R.Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 19th April, 2022

Joydeep Mukherjee
Director
Place: Kolkata
Date: 19th April, 2022

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 19th April, 2022

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 19th April, 2022

Mona Purandare
Company S
Place: Mum
Date: 19th A

MAITHON POWER LIMITED

Statement of Changes in Equity for the year ended 31st March, 2022

A. Equity Share Capital

		₹ Crores
Equity Shares of ₹ 10 each issued, subscribed and fully paid	No. of Shares	Amount
Balance as at 1st April, 2020	1,50,89,17,729	1,508.92
Balance as at 31st March, 2021	1,50,89,17,729	1,508.92
Balance as at 1st April, 2021	1,50,89,17,729	1,508.92
Balance as at 31st March, 2022	1,50,89,17,729	1,508.92

B. Other Equity

			₹ Crores
	Debenture Redemption Reserve	Retained Earnings	Total
Balance as at 1st April, 2020	**129.05**	**430.46**	**559.51**
Profit for the year	-	311.02	311.02
Other Comprehensive Income for the year (Net of Tax)	-	0.94	0.94
Total Comprehensive Income	**-**	**311.96**	**311.96**
Dividend Paid	-	(180.00)	(180.00)
	-	**(180.00)**	**(180.00)**
Balance as at 31st March, 2021	**129.05**	**562.42**	**691.47**
Balance as at 1st April, 2021	**129.05**	**562.42**	**691.47**
Profit for the year	-	280.53	280.53
Other Comprehensive Income for the year (Net of Tax)	-	(0.03)	(0.03)
Total Comprehensive Income	**-**	**280.50**	**280.50**
Balance as at 31st March, 2022	**129.05**	**842.92**	**971.97**

See accompanying notes to the Financial Statements

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 19th April, 2022

For and on behalf of the Board,

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 19th April, 2022

Joydeep Mukherjee
Director
Place: Kolkata
Date: 19th April, 2022

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 19th April, 2022

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 19th April, 2022

Mona Purandare
Company Secretary
Place: Mumbai
Date: 19th April, 2022

1. Corporate Information

MAITHON POWER LIMITED ('the Company'), has been set up pursuant to an agreement entered into between The Tata Power Company Limited (TPCL) and Damodar Valley Corporation (DVC) with 74% and 26% shareholding respectively, to operate and maintain Electric power generating stations. The Company has set up a thermal power generation plant (comprising of two units of 525 MW each namely 'Unit I and Unit II') at Maithon, Jharkhand with a total capacity of 1050 MW. Unit I and Unit II of the project were commissioned on 1 September, 2011 and 24 July, 2012 respectively. The registered office of the Company is Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400009, Maharashtra, India.

The financial statements have been approved for issue in accordance with a resolution of the directors on 19th April, 2022.

2. Significant Accounting Policies

2.1 Basis of preparation and presentation

The financial statements of the Company have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 (as amended from time to time) and presentation requirements of Division II of Schedule III to the Companies Act, 2013, (Ind AS compliant Schedule III).

The financial statements have been prepared on a historical cost basis except for certain financial assets and liabilities measured at fair value (refer accounting policy regarding financial instruments).

Accounting Policy are consistent with earlier years unless stated otherwise.

3. Summary of Significant Accounting Policies

3.1 Foreign Currencies

The functional currency of the Company is Indian rupee (₹)

Income and expenses in foreign currencies are recorded at exchange rates prevailing on the date of the transaction. Foreign currency denominated monetary assets and liabilities are translated at the exchange rate prevailing on the balance sheet date and exchange gains and losses arising on settlement and restatement are recognized in the statement of profit and loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognised in OCI or profit or loss are also recognised in OCI or profit or loss, respectively).

Exchange differences on monetary items are recognized in profit or loss in the period in which they arise except for exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings.

3.2 Current Vs Non Current

The Company presents assets and liabilities in the balance sheet based on current/ non-current classification. An asset is treated as current when it is:

- Expected to be realised or intended to be sold or consumed in normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realised within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The Company has identified twelve months as its operating cycle.

3.3 Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in statement of profit and loss.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

3.4 Financial Assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace. Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), or fair value through profit or loss. The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them.

3.4.1 Financial assets at amortised cost

A 'financial asset' is measured at the amortised cost if both the following conditions are met:
a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. The EIR amortisation is included in finance income in the profit or loss.

3.4.2 Financial assets at fair value through other comprehensive income(FVTOCI)

A 'financial asset' is classified as at the FVTOCI if both of the following criteria are met:
a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset's contractual cash flows represent SPPI.

On initial recognition, the Company makes an irrevocable election on an instrument-by-instrument basis to present the subsequent changes in fair value in other comprehensive income pertaining to investments in equity instruments, other than equity instruments which are held for trading. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instruments through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on sale of the investments.

3.4.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Company irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading.
Other financial assets are measured at fair value through profit or loss unless it is measured at amortised cost or at fair value through other comprehensive income on initial recognition. The transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognized in statement of profit or loss.

3.4.4 Derecognition of Financial Assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the Company's balance sheet) when:

i) the right to receive cash flows from the asset have expired, or
ii) the Company has transferred its right to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its right to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Company continues to recognise the transferred asset to the extent of the Company's continuing involvement. In that case, the Company also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

3.4.5 Impairment of financial assets

The Company assesses at each date of balance sheet whether a financial asset or a group of financial assets is impaired. Ind AS 109 requires expected credit losses to be measured through a loss allowance. The Company recognises lifetime expected losses for all contract assets and / or all trade receivables that do not constitute a financing transaction. For all other financial assets, expected credit losses are measured at an amount equal to the 12 month expected credit losses or at an amount equal to the life time expected credit losses if the credit risk on the financial asset has increased significantly since initial recognition.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

3.5 Financial Liabilities

All financial liabilities are recognised initially at fair value and in case of loans and borrowings and payables, net of directly attributable transaction cost.

For purposes of subsequent measurement, financial liabilities are classified in two categories:

a) Financial liabilities at fair value through profit or loss
b) Financial liabilities at amortised cost (loans and borrowings)

3.5.1 Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Gains or losses on liabilities held for trading are recognised in the profit or loss. The Company has not designated any financial liability as at fair value through profit or loss.

3.5.2 Financial liabilities at amortised cost (Loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process. The EIR amortisation is included as finance costs in the statement of profit and loss.

3.5.3 Derecognition of Financial Liabilities

A Financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified , such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability . The difference in the respective carrying amounts is recognised in the statement of profit and loss.

3.6 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

3.7 Dividend Distribution to equity shareholders of the Company

The Company recognises a liability to make dividend distributions to its equity holders when the distribution is authorised and the distribution is no longer at the discretion of the Company . As per the corporate laws in India, a distribution is authorised when it is approved by the shareholders. A corresponding amount is recognised directly in equity.

In case of Interim Dividend, the liability is recognised on its declaration by the Board of Directors.

4. Critical accounting estimates and judgements

In the application of the Company's accounting policies, the management of the Company is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods. Detailed information about each of these estimates and judgements is included in relevant notes together with information about the basis of calculation for each affected line item in the financial statements.

The areas involving critical estimates or judgements are:

a) Estimation of current tax and deferred tax expense (including Minimum alternate tax credit) - Note 23 and Note 33
b) Recoverable from Beneficiaries / Payable to Beneficiaries(Net) - Note 24
c) Estimation on recoverability of Late Payment Surcharge (LPS) – Note 27
d) Estimation of defined benefit obligations- Note 22
e) Judgement to estimate the amount of provision required or to determine required disclosure related to litigation and claims against the Company - Note 35.

Estimates and judgement are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the Company and that are believed to be reasonable under the circumstances.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

5. Property, Plant and Equipment

5.1 Accounting Policy

Property, plant and equipment (PPE) is stated at cost less accumulated depreciation and accumulated impairment losses, if any. Cost includes purchase price (net of trade discount and rebates) and any directly attributable cost of bringing the asset to its working condition for its intended use and for qualifying assets, borrowing costs capitalised in accordance with Ind AS 23. Capital work in progress is stated at cost, net of accumulated impairment loss, if any. Other Indirect Expenses incurred relating to project, net of income earned during the project development stage prior to its intended use, are considered as pre-operative expenses and disclosed under Capital Work-in-Progress. When significant parts of plant and equipment are required to be replaced at intervals, the Company depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in the statement of profit and loss as incurred.

5.2 Subsequent Cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably. All other repair and maintenance costs are recognized in profit or loss as incurred.

5.3 Depreciation

Depreciation commences when the assets are ready for the intended use.

Depreciation on property, plant and equipment in respect of electricity business of the Company is covered under Part B of Schedule II of the Companies Act, 2013, has been provided on the straight line method at the rates using the methodology required by relevant provisions of Central Electricity Regulatory Commission.

Depreciation on all other assets is recognised on the cost of assets (other than freehold land) less their residual values over their estimated useful lives, using the straight-line method.

5.4 Useful lives of tangible assets:

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis. The Company, based on technical assessment made by technical expert and management estimate, depreciates certain items of building, plant and equipments over estimated useful lives which are different from the useful life prescribed in Schedule II to the Companies Act, 2013. The management believes that these estimated useful lives are realistic and reflect fair approximation of the period over which the assets are likely to be used.

Type of Asset	Useful Lives
Buildings-Plant	25 Years
Buildings-Others	25 Years
Plant and Equipment	25 Years
Computer	3 Years
Furniture and Fixtures	5 to 10 years
Office Equipment	5 to 10 years
Motor vehicles etc	5 Years
Railway Sidings & Overhead Electrification	25 Years

5.5 Derecognition of tangible assets

An item of Property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipments is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the statement of profit and loss.

5.6 Impairment of tangible and intangible assets

The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets of or Group of assets.

When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Impairment losses of tangible and intangible assets are recognised in the statement of profit and loss.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March, 2022

5. Property, Plant and Equipment (Continue)

₹ Crores

Description	Freehold Land	Buildings - Plant	Buildings - Others	Railway sidings	Plant and Equipment	Overhead Electrification	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation										
Balance as at 1st April, 2021	299.91	263.30	179.44	492.84	4,383.78	47.39	14.07	7.26	2.67	5,690.66
Additions	-	0.68	0.02	-	42.34	-	0.12	0.02	-	43.18
Disposals	-	-	-	-	(0.13)	-	(0.64)	-	-	(0.77)
Balance as at 31st March, 2022	**299.91**	**263.98**	**179.46**	**492.84**	**4,425.99**	**47.39**	**13.55**	**7.28**	**2.67**	**5,733.07**
Accumulated depreciation										
Balance as at 1st April, 2021	-	70.19	39.31	-	2,017.01	-	11.04	6.56	2.38	2,146.49
Depreciation Expense (Refer Note 30)	-	8.79	5.96	17.20	231.07	2.77	0.91	0.08	0.12	266.90
Disposal of assets	-	-	-	-	(0.12)	-	(0.57)	-	-	(0.69)
Balance as at 31st March, 2022		**78.98**	**45.27**	**17.20**	**2,247.96**	**2.77**	**11.38**	**6.64**	**2.50**	2,412.70
Net carrying amount										
As at 31st March, 2022	**299.91**	**185.00**	**134.19**	**475.64**	**2,178.03**	**44.62**	**2.17**	**0.64**	**0.17**	3,320.37
As at 31st March, 2021	**299.91**	**193.11**	**140.13**	**492.84**	**2,366.77**	**47.39**	**3.03**	**0.70**	**0.29**	3,544.17

₹ Crores

Description	Freehold Land	Buildings - Plant	Buildings - Others	Railway sidings	Plant and Equipment	Overhead Electrification	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation										
Balance as at 1st April, 2020	298.64	253.86	178.57	-	4,299.58	-	13.90	7.07	2.72	5,054.34
Additions	1.27	9.44	0.87	492.84	84.42	47.39	0.18	0.19	-	636.60
Disposals	-	-	-	-	(0.22)	-	(0.01)	-	(0.05)	(0.28)
Balance as at 31st March, 2021	**299.91**	**263.30**	**179.44**	**492.84**	**4,383.78**	**47.39**	**14.07**	**7.26**	**2.67**	5,690.66
Accumulated depreciation										
Balance as at 1st April, 2020	-	61.47	33.38	-	1,792.07	-	10.07	6.50	2.21	1,905.70
Depreciation Expense (Refer Note 30)	-	8.72	5.93	-	225.12	-	0.98	0.06	0.22	241.03
Disposal of assets	-	-	-	-	(0.18)	-	(0.01)	-	(0.05)	(0.24)
Balance as at 31st March, 2021	**-**	**70.19**	**39.31**	**-**	**2017.01**	**-**	**11.04**	**6.56**	**2.38**	2,146.49
Net carrying amount										
As at 31st March, 2021	**299.91**	**193.11**	**140.13**	**492.84**	**2,366.77**	**47.39**	**3.03**	**0.70**	**0.29**	3,544.17
As at 31st March,2020	**298.64**	**192.39**	**145.19**	**-**	**2,507.51**	**-**	**3.83**	**0.57**	**0.51**	3,148.64

Note: The Company has elected to fair value its freehold land and use that fair value in its opening Ind AS Balance Sheet as at 1 April, 2015 as deemed cost. Accordingly, the freehold land is carried at fair value of ₹296.22 crores and carrying amount reported under previous GAAP was ₹ 172.71 crores. Accordingly an amount of ₹ 123.51 crores has been credited to retained earnings as at 1 April, 2015 (transition date).

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

5. Property, Plant and Equipment (Continue)

5.7 Immovable properties whose title deeds are not in the name of the Company

As on 31st March, 2022 ₹ crore

Description	Relevant line item in the Balance Sheet	Carrying value	Title deeds held in the name of	Whether title deed holder is a promoter, director or relative of promoter / director or employee of promoter / director	Property held since which date	Reason for not being held in the name of the company
Raiyati Land (Free hold) located at Maithon, Jharkhand.	PPE	159.80	Damodar Valley Corporation	Promoters	December 2008	Refer Note (a)
Railway Land (Freehold Land) located at Maithon, Jharkhand.	PPE	137.12	Damodar Valley Corporation	Promoters	Oct 2008 to Mar 2015	Refer Note (b)
UnNotified Forest land (Leasehold) located at Maithon, Jharkhand	Right of use Assets	12.40	Damodar Valley Corporation	Promoters	May 2008	Refer Note (c)
GM land - Plant (Leasehold) located at Maithon, Jharkhand	Right of use Assets	7.06	Damodar Valley Corporation	Promoters	July 2010	Refer Note (d)
GM land - Railway (Leasehold) located at Maithon, Jharkhand	Right of use Assets	5.91	Damodar Valley Corporation	Promoters	July 2010	Refer Note (d)

As on 31st March, 2021 ₹ crore

Description	Relevant line item in the Balance Sheet	Carrying value	Title deeds held in the name of	Whether title deed holder is a promoter, director or relative of promoter / director or employee of promoter / director	Property held since which date	Reason for not being held in the name of the company
Raiyati Land (Free hold) located at Maithon, Jharkhand.	PPE	159.80	Damodar Valley Corporation	Promoters	December 2008	Refer Note (a)
Railway Land (Freehold Land) located at Maithon, Jharkhand.	PPE	137.12	Damodar Valley Corporation	Promoters	Oct 2008 to Mar 2015	Refer Note (b)
UnNotified Forest land (Leasehold) located at Maithon, Jharkhand	Right of use Assets	13.26	Damodar Valley Corporation	Promoters	May 2008	Refer Note (c)
GM land - Plant (Leasehold) located at Maithon, Jharkhand	Right of use Assets	7.12	Damodar Valley Corporation	Promoters	July 2010	Refer Note (d)
GM land - Railway (Leasehold) located at Maithon, Jharkhand	Right of use Assets	12.18	Damodar Valley Corporation	Promoters	July 2010	Refer Note (d)

(a) The Land was acquired by Damodar Valley Corporation (DVC) exclusively for the Maithon Right Bank Thermal Power Project. As per the Shareholders Agreement, the title is to be transferred to the Company. Pending transfer of title as stated above, the Company had entered into an Indenture Deed with DVC on 5 December, 2008, which provided inter-alia, lease of private land for a period of 35 years (and extendable for another 35 years at the option of the Company) and provision to create security in favour of Lenders and transfer this land to the Company at the cost at which it was acquired subject to approval of the Government of the State of Jharkhand. The process of Mutation in name of DVC is yet to complete, thereafter it will be transferred in the name of the company.

(b) The Land was acquired by Damodar Valley Corporation (DVC) exclusively for the Maithon Right Bank Thermal Power Project. As per the shareholders agreement, the title of these lands is to be transferred to the Company. DVC is in the process of transferring title of these lands in favour of the Company as per applicable laws of the State of Jharkhand. The process of Mutation in name of DVC is yet to complete, thereafter it will be transferred in the name of the company.

(c) The Company has received demand for 191.67 acres of Jungle Jhar (Forest Land) from Government of Jharkhand and has made payment of requisite amount and is waiting for Draft Lease agreement to execution of lease from Government of Jharkhand in the name of Company.

(d) The Land was acquired by Damodar Valley Corporation (DVC) exclusively for the Maithon Right Bank Thermal Power Project. As per the shareholders agreement, the lease of these lands is to be transferred to the Company. DVC is in the process of transferring lease of these lands in favour of the Company as per applicable laws of the State of Jharkhand. The Company is yet to received demand from Government of Jharkhand for execution of lease in the name of Company.

(e) The expenditure in connection with private land including land compensation and rehabilitation and resettlement expenses has been capitalised as freehold land and the expenditure in connection with GM land and Forest land has been included in Right of Use Assets.

(f) Freehold land with a carrying amount of ₹299.91 crores (as at 31st March, 2021 ₹299.91 crores) has been mortgaged to secure borrowings of the Company (Refer Note 19 & 25).

S.R. Batliboi & Co. LLP Kolkata
MAITHON POWER LIMITED

6. Capital Work-in-Progress

Accounting Policy

Capital work in progress is stated at cost, net of accumulated impairment loss, if any.

CWIP* ageing Schedule as at 31st March 2022

₹ crore

Capital Work in Progress	Amount in CWIP for a period of				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Projects in progress	125.72	61.75	2.61	-	190.08

CWIP* ageing Schedule as at 31st March 2021

₹ crore

Capital Work in Progress	Amount in CWIP for a period of				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Projects in progress	74.57	2.65	-	0.37	77.59

*Excluding Capital Stock. .

Note:- There is no project whose completion is overdue or its cost has exceeded the original plan as at 31st March, 2022 as well as 31st March, 2021.

7. Other Intangible Assets

7.1 Accounting Policy

Intangible assets acquired separately
Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses, if any.

7.2 Subsequent Cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably.

7.3 Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset is measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

7.4 Amortisation of intangible assets

Intangible assets with finite lives are amortised over the useful economic life on straight line basis and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life is reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

Estimated useful lives of the intangible assets are as follows:

Type of Asset	Useful Lives
Computer Software	5 years

₹ Crores

Description	Computer software	Total
Cost		
Balance as at 1st April, 2021	1.26	**1.26**
Additions	-	-
Balance as at 31st March, 2022	**1.26**	**1.26**
Accumulated amortisation		
Balance as at 1st April, 2021	0.81	**0.81**
Amortisation expense (Refer Note 30)	0.15	**0.15**
Balance as at 31st March, 2022	**0.96**	**0.96**
Net Book Value		
As at 31st March, 2022	**0.30**	**0.30**
As at 31st March, 2021	**0.45**	**0.45**

Description	Computer software	Total
Cost		
Balance as at 1st April, 2020	1.06	**1.06**
Additions	0.20	**0.20**
Balance as at 31st March, 2021	**1.26**	**1.26**
Accumulated amortisation		
Balance as at 1st April, 2020	0.69	**0.69**
Amortisation expense (Refer Note 30)	0.12	**0.12**
Balance as at 31st March, 2021	**0.81**	**0.81**
Net Book Value		
As at 31st March, 2021	**0.45**	**0.45**
As at 31st March,2020	**0.37**	**0.37**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

8. Right - of - use - assets

The Company recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, lease payments made at or before the commencement date less any lease incentives received and estimate of costs to dismantle. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

- Land: 05 to 35 years

The right-of-use assets are also subject to impairment in accordance with Ind AS 36 "Impairment of assets". The Company presents right-of-use assets that do not meet the definition of investment property in 'Property, plant and equipment'.

₹ Crores

Description	ROU-Land	Total
Cost		
Balance as on 1st April, 2021	102.05	**102.05**
Additions	3.25	**3.25**
Balance as at 31st March, 2022	**105.30**	**105.30**
Accumulated depreciation		
Balance as on 1st April, 2021	34.61	**34.61**
Depreciation Expense (Refer Note 30)	5.09	**5.09**
Balance as at 31st March, 2022	**39.70**	**39.70**
Net carrying amount		
As at 31st March, 2022	**65.60**	**65.60**
As at 31st March, 2021	**67.44**	**67.44**

₹ Crores

Description	ROU-Land	Total
Cost		
Balance as at 1st April, 2020	98.78	**98.78**
Additions	3.27	**3.27**
Balance as at 31st March, 2021	**102.05**	**102.05**
Accumulated depreciation		
Balance as at 1st April, 2020	29.69	**29.69**
Depreciation Expense (Refer Note 30)	4.92	**4.92**
Balance as at 31st March,2020	**34.61**	**34.61**
Net carrying amount		
As at 31st March, 2021	**67.44**	**67.44**
As at 1st April, 2020	**69.09**	**69.09**

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
9. Loans		
Unsecured and considered good unless otherwise stated		
Non-current		
Loans to Employees Including loans due by officers of the Company - ₹ 0.05 Crores (As at March 31, 2021 - ₹ 0.06 Crores)	0.11	0.16
	0.11	**0.16**
Current		
Loan to Related Party (Refer Note 37)	450.00	200.00
Other Loans		
Loans to Employees Including loans due by officers of the Company - ₹ 0.00 Crores* (As at March 31, 2021 - ₹ 0.00 Crores)*	0.02	0.02
* Amount is lesser than the rounding off norms followed by the Company.	**450.02**	**200.02**

Note-There is no Loan or Advance in the nature of Loan given to specified persons without specific terms of period of repayment.

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
10. Other Financial Assets		
Unsecured and considered good unless otherwise stated		
Non - Current		
Security Deposit		
With Related Parties (Refer Note 37)	0.28	0.28
With Others	0.20	0.21
With bank in deposit accounts*	13.01	0.01
* Includes deposit for Debt Service Reserve Account	**13.49**	**0.50**
Current		
Interest Accrued on Bank Deposits	0.14	-
Interest Accrued on Inter-corporate deposits	2.60	1.09
	2.74	**1.09**

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
11. Tax Assets / Liabilities		
Non-current tax assets		
Advance Income Tax (Net)	10.67	10.66
	10.67	**10.66**
Current tax liabilities		
Income Tax Payable (Net)	2.08	0.93
	2.08	**0.93**

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
12. Other Assets		
Unsecured and considered good unless otherwise stated		
Non-current		
Capital Advances	37.02	53.26
Claims Receivable from Suppliers	32.59	16.74
	69.61	70.00
Current		
Prepaid Expenses	7.27	12.52
Advances to Vendors	119.65	26.00
Other Advances	0.07	0.14
	126.99	38.66

13. Inventories

Inventories are stated at the lower of cost and net realisable value. Cost of inventory includes cost of purchase and other costs incurred in bringing the inventories to their present location and condition. Costs of inventories are determined on weighted average basis. Finished goods and work in progress: cost includes cost of direct materials and labour and a proportion of manufacturing overheads based on the normal operating capacity, but excluding borrowing costs. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale. Unserviceable/damaged stores and spares are identified and written down based on technical evaluation.

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
(a) Raw Materials		
Fuel	153.41	89.58
Fuel-in-Transit	3.71	4.96
(b) Stores and Spares		
Stores and Spare Parts	55.56	55.16
(c) Loose Tools	0.04	0.03
	212.72	149.73

Notes:-Refer Note 19 & 25 for Inventories pledged as security for borrowings.

14. Current Investments

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
Investments carried at Fair Value through Profit and Loss		
Mutual Funds (Unquoted)		
i. ICICI Prudential Liquid Fund - Direct Plan - Growth Nil Units (31st March, 2021: 18,03,377.071 Units)	-	54.96
ii. KOTAK Liquid Fund - Direct Plan - Growth Nil Units (31st March 2021: 1,31,649.324 Units)	-	54.75
iii. NIPPON India Liquid Fund - Direct Plan - Growth Plan - Growth Option Nil Units (31st March 2021: 1,03,379.411 Units)	-	52.03
iv. SBI Liquid Fund - Direct Plan - Growth 60,015.389 Units (31st March 2021: Nil Units)	20.00	-
v. IDFC Cash Fund - Direct Plan - Growth 1,77,155.187 Units (31st March 2021: Nil Units)	45.55	-
	65.55	161.74
Notes:		
1. Aggregate Market Value of Unquoted Investments	65.55	161.74
2. Aggregate Carrying Value of Unquoted Investments	65.55	161.74

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores

15. Trade Receivables

Current Trade Receivables

Secured, Considered good	60.03	27.49
	60.03	**27.49**

The average credit period for the Company's receivable from its sale of power is 60 days. As per the relevant provisions of the CERC Regulations, penal interest @ 18% p.a. is claimable from the customers as Late payment Surcharge (LPS).

As stated in Note 27 to financial statements Late Payment Surcharge (LPS) are recognised on actual realisation or accrued based on an assessment of certainty of realization supported by either an acknowledgement from customers or on receipt of favourable order from regulator / authorities.

No Trade or Other receivable are due from directors or other officers of the company either severally or jointly with any other person. No Trade or Other receivable are due from firms or private companies respectively in which any director is a partner, a director or a member.

Trade Receivables Ageing schedule:

There is no outstanding balance of Trade Receivable which are due for payment as on 31st March, 2022 and as on 31st March, 2021, therefore ageing schedule has not been disclosed. Further the outstanding balance of trade receivables are undisputed as on year end.

16. Cash and cash equivalents

Accounting Policy

Cash and cash equivalents in the Balance Sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value. Cash and cash equivalents include balances with banks which are unrestricted for withdrawal and usage.

For the purpose of the statement of cash flows, cash and cash equivalents consist of cash at bank, cash/cheques on hand and short-term deposits, as defined above as they are considered an integral part of the Company's cash management.

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
(i) Balances with Banks:		
In Current Accounts	12.01	67.34
Cash and Cash Equivalents as per Balance Sheet	**12.01**	**67.34**
Cash and Cash Equivalents as per Statement of Cash Flows	**12.01**	**67.34**

Reconciliation of liabilities from Financing Activities

₹ Crores

Particulars	As at 31st March, 2021	Cash flows		Non Cash Transactions	As at 31st March, 2022
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	1,763.41	100.00	(204.62)	1.00	1,659.79
Current Borrowings (excluding Bank Overdraft)	15.00	33.80	(48.80)	-	-
Total	**1,778.41**	**133.80**	**(253.42)**	**1.00**	**1,659.79**

₹ Crores

Particulars	As at 31st March, 2020	Cash flows		Non Cash Transactions	As at 31st March, 2021
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	2,058.84	524.00	(817.91)	(1.52)	1,763.41
Current Borrowings (excluding Bank Overdraft)	15.00	110.00	(110.00)	-	15.00
Total	**2,073.84**	**634.00**	**(927.91)**	**(1.52)**	**1,778.41**

Note - Figures in brackets represents Cash outflow.

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March, 2022

17. Equity - Share Capital

	As at 31st March, 2022		As at 31st March, 2021	
	Number	₹ Crores	Number	₹ Crores
Authorised				
Equity Shares of ₹ 10/- each	2,00,00,00,000	2,000.00	2,00,00,00,000	2,000.00
		2,000.00		2,000.00
Issued, Subscribed and Paid-up Capital				
Equity shares of ₹ 10/- each fully paid up	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

(i) **Reconciliation of the shares outstanding at the beginning and at the end of the reporting year**

	As at 31st March, 2022		As at 31st March, 2021	
	Number	₹ Crores	Number	₹ Crores
Equity Shares				
At the beginning of the year and at the end of the year	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

Terms/rights attached to Equity Shares

The Company has issued only one class of Equity Shares having a par value of ₹ 10/- per share. Each holder of Equity Shares is entitled to one vote per share. The final dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting.

In the event of liquidation of the Company, the holders of Equity Shares will be entitled to receive remaining assets of the Company, after distribution of all preferential amounts. The distribution will be in proportion to the number of Equity Shares held by the shareholders.

(ii) **Details of shareholders holding more than 5% shares in the Company and shares held by holding Company**

	As at 31st March, 2022		As at 31st March, 2021	
	Number	% Holding	Number	% Holding
Equity Shares of ₹10/- each fully paid				
The Tata Power Company Limited (the holding company)	1,11,65,99,120	74%	1,11,65,99,120	74%
Damodar Valley Corporation	39,23,18,609	26%	39,23,18,609	26%

(iii) **Shareholding of Promoters**

Shares held by promoters at the end of the year 31st March, 2022				% Change during the year
Sl No	Promoter name	No. of shares	% of total shares	
1	The Tata Power Company Limited (TPCL)	1,11,65,99,114	74%	-
2	TPCL and Mr. Anand Agarwal	1	0%	-
3	TPCL and Mr. H.M. Mistry	1	0%	-
4	TPCL and Mr. Prasad Bagade	1	0%	-
5	TPCL and Mr. Pradip Roy	1	0%	-
6	TPCL and Mr. Kasturi Soundarajan	1	0%	-
7	TPCL and Mr. Jeraz E. Mahernosh	1	0%	-
8	Damodar Valley Corporation (DVC)	39,23,18,009	26%	-
9	DVC and Mr. Achintya Debnath	100	0%	-
10	DVC and Mr. Alok Raychaudhuri	100	0%	-
11	DVC and Mr. Sourendra Coomer Dutt	100	0%	-
12	DVC and Mr. Pradyot Chakraborty	100	0%	-
13	DVC and Mr. Pulak Datta	100	0%	-
14	DVC and Mr. D. Ghosh	100	0%	-

Shares held by promoters at the end of the year 31st March, 2021				% Change during the year
Sl No	Promoter name	No. of shares	% of total shares	
1	The Tata Power Company Limited (TPCL)	1,11,65,99,114	74%	-
2	TPCL and Mr. Anand Agarwal	1	0%	-
3	TPCL and Mr. H.M. Mistry	1	0%	-
4	TPCL and Mr. Prasad Bagade	1	0%	-
5	TPCL and Mr. Pradip Roy	1	0%	-
6	TPCL and Mr. Kasturi Soundarajan	1	0%	-
7	TPCL and Mr. Jeraz E. Mahernosh	1	0%	-
8	Damodar Valley Corporation (DVC)	39,23,18,009	26%	-
9	DVC and Mr. Achintya Debnath	100	0%	-
10	DVC and Mr. Alok Raychaudhuri	100	0%	-
11	DVC and Mr. Sourendra Coomer Dutt	100	0%	-
12	DVC and Mr. Pradyot Chakraborty	100	0%	-
13	DVC and Mr. Pulak Datta	100	0%	-
14	DVC and Mr. D. Ghosh	100	0%	-

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
18. Other Equity		
(i) Debenture Redemption Reserve (DRR)		
As at the beginning of the year	129.05	129.05
Add: Amount transferred from Retained Earnings	-	-
As at the end of the year	**129.05**	**129.05**
(ii) Retained Earnings		
As at the beginning of the year	562.42	430.46
Add: Remeasurement of Defined Benefit Obligation (Net of Tax)	(0.03)	0.94
Profit for the year	280.53	311.02
Less: Dividend Paid	-	180.00
Movement for the year	280.50	131.96
As at the end of the year	**842.92**	**562.42**
	971.97	**691.47**

Note:

1 The board of directors have proposed final dividend @ 28.92% of the face value of ₹10/- per share (₹ 2.98 per equity share) after the balance sheet date which is subject to approval by the shareholders at the annual general meeting.

2 On 30th June, 2020, Interim dividend of ₹0.40 per share (3.98%) aggregating ₹60 Crore was declared and paid to the holders of the fully paid equity shares on 1st July, 2020.

3 On 29th September, 2020, Interim dividend of ₹0.40 per share (3.98%) aggregating ₹60 Crore was declared and paid to the holders of the fully paid equity shares on 1st October, 2020.

4 On 30th December, 2020, Interim dividend of ₹0.40 per share (3.98%) aggregating ₹60 Crore was declared and paid to the holders of the fully paid equity shares on 30th December, 2020.

Nature and purpose of reserves:

Debenture Redemption Reserve
The Company was required to create a Debenture Redemption Reserve out of the profits which are available for payment of dividend for the purpose of redemption of debentures. Pursuant to Companies (Share Capital and Debentures) Amendment Rules, 2019 dated 16th August, 2019, the Company is not required to create Debenture Redemption Reserve (DRR). Accordingly, the Company has not created DRR during the year and DRR created till previous years will be transferred to retained earnings on redemption of debentures.

Retained Earnings
Retained Earnings are the profits of the Company earned till date net of appropriations.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	As at 31st March, 2022 ₹ Crores		As at 31st March, 2021 ₹ Crores	
19. Non-current Borrowings Secured - At Amortised Cost	Non-current	Current Maturities*	Non-current	Current Maturities*
(i) Redeemable Non-Convertible Debentures (See Note I, II & III below)	765.09	265.00	1,029.27	165.00
(ii) Term Loans from Banks (See Note IV & V below)				
(a) Union Bank of India	131.26	12.51	93.07	4.43
(b) Axis Bank	438.38	47.55	441.01	30.63
	569.64	60.06	534.08	35.06
* (Refer Note 25)	1,334.73	325.06	1,563.35	200.06

I. Redeemable Non-Convertible Debentures issued on 30th November 2015

(a) The Company has issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹10.00 lakhs each on 30 November, 2015 at par. The debentures have been issued for the part-refinancing of the outstanding term loan from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures have been secured in favour of the debenture trustee by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land) of the issuer, both present and future.

(c) These debentures carry a floating rate which is base rate of HDFC Bank Limited plus 15 basis points. Interest is payable on the 30th of November each year.

II. Redeemable Non-Convertible Debentures issued on 9th February 2017

(a) The Company has issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹50.00 Lakhs on 9 February, 2017 at par respectively. The debentures have been issued for the part-refinancing of the outstanding term loan from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures have been secured by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land), all movable properties and assets, all the bank accounts, all current assets, all intangible assets, both present and future.
Assignment by way of security over letter of credit, performance bonds or guarantees provided by any person, all the rights, title, interest, benefits, claims and demands, whatsoever of the Issuer in each of the Project Documents, all Insurance Contracts/proceeds under Insurance Contracts, in relation to the Project of the issuer .
The above security will at all times, rank pari-passu inter se the Existing Lenders and the Debenture holders.

(c) These debentures carry a fixed rate of interest of 8% per annum. Interest is payable on the 9th of February each year.
The Company will have to take a prior written no-objection certificate from the debenture holders in the event it intends to create a security over the above secured properties in favour of its working capital lenders over and above ₹ 1000.00 crores.

III. Redeemable Non-Convertible Debentures issued on 24th December 2020

(a) The Company has issued ₹ 199.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹10.00 Lakhs each on 24th December, 2020 at par respectively. The debentures have been issued for the part-repayment of the existing term loan availed from SBI. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These Debentures have been secured by Security as mentioned in above para II-(b).

(c) These debentures carry a fixed coupon rate of 6.25% per annum. Interest is payable on 24th December each year.

IV. Term Loan from Axis Bank & Union Bank of India

(a) The Company has entered into a Loan Agreement of ₹ 500 Crore for Railway Infra with Axis Bank on 28th January, 2020. Axis bank has down sell borrowings of ₹ 150 Crs to Union Bank of India with same terms & condition on 6th January 2021.

(b) These loan have been secured by Security as mentioned in above para II-(b).

(c) Interest rate term loan is Axis bank 12 Month MCLR plus 25 basis points.

V. Term Loans from Axis Bank (Refinancing)

(a) The Company has entered into a Loan Agreement of ₹ 225 Crore with Axis Bank on 29th December, 2020 for the part-refinancing of the outstanding term loan from SBI.

(b) These loan have been secured by Security as mentioned in above para II-(b).

(c) Interest rate term loan is Axis Bank 12 month MCLR plus 5 basis points.

VI. Non Current borrowings secured against current assets

The quarterly returns or statements of current assets filed by the company with banks or financial institutions are in agreement with the books of accounts and there are no discrepancies.

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

Terms of Repayment As at 31st March, 2022

₹ crore

Particulars		Amount Outstanding	Repayments						
			FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28 to FY 31-32	FY 32-33 & onwards
(i)	Non-Convertible Debentures issued on 30th Nov , 2015	335.00	165.00	170.00		-	-	-	-
(ii)	Non-Convertible Debentures issued on 09th Feb , 2017	500.00	100.00	100.00	100.00	100.00	100.00		
(iii)	Non-Convertible Debentures issued on 24th Dec , 2020	199.00	-	39.80	59.70	99.50	-	-	-
(iv)	Term Loan - Axis Bank	298.30	28.41	28.41	28.41	28.41	28.41	114.77	41.48
(v)	Term Loan - Union Bank of India	131.25	12.50	12.50	12.50	12.50	12.50	62.50	6.25
(vi)	Term Loan - Axis Bank (Refinancing)	201.06	19.15	19.15	19.15	19.15	19.15	95.74	9.57
Less: Impact of recognition of borrowings at amortised cost using EIR		4.82							
Total		1,659.79							

Terms of Repayment As at 31st March, 2021

₹ crore

Particulars		Amount Outstanding	Repayments						
			FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27 to FY 30-31	FY 31-32 & onwards
(i)	Non-Convertible Debentures issued on 30th Nov , 2015	500.00	165.00	165.00	170.00	0.00	-	-	-
(ii)	Non-Convertible Debentures issued on 09th Feb , 2017	500.00	-	100.00	100.00	100.00	100.00	100.00	-
(iii)	Non-Convertible Debentures issued on 24th Dec , 2020	199.00	-	-	39.80	59.70	99.50	-	-
(iv)	Term Loan - Axis Bank	252.50	11.48	22.95	22.95	22.95	22.95	114.77	34.43
(v)	Term Loan - Union Bank of India	97.50	4.43	8.86	8.86	8.86	8.86	44.32	13.30
(vi)	Term Loan - Axis Bank (Refinancing)	220.21	19.15	19.15	19.15	19.15	19.15	95.74	28.72
Less: Impact of recognition of borrowings at amortised cost using EIR		5.80							
Total		1,763.41							

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

20. Lease Liabilities

Accounting Policy

At inception of contract, the Company assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. At inception or on reassessment of a contract that contains a lease component, the Company allocates consideration in the contract to each lease component on the basis of their relative standalone

As a lessee

i) Lease liabilities

At the commencement date of the lease, the Company recognises lease liabilities measured at the present value of lease payments to be made over the lease term. In calculating the present value of lease payments, the Company generally uses its incremental borrowing rate at the lease commencement date if the discount rate implicit in the lease is not readily determinable.

After the commencement date , the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. The carrying amount is remeasured when there is a change in future lease payments arising from a change in index or rate. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset. The Company's lease liabilities are included in Interest-bearing loans and borrowings.

ii) Short term leases and leases of low value of assets

The Company applies the short-term lease recognition exemption to its short-term leases (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption that are considered to be low value. Lease payments on short-term leases and leases of low value assets are recognised as expense on a straight-line basis over the lease term.

Leasing arrangement as Lessee

The Company has lease contracts for various items of plant, machinery, land, vehicles and other equipment used in its operations. Leases of land generally have lease terms between 05 and 35 years. Expenses related to leases of low value asset has been charged to statement of profit and loss account as lease rent amounting ₹0.59 crores during the current year (31st March 2021 - ₹0.66 crores).

₹ crore

Amount recognised in the Statement of Profit and Loss	For the year ended 31st March, 2022	For the year ended 31st March, 2021
Depreciation of Right-of-use assets	5.09	4.92
Interest on lease liabilities	0.04	-
Expenses related to short term leases	0.59	0.66
Expenses related to leases of low value assets, excluding short term leases of low value assets	-	-
Variable lease payments not included in measurement of lease liabilities	-	-

Refer Note (8) for additions to Right-of-Use Assets and the carrying amount of Right-of-Use Assets as at 31st March, 2022. Further, Refer Note 39.3.3 for maturity analysis of lease liabilities.

₹ crore

Amount as per the Statement of Cash Flows	For the year ended 31st March, 2022	For the year ended 31st March, 2021
Total cash outflow of leases	-	-

	As at 31st March, 2022 ₹ crore	As at 31st March, 2021 ₹ crore
Non-current		
Lease Liabilities	3.24	-
Total	3.24	-
Current		
Lease Liabilities	-	-
Total	-	-

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
21. Other Financial Liabilities		
Non-current		
Payables towards Purchase of Property, Plant and Equipment	6.39	18.47
	6.39	18.47
Current		
(a) Interest accrued but not due on Borrowings	17.46	23.19
(b) Payables towards Purchase of Property,Plant and Equipment	38.70	68.00
(c) Security Deposits from Others	1.03	1.69
(d) Tender Deposits from Vendors	0.10	-
(e) Other Financial Liabilities	40.56	2.58
	97.85	95.46

22. Provisions

Accounting Policy

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of time value of money is material).
Present obligations arising under onerous contracts are recognised and measured as provisions with charge to statement of profit and loss. An onerous contract is considered to exist where the Company has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Defined contribution plans
Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

Defined benefits plans
The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liabilities and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the balance sheet with a corresponding debit or credit to retained earnings through other comprehensive income in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods. Past service costs are recognised in the statement of profit and loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Company recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liabilities or asset. The Company recognises the following changes in the net defined benefit obligation as an expense in the statement of profit and loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non routine settlements; and
- Net interest expense or income.

A liability for a termination benefit is recognised at the earlier of when the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs.

The cost of the defined benefit gratuity plan and other post-employment medical benefits and the present value of the gratuity obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases and mortality rates. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

The parameter most subject to change is the discount rate. In determining the appropriate discount rate for plans operated in India, the management considers the interest rates of government bonds. The mortality rate is based on publicly available mortality tables. Those mortality tables tend to change only at interval in response to demographic changes. Future salary increases and gratuity increases are based on expected future inflation rates.

Current and other non-current employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of current employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other non-current employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
22. Provisions (Continue)		
Non-Current		
Compensated Absences	4.93	5.15
Post-Employment Medical Benefits	0.98	0.91
Other Defined Benefit Plans	1.13	1.28
Other Employee Benefits	1.04	0.94
	8.08	8.28
Current		
Compensated Absences	0.31	0.20
Other Defined Benefit Plans	0.14	0.13
Other Employee Benefits	0.03	0.02
	0.48	0.35

Employee Benefit Plans

22.1 Defined Contribution plan

The Company makes Provident Fund and Superannuation Fund contributions to defined contribution retirement benefit plans for eligible employees. The provident fund plan is operated by the Regional Provident Fund Commissioner. The Superannuation fund is managed by LIC of India. Under the schemes, the Company is required to contribute a specified percentage of the payroll costs to fund the benefits. The only obligation of the Company with respect to the retirement benefit scheme is to make the specified contributions.

The Company has recognized ₹ 1.28 crores (31st March, 2021 ₹ 1.37 crores) for provident fund contributions and ₹ 0.37 crores (31st March, 2021 ₹ 0.45 crores) for superannuation contributions in the Statement of Profit and Loss. The contributions payable to these plans by the Company are at rates specified in the rules of the schemes.

22.2 Defined benefit plans

(i) Unfunded

Post-Employment Medical Benefits
The Company provides certain post-employment health care benefits to superannuated employees at some of its locations. In terms of the plan, the retired employees can avail free medical check-up and medicines at Company's facilities.

Pension
The Company operates a defined benefit pension plan for employees who have completed 15 years of continuous service. The plan provides benefits to members in the form of a pre-determined lumpsum payment on retirement. Executive Director, on retirement, is entitled to pension payable for life including HRA benefit. The level of benefit is approved by the Board of Directors of the Company from time to time.

Ex-Gratia Death Benefit

The Company has a defined benefit plan granting ex-gratia in case of death during service. The benefit consists of a pre-determined lumpsum amount along with a sum determined based on the last drawn basic salary per month and the length of service.

Retirement Gift
The Company has a defined benefit plan granting a pre-determined sum as retirement gift on superannuation of an employee.

(ii) Funded

Gratuity Plan
The Company has a defined benefit gratuity plan. The gratuity plan is primarily governed by the Payment of Gratuity Act, 1972. Employees who are in continuous service for a period of five years are eligible for gratuity. The level of benefits provided depends on the member's length of service and salary at the retirement, withdrawal, resignation or death of an employee. The gratuity plan is funded plan. The gratuity fund is managed by Aditya Birla Sun Life Insurance Company Limited. The fund has the form of a trust and is governed by Trustees appointed by the Company. The Trustees are responsible for the administration of the plan assets and for the definition of the investment strategy in accordance with the regulations. The funds are deployed in recognized insurer managed funds in India. The Company does not fully fund the liability and maintains a target level of funding to be maintained over a period of time based on estimates of expected gratuity payments.

The Plan assets include investments in G-Sec Bonds and accordingly exposed to financial risk.

B.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

(iii) Risks associated with Plan Provisions

Risks associated with the plan provisions are actuarial risks. These risks are: - (i) investment risk, (ii) interest risk (discount rate risk), (iii) mortality risk and (iv) salary risk.

Investment risk	The present value of the defined benefit plan liability is calculated using a discount rate determined by reference to Government Bonds Yield. If plan liability is funded and return on plan assets is below this rate, it will create a plan deficit.
Interest rate risk (discount rate risk)	A decrease in the bond interest rate (discount rate) will increase the plan liability; however , this will be partially offset by an increase in the return on the plan debt investments.
Mortality risk	The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after the employment. Indian Assured Lives Mortality (2006-08) ultimate table has been used in respect of the above. An increase in the life expectancy of the plan participants such as, an increase in the salary of the plan participants will increase the plan's liability.
Salary escalation risk	The present value of the defined benefit plan liability is calculated with the assumption of salary increase rate of plan participants in future. Deviation in the rate of increase of salary in future for plan participants from the rate of increase in salary used to determine the present value of obligation will have a bearing on the plan's liability.
Demographic risk	This is the risk of variability of results due to unsystematic nature of decrements that include mortality, withdrawal, disability and retirement. The effect of these decrements on the defined benefit obligations is not straight forward and depends upon the combination of salary increase, discount rate and vesting criterion.
Medical Inflation rate risk	Higher than expected increase in salary and medical cost will increase the defined benefit obligation.
Change in Leave Balances	This is the risk of variability of results due to a significant variation from expected accumulation of leave balances. All other aspects remaining same, higher than expected increase in the leave balances will increase the defined benefit obligation.

(iv) The principal assumptions used for the purposes of the actuarial valuations were as follows:

S. No.	Particulars	Refer note below	As at 31st March, 2022	As at 31st March, 2021
i.	Discount rate (p.a)	1	6.80%	6.60%
ii.	Salary escalation rate (p.a)	2		
	Management		7.00%	7.00%
	Non-Management		6.00%	5.00%
iii.	Retirement Age		60 years	60 years
iv.	Mortality Table		Indian Assured Lives Mortality (2006-08) Ult	Indian Assured Lives Mortality (2006-08) Ult
v.	Withdrawal Rate			
	Management: 21-44 years		6.00%	6.00%
	45 years and above		2.00%	2.00%
	Non-Management		0.50%	0.50%
vi.	Rate of Gold Inflation		8.00%	8.00%
vii.	Rate of Medical inflation (p.a)		8.00%	8.00%

Note:

1. The discount rate is based on the prevailing market yields of Indian Government securities as at the balance sheet date for the estimated term of obligations

2. The gratuity plan is funded

3. The estimates of future salary increases considered take into account the inflation, seniority, promotion and other relevant factors.





22.3 The amounts recognized in the financial statements and the movements in the net defined benefit obligations (DBO) over the year are as follows:

i. Amounts recognized in the Statement of Profit and Loss in respect of the funded defined benefits plans are as follows:

Particulars	For Year ended 31st March, 2022 ₹ crores	For Year ended 31st March, 2021 ₹ crores
Current service cost	1.04	1.16
Net interest on net defined liability / (asset)	(0.14)	(0.04)
Components of defined benefit costs recognized in profit or loss	**0.90**	**1.12**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March, 2022 ₹ crores	For Year ended 31st March, 2021 ₹ crores
Actuarial (gain)/Loss due to DBO Experience	0.20	(0.45)
Actuarial (gain)/Loss due to assumption changes	(0.24)	(0.12)
Actuarial (gain)/loss arising during period	(0.03)	(0.57)
Return on plan assets (greater)/less than discounting rate	0.40	0.04
Component of defined benefit costs recognized in Other Comprehensive Income	**0.37**	**(0.53)**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. The amount included in the Balance Sheet arising from the entity's obligation in respect of its defined benefits plans as follows:

Particulars	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Present value of funded defined benefit obligation	(12.59)	(11.72)
Fair value of plan assets	14.17	13.66
Funded status surplus/(deficit)	**1.57**	**1.94**

iv. Movement in the fair value of the defined benefit obligation:

Particulars	For Year ended 31st March, 2022 ₹ crores	For Year ended 31st March, 2021 ₹ crores
Opening defined benefit obligation	11.72	12.42
Current service cost	1.04	1.16
Interest cost on defined benefit obligation	0.76	0.80
Acquisitions (credit) / cost	(0.42)	(1.81)
Actuarial (gains) / loss arising from changes in experience	0.20	(0.45)
Actuarial (gains) / loss arising from changes in financial assumption	(0.24)	(0.12)
Benefits paid directly by the company	(0.47)	(0.28)
Closing defined benefit obligations	**12.59**	**11.72**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

v. Movement in the fair value of the plan assets are as follows:

Particulars	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Opening fair value of plan assets	13.66	12.87
Interest income on plan assets	0.90	0.84
Return on plan assets (greater)/less than discounting rate	(0.40)	(0.04)
Closing fair value of plan assets	**14.17**	**13.66**

Note:

1) The plan assets of the Company managed through a trust are managed by Birla Sun Life Insurance (BSLI) Company Limited. The details of investments relating to these assets are not shown by BSLI. Hence, the composition of each major category of plan assets, the percentage or amount that each major category constitutes to the fair value of the total plan assets has not been disclosed.

2) The Company expects to make a contribution of ₹ Nil (as at 31 March, 2021: ₹ Nil) to defined benefit plan during the next financial year.

vi. Sensitivity analysis

Significant actuarial assumptions for the determination of the defined benefit obligation are discount rate, expected salary increase and mortality. The sensitivity analysis below have been determined based on reasonably possible changes of the assumptions occurring at the end of the reporting period, while holding all other assumptions constant.

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

Particulars	31st March, 2022 ₹ Crores		31st March, 2021 ₹ Crores	
	Increase	Decrease	Increase	Decrease
Discount Rate (-/+0.5%)	(0.56)	0.60	(0.56)	0.61
Salary Growth Rate (+/-0.5%)	0.60	(0.56)	0.60	(0.56)
Withdrawal Rate (-/+ 5%)	(0.65)	-	(0.77)	-

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit liability recognized in the Balance sheet.

There was no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

vii. The expected maturity analysis of defined benefit obligation is as follows:

Time Period	31st March, 2022 ₹ Crores	31st March, 2021 ₹ Crores
Within 1 year	1.05	0.42
Between 1-2 years	0.58	0.48
Between 2-3 years	0.52	0.96
Between 3-4 years	1.90	1.15
Between 4-5 years	2.27	1.87
Beyond 5 years	8.28	8.05

Particulars	31st March, 2022	31st March, 2021
The weighted average duration of the defined benefit plan obligation represents average duration for active members	7.6 years	7.4 years

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

22.4 Other Defined benefit plans

The amounts recognized in the financial statements and the movements in the net defined benefit obligations over the year are as follows:

i. Amounts recognized in the Statement of Profit and Loss in respect of these defined benefits plans are as follows:

Particulars	For Year ended 31st March, 2022 ₹ crores	For Year ended 31st March, 2021 ₹ crores
Current service cost	0.64	0.80
Past Service Cost	-	-
Net interest expenses	0.55	0.57
Actuarial (Gain)/ Loss	0.22	0.11
Components of defined benefit costs recognized in profit or loss	**1.41**	**1.48**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March, 2022 ₹ crores	For Year ended 31st March, 2021 ₹ crores
Actuarial (gain)/Loss due to Defined Benefit Obligation Experience	0.01	(0.58)
Actuarial (gain)/Loss due to assumption Changes	(0.12)	(0.04)
Component of defined benefit costs recognized in Other Comprehensive Income	**(0.11)**	**(0.62)**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. Reconciliation of Net Balance Sheet Position

Particulars	For Year ended 31st March, 2022 ₹ crores	For Year ended 31st March, 2021 ₹ crores
Opening Net defined benefit asset/ (liability)	**(8.63)**	**(9.13)**
Current service cost	(0.64)	(0.80)
Net interest on net defined benefit liability/ (asset)	(0.55)	(0.57)
Amount recognized in OCI	0.33	0.62
Actuarial Gains/ (Losses)	(0.22)	(0.11)
Benefit paid directly by the Company	0.74	0.64
Acquisitions credit/ (cost)	0.32	0.71
Closing Net defined benefit asset/ (liability)	**(8.65)**	**(8.63)**

iv. Sensitivity analysis

Particulars	31st March, 2022 ₹ crores		31st March, 2021 ₹ crores	
	Increase	Decrease	Increase	Decrease
Discount Rate (-/+0.5%)	(0.48)	0.54	(0.50)	0.55
Salary Growth Rate (+/-0.5%)	0.31	(0.28)	0.33	(0.31)
Withdrawal Rate (-/+ 5%)	(1.96)	-	(1.91)	-
Gold Inflation Rate (+/- 5%)	0.07	(0.06)	0.07	(0.06)
Medical Inflation Rate (+/- 5%)	0.14	(0.12)	0.13	(0.11)
Mortality Rate (+/- 5%)	0.05	(0.04)	0.05	(0.05)

vi. The expected maturity analysis of defined benefit obligations

Time Period	31st March, 2022 ₹ crores	31st March, 2021 ₹ crores
Within 1 year	0.50	0.37
Between 1-2 years	0.51	0.40
Between 2-3 years	0.37	0.73
Between 3-4 years	0.75	0.54
Between 4-5 years	1.08	0.79
Beyond 5 years	4.07	4.16

Particulars	31st March, 2022	31st March, 2021
The weighted average duration of the Post Retirement Medical Benefit represents average duration for active members	17 years	17.20 years

23. Deferred Tax Assets / Liabilities (Net)

Accounting Policy

Deferred Tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

For operations carried out under tax holiday period (80IA benefits of Income Tax Act, 1961), deferred tax assets or liabilities, if any, have been established for the tax consequences of those temporary differences between the carrying values of assets and liabilities and their respective tax bases that reverse after the tax holiday ends.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss (either in other comprehensive income or in equity). Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the relevant entity intends to settle its current tax assets and liabilities on a net basis.

Deferred tax assets include Minimum Alternative Tax (MAT) paid in accordance with the tax laws in India, which is likely to give future economic benefits in the form of availability of set off against future income tax liability. Accordingly, MAT is recognised as deferred tax asset in the balance sheet when the asset can be measured reliably and it is probable that the future economic benefit associated with the asset will be realised. The Company reviews the "MAT credit entitlement" asset at each reporting date and writes down the asset to the extent that it is no longer probable that it will pay normal tax during the specified period.

In the situations where one or more units of the Company are entitled to a tax holiday under the tax law, no deferred tax (asset or liability) is recognized in respect of temporary differences which reverse during the tax holiday period, to the extent the concerned unit's gross total income is subject to the deduction during the tax holiday period. Deferred tax in respect of temporary differences which reverse after the tax holiday period is recognized in the year in which the temporary differences originate. However, the Company restricts recognition of deferred tax assets to the extent it is probable that sufficient future taxable income will be available against which such deferred tax assets can be realized. For recognition of deferred taxes, the temporary differences which originate first are considered to reverse first.

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

MAT Credit Entitlement

Minimum alternate tax (MAT) paid in a year is charged to the statement of profit and loss as current tax for the year. The deferred tax asset is recognised for MAT credit available only to the extent that it is probable that the Company will pay normal income tax during the specified period, i.e., the period for which MAT credit is allowed to be carried forward. In the year in which the Company recognizes MAT credit as an asset, it is created by way of credit to the statement of profit and loss and shown as part of deferred tax asset. The Company reviews the "MAT credit entitlement" asset at each reporting date.

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
Deferred Tax Liabilities (Net)	427.62	421.12
Less: MAT Credit entitlement	463.23	418.68
Deferred Tax Liabilities (Net)	-	2.44
Deferred Tax Assets (Net)	35.61	-

For Year ended 31st March, 2022 ₹ Crores

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive Income	Closing balance
MAT credit entitlement	418.68	44.55	-	463.23
Deferred Tax Liabilities (Net) in relation to:				
Property, plant and equipment	421.33	6.30	-	427.63
Borrowings	2.03	(0.34)	-	1.69
Investments	(0.35)	0.31	-	(0.04)
Provision for compensated absences	(1.89)	0.23	-	(1.66)
	421.12	6.50	-	427.62
Total	2.44	(38.05)	-	(35.61)

For Year ended 31st March, 2021 ₹ Crores

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive Income	Closing balance
MAT credit entitlement	369.39	49.29	-	418.68
Deferred Tax Liabilities (Net) in relation to:				
Property, plant and equipment	421.99	(0.66)	-	421.33
Borrowings	-	2.03	-	2.03
Investments	-	(0.35)	-	(0.35)
Provision for compensated absences	-	(1.89)	-	(1.89)
	421.99	(0.87)	-	421.12
Total	52.60	(50.16)	-	2.44

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

Note:

a. Deferred tax assets and liabilities are being offset as they relate to taxes on income levied by the same governing taxation laws.

b. The Company is entitled for availing the tax benefit under section 80IA of the Income-tax Act, 1961, with effect from the financial year 2016-17 for 10 years. Deferred tax liabilities as at 31 March, 2022, reflect the quantum of tax liabilities accrued upto the period end but payable after the expiry of the tax holiday period.

c. The Company has recognised MAT credit entitlement of ₹ 463.23 crores as at March 31, 2022 (as at March 31, 2021: ₹ 418.68 crores). Basis the existing tax laws and the projections of future profitability considering definitive Power purchase agreements which are completely tied up with the plant capacity, the management is confident of earning taxable profits each year and will be able to utilise the entire amount of MAT credit entitlement recognised in the financial Statement.

	As at 31st March, 2022 ₹ Crores	As at 31st March, 2021 ₹ Crores
24. Other Liabilities		
Non-current		
Consumers' Benefit Account	14.32	14.32
Payable to Beneficiaries (Net)	35.61	-
	49.93	**14.32**
Current		
Payable to Beneficiaries (Net)	185.92	227.48
Statutory Liabilities	7.57	4.49
Liability towards Corporate Social Responsibility	2.15	-
Other Liabilities	0.01	-
	195.65	**231.97**
25. Current Borrowings		
Secured - At Amortised Cost		
From Banks		
(a) Short term loan from Bank	-	15.00
(b) Current Maturities of Long-term Debt (Refer Note 19)	325.06	200.06
	325.06	**215.06**
	325.06	**215.06**

Note:

i. The Company has entered into 'Working Capital Facility Agreement' with State Bank of India, Axis Bank, Kotak Mahindra Bank and HDFC Bank for availing fund for managing working capital requirement.

ii Security offered to State Bank of India secured by way of first pari-passu charge on movable and immovable assets of the Company present and future, with other term loan and working capital lenders.

iii Kotak Mahindra Bank working capital facilities is secured by way of first hypothecation charge on all the existing and future current assets of the borrower on pari passu with other secured lenders of the borrower.

iv HDFC Bank working capital facilities is secured by way of pari passu charge on current assets along with other term loan and working capital lenders.

v Axis Bank working capital facilities is secured by way of pari passu charge on current assets along with other term loan and working capital lenders.

vi The quarterly returns or statements of current assets filed by the company with banks or financial institutions are in agreement with the books of accounts and there are no discrepancies.

26. Trade Payables

	As at 31st March, 2022 ₹ crore	As at 31st March, 2021 ₹ crore
Current		
Outstanding dues of micro enterprises and small enterprises	3.61	4.23
Outstanding dues of trade payables other than micro enterprises and small enterprises	190.10	120.75
Total	**193.71**	**124.98**

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

Trade Payables Ageing schedule as at 31st March , 2022 ₹ crore

Particulars	Outstanding for following periods from due date of payment #				Total
	Less than 1 Year	1-2 Years	2-3 years	More than 3 years	
(i) Undisputed Trade Payables					
a) MSME	3.48	0.13	-	-	3.61
b) Others	165.88	18.58	(3.29)	8.93	190.10

Where due date of payment is not available date of transaction has been considered

Trade Payables Ageing schedule as at 31st March , 2021 ₹ crore

Particulars	Outstanding for following periods from due date of payment #				Total
	Less than 6 Months	1-2 Years	2-3 years	More than 3 years	
(i) Undisputed Trade Payables					
a) MSME	4.17	0.06	0.01	-	4.23
b) Others	97.93	7.87	0.67	14.27	120.75

Where due date of payment is not available date of transaction has been considered

Note : There are no disputed Trade Payables.

		As at 31st March, 2022 ₹ crore	As at 31st March, 2021 ₹ crore
MSME Disclosure			
Micro and small enterprises under the Micro, Small and Medium Enterprises Development Act, 2006:			
The principal amount and the interest due thereon remaining unpaid to any supplier as at the end of each accounting year			
(a)	Principal amount remaining unpaid	3.61	4.23
(b)	Interest* due thereon	-	-
(c)	The amount of Interest* paid along with the amounts of the payment made to the supplier beyond the appointed day	-	-
(d)	The amount of Interest* due and payable for the year	-	-
(e)	The amount of Interest* accrued and remaining unpaid	-	-
(f)	The amount of further interest* due and payable even in the succeeding years, until such date when the interest* dues as above are actually paid	-	-
		3.61	4.23

* Amounts unpaid to Micro and Small Enterprises vendors on account of retention money have not been considered for the purpose of interest calculation.

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

27. Revenue from Operations
Accounting Policy

Revenue recognition
Revenue from contracts with customers is recognised when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.

Description of performance obligations are as follows :

Sale of Power - Generation (Thermal)
Revenue from sale of power is recognised net of cash discount over time for each unit of electricity delivered.

Contract price determined as per tariff regulations
The Company as per the prevalent tariff regulations is required to recover its Annual Revenue Requirement ('ARR') comprising of expenditure on account of fuel cost, operations and maintenance expenses, financing costs, taxes and assured return on regulator approved equity with additional incentive for operational efficiencies. Accordingly, rate per unit is determined using input method based on the Company's efforts to the satisfaction of a performance obligation to deliver power. As per tariff regulations, the Company determines ARR and any surplus/shortfall in recovery of the same is accounted as revenue.

Late Payment Surcharge
Late payment surcharge leviable as per the relevant contracts are recognised on actual realisation or accrued based on an assessment of certainty of realization supported by either an acknowledgement from customers or on receipt of favourable order from regulator / authorities.

No Late Payment Surcharge ('LPS') is charged for the initial 45 days from the date of receipt of invoice by customer. Thereafter, LPS is charged at the rate prescribed by the Power Purchase Agreement on the outstanding balance once the dues are received. Revenue in respect of late payment surcharge leviable as per the relevant contracts are recognised on actual realisation or accrued based on an assessment of certainty of realization supported by either an acknowledgement from customers or on receipt of favourable order from regulatory authorities.

Dividend and interest income

Dividend income from investments is recognized when the shareholder's right to receive payment has been established.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

		For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
27.	**Revenue from Operations (Continue)**		
(a)	Revenue from Power Supply	2,844.17	2,646.30
	Less: Cash Discount	(55.88)	(50.75)
		2,788.29	**2,595.55**
	Less: Income to be adjusted in future tariff determination (Net)	(5.95)	(92.28)
		2,782.34	**2,503.27**
(b)	Other Operating Revenue		
	Rental of Buildings	0.04	0.04
	Sale of Scrap	-	0.07
		0.04	**0.11**
		2,782.38	**2,503.38**

Note:-

The tariff to be charged from Long Term beneficiaries is determined by the Central Electricity Regulatory Commission (CERC) in accordance with the tariff regulations/norms notified by CERC. The tariff consists of two parts namely, capacity charge (for recovery of fixed cost based on plant availability) and energy charges (for recovery of fuel costs). The Company has received True-up order for the control period 2014-19 and also the Tariff order for the control period 2019-24, issued by Central Electricity Regulatory Commission on 8th January, 2022, the effect of which has been considered in these financial statements. Consequently, the company has recognised incremental revenue and charge for the control periods 2014-19 and 2019-24 respectively in accordance with these orders. Further, the tariff order for 2019-24 has considered a significant cost element divergent from the basis followed so far and also the true-up order for 2014-19, for which the company has filed review petition with the relevant appellate authority, and has recognised revenue as per the tariff order, on a conservative basis. Further adjustments could arise upon disposal of company's review petition.

		For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
28.	**Other Income**		
(a)	**Interest Income**		
	On Financial Assets held at Amortised Cost		
	Interest on Banks Deposits	1.96	0.09
	Interest on Inter - Corporate Deposit	11.99	5.86
	Other Interest	0.01	0.01
		13.96	**5.96**
(b)	**Gain on Investments**		
	Gain on sale/fair valuation of Current Investment measured at FVTPL	4.32	7.76
		4.32	**7.76**
(c)	**Other Non Operating Income**		
	Gain/(Loss) on Disposal of Property, Plant and Equipment (Net)	(0.07)	(0.01)
	Miscellaneous Income	4.07	3.44
		4.00	**3.43**
		22.28	**17.15**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

29. Employee Benefits Expenses

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Salaries and Wages	37.37	37.22
Contribution to Provident Fund	1.28	1.37
Contribution to Superannuation Fund	0.37	0.45
Retiring Gratuities	0.56	1.12
Leave Encashment Scheme	1.11	0.90
Pension Scheme	0.69	0.65
Staff Welfare Expenses	7.13	4.33
	48.51	**46.04**
Less:		
Employee Cost Capitalised	3.55	5.77
	3.55	**5.77**
	44.96	**40.27**

30. **Depreciation and Amortisation expenses:**

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Depreciation on Property, Plant & Equipment (Refer Note 5)	266.90	241.03
Depreciation on Right of use Assets (Refer Note 8)	5.09	4.92
Amortisation on Intangible Assets (Refer Note 7)	0.15	0.12
	272.14	**246.07**

31. **Finance Costs**

Accounting Policy

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Interest income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognized in statement of profit and loss in the period in which they are incurred.

(a) **Interest Expense:**

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Borrowings		
Interest on Debentures	87.03	84.03
Interest on Loans from banks	47.95	74.94
Others		
Other Interest and Commitment Charges	0.01	0.18
Interest on Lease Liability - At Amortised cost	0.04	-
	135.03	**159.15**
Less: Interest Capitalised	-	24.75
	135.03	**134.40**
(b) **Other Borrowing Cost:**		
Other Finance Costs	2.26	1.69
	2.26	**1.69**
	137.29	**136.09**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

32. Other Expenses

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Consumption of Stores, Oil, etc.	11.90	9.79
Rental of Land, Buildings etc.	3.49	0.20
Repairs and Maintenance -		
(i) To Buildings and Civil Works	4.22	4.53
(ii) To Machinery and Hydraulic Works	97.51	102.51
(iii) To Furniture, Vehicles, etc.	3.19	2.11
Water Charges & Others Taxes	21.58	18.12
Insurance	8.57	7.87
Other Operation Expenses	6.43	6.89
Ash Disposal Expenses	30.24	37.20
Transmission Charges	-	0.12
Travelling and Conveyance Expenses	1.35	2.08
Consultants' Fees	0.43	0.93
Auditor's Remuneration (Refer - i)	0.42	0.46
Cost of Services Procured	75.50	70.69
Security Expenses	9.19	8.35
Legal Charges	0.75	0.48
Corporate Social Responsibility Expenses (Refer - ii)	7.55	6.92
Miscellaneous Expenses	0.30	0.86
	282.62	**280.11**

(i) Payment to the Auditors

Audit Fee & Limited Review	0.38	0.34
Tax Audit Fees	0.02	0.02
Other Services (Certification Fees)	0.01	0.09
Reimbursement of Expenses	0.01	0.01
	0.42	**0.46**

(ii) Corporate Social Responsibility Expenses

(a) Amount required to be spent as per Sec 135 of the Companies Act 2013 :	7.55	6.92
(b) Amount spent during the year:		
i. Construction/acquisition of any asset	0.28	-
ii. On purposes other than (i) above	7.27	6.92
	7.55	**6.92**
(c) Details related to spent / unspent obligations:		
i. Contribution to Charitable Trust	3.17	6.52
ii. Unspent amount in relation to:		
-Ongoing project	2.15	-
-Other than ongoing project	-	-

(d) Details of ongoing project and other than ongoing project

Ongoing Project as per Sec 135(6) of the Companies Act 2013:

Opening Balance	
With Company	-
In Separate CSR Unspent A/c	-
Amount required to be spent during the year	3.51
Amount spent during the year	
From Company's bank A/c	1.36
In Separate CSR Unspent A/c	-
Closing Balance	
With Company	-
In Separate CSR Unspent A/c	2.15

Other than ongoing Project as per Sec 135(5) of the Companies Act 2013:

Opening Balance	-
Amount deposited in Specified Fund of Sch. VII within 6 months	-
Amount required to be spent during the year	4.04
Amount spent during the year	4.04
Closing Balance	-

S.K. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

33. Income taxes

Accounting Policy

Current Tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date in the countries where the Company operates and generates taxable income.

Current income tax relating to items recognised outside statement of profit and loss is recognised outside statement of profit and loss (either in other comprehensive income or in equity). Current tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

(i) Income tax recognised in profit and loss

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Current tax		
For the year	51.13	55.63
In respect of earlier years	(0.99)	-
Current Tax (Including adjustment of tax relating to earlier year)	**50.14**	**55.63**
Deferred tax	6.50	(0.87)
MAT Credit	(44.54)	(49.30)
Deferred Tax (Net)	**(38.04)**	**(50.17)**
Income tax expense reported in the Statement of Profit and Loss	**12.10**	**5.46**

(ii) Reconciliation of tax expense as per the effective rate of tax and India's statutory rate of tax

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Profit before tax	292.63	316.48
Applicable income tax rate	34.94%	34.94%
Income tax expense calculated at applicable rate	102.26	110.59
Temporary difference reversed during tax holiday period.	27.57	19.11
On account of 80IA benefits	(121.15)	(130.53)
Other Adjustments	3.42	6.29
Total income tax expense	**12.10**	**5.46**

1. The tax rate used for the financial years 2021-22 and 2020-21 reconciliations above is the corporate tax rate of 34.94% and 34.94% respectively payable by the corporate entities in India on taxable profits under the Indian tax law.
2. The Company has to pay taxes based on higher of income tax on profit of the Company or MAT @17.472% of book profit for the years 2021-22 and 2020-21 respectively.
3. The rate used for calculation of deferred tax is @34.94% for FY 2021-22 & for FY 2020-21 being statutory enacted rates at respective Balance Sheet Dates.

(iii) Income tax recognised in other comprehensive income

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Arising on income and expenses reclassified in other comprehensive income:		
Remeasurement of the defined benefit plan	(0.04)	1.14
Total income tax expense recognised in other comprehensive income	**(0.04)**	**1.14**
Bifurcation of the income tax recognised in other comprehensive income into:		
- Items that will not be reclassified to profit or loss	0.01	(0.20)
	0.01	**(0.20)**

34. **Commitments**

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Estimated amount of contracts remaining to be executed on capital account and not provided for	358.79	457.39
	358.79	**457.39**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

35. Contingent liabilities

(a) The Company has received a demand of ₹ 45.00 crores from the Office of Assistant Commissioner, Dhanbad under the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 contending that the Company has to pay 1% of the Project Cost (estimated to be ₹ 4500.00 crores) as cess.

As per legal advice obtained by the Company, the Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 is applicable on cost of construction and not on supply of equipment, accordingly the Company had deposited an amount of ₹ 1.26 crores as cess for cost of construction and raised the demand on the concerned contractor / vendor. Further, the Company is of the view that any such demand if payable will be borne by the contractor/vendors. Accordingly, no provision has been made in the books of account.

(b) Claims against the Company not acknowledged as debts for demands raised by the office of the Zonal Jt. Director General Trade for revocation of grant of deemed export benefits which has been disputed by the Company ₹ 36.41 crores (31 March, 2021 : ₹ 36.41 crores).

(c) The Code on Social Security 2020 has been notified in the Official Gazette on 29th September, 2020. The effective date from which the changes are applicable is yet to be notified and the rules are yet to be framed. Impact if any of the change will be assessed and accounted in the period in which said Code becomes effective and the rules framed thereunder are notified.

36. **Earnings per share (EPS)**

Accounting Policy

Basic earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares outstanding during the period. Diluted earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares considered for deriving basic earnings per equity share and also the weighted average number of equity shares that could have been issued upon conversion of all dilutive potential equity shares. The dilutive potential equity shares are adjusted for the proceeds receivable had the equity shares been actually issued at fair value (i.e. The average market value of the outstanding equity shares). Dilutive potential equity shares are deemed converted as of the beginning of the period, unless issued at a later date. Dilutive potential equity shares are determined independently for each period presented.

The number of equity shares and potentially dilutive equity shares are adjusted retrospectively for all periods presented for any share splits and bonus shares issues including for changes effected prior to the approval of the financial statements by the Board of Directors.

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Basic and diluted earnings per share (face value of ₹ 10/- each)	1.86	2.06
Basic and diluted earnings per share	**1.86**	**2.06**

The earnings and weighted average number of equity shares used in the calculation of basic and diluted earnings per share are as follows:

	For Year ended 31st March, 2022 ₹ Crores	For Year ended 31st March, 2021 ₹ Crores
Profit After Tax	280.53	311.02
The weighted average number of equity shares for Basic and Diluted EPS	1,50,89,17,729	1,50,89,17,729

Note:
There have been no other transactions involving Equity Shares or Potential Equity Shares between the Reporting date and the date of authorisation of these financial statements.

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

37. Related Party Transactions

a. List of related parties

i. **Controlling Entity (CE)**

The Tata Power Company Limited (TPCL) (Holding Company)

ii. **Entity exercising significant influence (SI)**

Damodar Valley Corporation (DVC)

iii. **Fellow Subsidiaries**
(With whom the Company has entered transaction during the reporting period)

Tata Power Trading Company Limited (TPTCL)
Tata Power Solar System Ltd (TPSSL)

iv. **Directors & Key Managerial Personnel**

Vijay Namjoshi (Chairman) (w.e.f 1st February 2020)
Krishnava Dutt (Director)
Ashok Sinha (Director)
Rita Sinha (Director)
Anandakumar Prabhakaran (Director) (w.e.f. 15th December 2020)
Ramesh Narayan (Director) (w.e.f. 8th February 2021)
Joydeep Mukherjee (Director) (w.e.f. 8th February 2021)
Mahesh Mishra (Director) (w.e.f. 23rd June 2020 upto 29th January 2021)
Amarjit Chopra (Director) (w.e.f. 31st March 2022)
Vijayant Ranjan (Chief Executive Officer) (w.e.f. 15th February 2022)
Ramesh Jha (Chief Executive Officer)(Till 14th February 2022)
Kajal Kumar Singh (Chief Financial Officer) (w.e.f. 15th January 2021)
Satish Kumar (Chief Financial Officer)(Till 31st December 2020)
Poonam Shirke (Company Secretary) (Till 31st October 2021)
Mona Purandare (Company Secretary) (w.e.f 1st November 2021)
Ramesh Subramanyam (Chairman) (Till 16th October 2020)
Anand Agarwal(Director) (Till 8th January 2021)
Suvamay Halder (Director) (Till 21st December 2020)

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

37. Related Party Transactions (Continue)

b. Transactions/balances outstanding with related parties

₹ Crores

i) Transactions for the period ended 31st March, 2022

Particulars	CE	SI	Fellow subsidiaries (FS)		Subtotal (FS)	KMP & Directors	Total
	TPCL	DVC	TPTCL	TPSSL			
Revenue from power supply	-	423.04	1,593.09	-	1,593.09	-	2,016.13
	-	(269.06)	(1,503.92)	-	(1,503.92)	-	(1,772.98)
Cash discount on power sales	-	-	-37.44	-	-37.44	-	-37.44
	-	-	(32.25)	-	(32.25)	-	(32.25)
Reimbursement of RRAS/SCED/Others Refund	-	-1.07	11.72	-	11.72	-	10.65
	-	(8.56)	(7.85)	-	(7.85)	-	(16.40)
Interest income on ICD	11.99	-	-	-	-	-	11.99
	(5.86)	-	-	-	-	-	(5.86)
Electricity Charges	-	0.38	-	-	-	-	0.38
	-	(0.45)	-	-	-	-	(0.45)
Water charges	-	21.49	-	-	-	-	21.49
		(17.74)			-	-	(17.74)
Rent and hire charges	-	3.44	-	-	-	-	3.44
	-	(0.19)	-	-	-	-	(0.19)
Cost of Services Procured	68.38	-	-	-	-	-	68.38
	(63.86)	-	-	-	-	-	(63.86)
ICD Given	800.00	-	-	-	-	-	800.00
	(475.00)	-	-	-	-	-	(475.00)
							-
ICD Repaid	550.00	-	-	-	-	-	550.00
	(275.00)	-	-	-	-	-	(275.00)
Reimbursement of expenses to the Company		0.12	0.54	-	0.54	-	0.66
		(0.10)	(0.38)	-	(0.38)	-	(0.48)
Reimbursement of expenses by the Company	2.36	-	-	-	-	-	2.36
	(2.08)	-	-	-	-	-	(2.08)
Service received related to CWIP	10.47	-	-	-	-	-	10.47
	(12.31)	-	-	-	-	-	(12.31)
Remuneration (includes sitting fees)	-	-	-	-	-	2.26	2.26
	-	-	-	-	-	(2.08)	(2.08)
Dividend Paid	-	-	-	-	-	-	-
	(133.20)	(46.80)	-	-	-	-	(180.00)

Figures in brackets stated pertain to the period ended 31st March, 2021.

ii) Balances outstanding as at 31st March, 2022

₹ Crores

Particulars	CE	SI	Fellow subsidiaries (FS)		Subtotal (FS)	KMP & Directors	Total
	TPCL	DVC	TPTCL	TPSSL			
Trade receivables							
As at 31st March, 2022	-	53.99	(36.19)	-	(36.19)	-	17.80
As at 31st March, 2021	-	(23.54)	(0.79)	-	(0.79)	-	(24.33)
Loans given (including interest thereon)							
As at 31st March, 2022	452.60	-	-	-	-	-	452.60
As at 31st March, 2021	(201.09)	-	-	-	-	-	(201.09)
Unbilled revenue							
As at 31st March, 2022	-	29.94	17.02	-	17.02	-	46.96
As at 31st March, 2021	-	(33.04)	(0.71)	-	(0.71)	-	(33.75)
Security deposits							
As at 31st March, 2022	-	0.28	-	-	-	-	0.28
As at 31st March, 2021	-	(0.28)	-	-	-	-	(0.28)
Trade payables							
As at 31st March, 2022	6.25	2.99	0.01	-	0.01	-	9.25
As at 31st March, 2021	(7.44)	(1.95)	(0.02)	(0.17)	(0.19)	-	(9.58)
Letter of credit (LC)							
As at 31st March, 2022	-	24.10	134.53	-	134.53	-	158.63
As at 31st March, 2021	-	(36.34)	(134.80)	-	(134.80)	-	(171.14)

Notes:

(i) Figures in brackets stated pertain to the year ended 31st March,2021.

(ii) Trade Receivable & Unbilled Revenue are secured to the extent of outstanding LC amount and remaining balance are unsecured.

(iii) All transactions with the related parties have been done at arms length.

(iv) Key Managerial Personnel are entitled to post-employment benefits and other long term employee benefits recognised as per Ind AS 19 - 'Employee Benefits' in the financial statements. As these employee benefits are lump sum amounts provided on the basis of actuarial valuation, the same is included above on payment basis.

S R Batliboi & Co. LLP Kolkata
MAITHON POWER LIMITED

38. Financial Ratios

Sl No	Ratios	Numerator	Denominator	As at 31st March, 2022	As at 31st March, 2021	% of Variance	Reason for Variance
a)	Current Ratio	Current Assets	Current Liabilities	1.20	1.03	16.59	
b)	Debt-equity ratio	Total Debt	Shareholders Equity	0.71	0.86	-17.80	
c)	Debt service coverage ratio	Earnings for debt service= Net Profit After Tax + Non-cash operating expenses	Debt Service = Interest & Lease Payments + Principal Repayments	2.02	0.74	174.91	Decrease in ratio due to higher repayment of loan during previous period
d)	Return on equity ratio	Net Profits after taxes - Interest on Perpetual securities	Average Shareholder's Equity	11.99	14.57	-17.75	
e)	Inventory turnover ratio	Average Inventories x number of days	Cost of goods sold	0.07	0.08	-14.96	
f)	Trade receivables turnover ratio	Average Trade Receivables	Net credit sales = Gross credit sales - sales return	32.13	16.35	96.59	Decrease in ratio due to Lower Debtors
g)	Trade payables turnover ratio	Average Trade Payables	Net credit purchase = Gross credit purchase - purchase return	12.87	8.47	51.94	Increase in ratio due to increase in Trade Payable
h)	Net capital turnover ratio	Net sales = Total sales - sales return	Working capital = Current assets - Current liabilities	17.32	139.59	-87.59	Decrease in ratio due to Increase in Current Assets.
i)	Net profit ratio	Net Profit	Net sales = Total sales - sales return	10.08	12.46	-19.10	
j)	Return on capital employed	Earning before interest and taxes	Capital Employed = Tangible Net worth + Total Debt + Deferred Tax Emploved	10.03	11.81	-15.06	
k)	Return on investment	Net Profit after taxes	Average Shareholders Equity	0.11	0.14	-20.24	

39. Financial Instruments

This section gives an overview of the significance of financial instruments for the company and provides additional information on balance sheet items that contain financial instruments. The details of significant accounting policies, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised in respect of each class of financial asset, financial liability and equity instrument are disclosed in the financial statements.

39.1 Financial assets and liabilities

The carrying value and fair value of financial instruments by categories as of 31st March, 2022 is as follows:

₹ Crores

Particulars	Fair Value through P&L	Fair Value through OCI	Amortised Cost	Total Carrying value	Total Fair Value
Assets					
Cash and Cash Equivalents	-	-	12.01	12.01	12.01
Trade Receivables	-	-	60.03	60.03	60.03
Investments	65.55	-	-	65.55	65.55
Unbilled Revenues	-	-	45.41	45.41	45.41
Loans	-	-	450.13	450.13	450.13
Other financial Assets	-	-	16.23	16.23	16.23
Total	**65.55**	**-**	**583.81**	**649.36**	**649.36**
Liabilities:					
Trade Payables	-	-	193.71	193.71	193.71
Fixed Rate Borrowings (Includes Current Maturities)	-	-	964.16	964.16	964.16
Floating Rate Borrowings (Includes Current Maturities)	-	-	695.63	695.63	695.63
Lease Liability	-	-	3.24	3.24	3.24
Other Financial Liabilities	-	-	104.24	104.24	104.24
Total	**-**	**-**	**1,960.97**	**1,960.97**	**1,960.97**

The carrying value and fair value of financial instruments by categories as of 31st March, 2021 is as follows:

Particulars	Fair Value through P&L	Fair Value through OCI	Amortised Cost	Total Carrying value	Total Fair Value
Assets					
Cash and Cash Equivalents	-	-	67.34	67.34	67.34
Trade Receivables	-	-	27.49	27.49	27.49
Investments	161.74	-	-	161.74	161.74
Unbilled Revenues	-	-	40.61	40.61	40.61
Loans	-	-	200.18	200.18	200.18
Other Financial Assets	-	-	1.59	1.59	1.59
Total	**161.74**	**-**	**337.21**	**498.95**	**498.95**
Liabilities:					
Trade Payables	-	-	124.98	124.98	124.98
Fixed Rate Borrowings (Includes Current Maturities)	-	-	712.74	712.74	712.74
Floating Rate Borrowings (Includes Current Maturities)	-	-	1,065.67	1,065.67	1,065.67
Other Financial Liabilities	-	-	113.93	113.93	113.93
Total	**-**	**-**	**2,017.32**	**2,017.32**	**2,017.32**

S R Batliboi & Co. LLP Kolkata
MAITHON POWER LIMITED

The management assessed that the fair value of cash and cash equivalents, other balances with bank, trade receivables, loans, unbilled revenues, trade payables, other financial assets and liabilities approximate their carrying amounts largely due to the short term maturities of these instruments.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties. The following methods and assumptions were used to estimate the fair values:

Fair value hierarchy

The fair value hierarchy is based on inputs to valuation techniques that are used to measure fair value that are either observable or unobservable and consists of the following three levels:

Quoted prices in an active market (Level 1): Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Valuation techniques with observable inputs (Level 2): Inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Valuation techniques with significant unobservable inputs (Level 3): Inputs are not based on observable market data (unobservable inputs). Fair values are determined in whole or in part using a valuation model based on assumptions that are neither supported by prices from observable current market transactions in the same instrument nor are they based on available market data.

The following table provides the fair value measurement hierarchy of the Company's assets and liabilities.

		Fair value hierarchy as at 31st March, 2022			
	Date of valuation	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
Investments carried at Fair Value through Profit and Loss (Unquoted Mutual Funds)	31st March, 2022	65.55	-	-	65.55
		65.55	**-**	**-**	**65.55**
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March, 2022	-	964.16	-	964.16
Floating rate borrowings	31st March, 2022	-	695.63	-	695.63
Total		**-**	**1,659.79**	**-**	**1,659.79**

		Fair value hierarchy as at 31st March, 2021			
	Date of valuation	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
Investments carried at Fair Value through Profit and Loss (Unquoted Mutual Funds)	31st March, 2021	161.74	-	-	161.74
		161.74	**-**	**-**	**161.74**
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March, 2021	-	712.74	-	712.74
Floating rate borrowings	31st March, 2021	-	1065.67	-	1,065.67
Total		**-**	**1,778.41**	**-**	**1,778.41**

There has been no transfer between level 1 and level 2 during the year.

39.2 Capital Management & Gearing Ratio

For the purpose of the Company's capital management, capital includes issued equity capital and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's capital management is to maximize the value for shareholders.

The Company manages its capital structure and makes adjustments in light of changes in economic conditions and the requirements of the financial covenants. From time to time, the Company reviews its policy related to dividend payment to shareholders, return capital to shareholders or fresh issue of shares. The Company monitors capital using gearing ratio, which is net debt divided by total capital plus net debt. The Company's policy is to keep the gearing ratio around 50%. The Company includes within net debt, interest bearing loans and borrowings, less cash and bank balances, excluding discontinued operations as detailed in the notes below.

The Company's capital management is intended to create value for shareholders by facilitating the meeting of its long-term and short-term goals. Its Capital structure consists of net debt (borrowings as detailed in notes below) and total equity.

Gearing ratio

The gearing ratio at the end of the reporting year was as follows:

	₹ crore	
	As at 31st March, 2022	As at 31st March, 2021
Debt (i)	1,659.79	1,778.41
Less: Cash and Bank balances	12.01	67.34
Net debt	**1,647.78**	**1,711.07**
Total Capital (ii)	2,480.89	2,200.39
Capital and net debt	**4,128.67**	**3,911.46**
Gearing ratio (%)	39.91	43.75

(i) Debt is defined as Non-current borrowings (including current maturities) and Current borrowings (excluding derivative, financial guarantee contracts and contingent considerations) and interest accrued on Non-current and Current borrowings.

(ii) Equity is defined as Equity share capital and other equity including reserves and surplus.

In order to achieve this overall objective, the Company's capital management, amongst other things, aims to ensure that it meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the bank to immediately call loans and borrowings. There have been no significant breaches in the financial covenants of any interest-bearing loans and borrowing in the current year.

No changes were made in the objectives, policies or processes for managing capital during the years ended 31st March, 2022 and 31st March, 2021.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

39. Financial Instruments

39.3 Financial risk management objectives and policies

The Company's principal financial liabilities, comprise borrowings, trade and other payables and other financial liabilities. The main purpose of these financial liabilities is to finance the Company's operations and to provide guarantees to support its operations. The Company's principal financial assets include investments, loans, trade and other receivables, cash and cash equivalents, other bank balances, unbilled receivables and other financial assets that derive directly from its operations.

The Company is exposed to market risk, credit risk and liquidity risk. The Company's senior management oversees the management of these risks. The Company's senior management is supported by a risk committee that reviews the financial risks and the appropriate financial risk governance framework for the Company. The Company's financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with the Company's policies and risk objectives. The risk management polices is approved by the board of directors, which is summarized below.

39.3.1 Market risk management

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risk: currency risk, interest rate risk and equity price risk. The impact of equity price risk and currency risk is not material. Financial instruments affected by market risk are loans and borrowings.

The sensitivity analysis in the following sections relate to the position as at 31st March, 2022 and 31st March, 2021.

a) Foreign currency risk management

(i) The year end foreign currency exposures of the Company is Nil (31 March, 2021: Nil).

(ii) The Company did not have any long term contract including derivative contract for which there were any material foreseeable losses.

b) Interest rate risk management

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to the risk of changes in market interest rates relates primarily to the company's long-term debt obligations with floating interest rates.

The Company manages its interest rate risk by having a balanced portfolio of fixed and variable rate loans and borrowings. The exposure of the Company's borrowings to interest rate changes at the end of the reporting period are as follows :

Particulars	31st March, 2022		31st March, 2021	
	Balance	Percentage	Balance	Percentage
Fixed Rate Borrowings (Includes Current Maturities)	964.16	58%	712.74	40%
Floating Rate Borrowings (Includes Current Maturities)	695.63	42%	1,065.67	60%
Total	1,659.79		1,778.41	

Interest rate sensitivity:

The sensitivity analysis below have been determined based on exposure to interest rates for term loans and debentures at the end of the reporting period and the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period in case of term loans and debentures that have floating rates.

If the interest rates had been 50 basis points higher or lower and all the other variables were held constant, the effect on Interest expense for the respective financial years and consequent effect on Company's profit in that financial year would have been as below:

Particulars	31st March, 2022		31st March, 2021	
	50 bps increase	50 bps decrease	50 bps increase	50 bps decrease
Interest expense on loan	(+) ₹ 3.48	(-) ₹ 3.48	(+) ₹ 5.33	(-) ₹ 5.33
Effect on profit before tax	(-) ₹ 3.48	(+) ₹ 3.48	(-) ₹ 5.33	(+) ₹ 5.33

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

39.3.2 Credit risk management

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (i.e. Primarily trade receivables and unbilled revenue) and from its financing activities including loans, foreign exchange transactions and other financial instruments.

Collateral held as security

The Company holds collateral i.e. letter of credit and bank guarantee to partly secure its outstanding trade receivables. Credit risk associated with receivables is mitigated because the receivables are partly secure.

₹ crore

	31st March, 2022	31st March, 2021
Trade Receivables	60.03	27.49
Loans	450.13	200.18
Other Financial Assets	16.23	1.59
Unbilled Revenue	45.41	40.61
Total	**571.80**	**269.87**

Refer Note 15 for credit risk and other information in respect of trade receivables. Other receivables as stated above are due from the parties under normal course of the business and as such the Company believes exposure to credit risk to be minimal.

39.3.3 Liquidity risk management

Liquidity risk is the risk that the company will encounter difficulty in meeting obligation, associated with financial liabilities that are settled by delivering cash or another financial asset.

The Company manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities. The Company has access to a sufficient variety of sources of funding. Having regards to the nature of the business wherein the Company is able to generate fixed cash flows over a period of time and to optimize the cost of funding, the Company, from time to time, funds its long -term investment from short-term sources. The short-term borrowings can be rollforward or, if required, can be refinanced from long term

	Up to 1 year	1 to 5 years	5+ years	Total	Carrying Amount
31st March, 2022					
Non-Derivatives					
Borrowings #	446.24	1,246.20	442.16	**2,134.60**	**1,677.25**
Trade Payables	193.71	-	-	**193.71**	**193.71**
Lease Liability	0.36	1.80	4.74	**6.90**	**3.24**
Other Financial Liabilities	79.92	6.39	-	**86.31**	**86.31**
Total Non-Derivative Liabilities	**720.23**	**1,254.39**	**446.90**	**2,421.51**	**1,960.51**
31st March, 2021					
Borrowings #	339.92	1,331.55	452.43	**2,123.90**	**1,801.60**
Trade Payables	124.98	-	-	**124.98**	**124.98**
Other Financial Liabilities	72.27	18.47	-	**90.74**	**90.74**
Total Non-Derivative Liabilities	**537.17**	**1,350.02**	**452.43**	**2,339.62**	**2,017.32**

The table has been drawn up based on the undiscounted contractual maturities of the financial liabilities including interest that will be paid on those liabilities upto the maturity of the instruments.

39.4 Commodity price risk

The operating activity of the company involves generation of power and therefore requires continuous supply of coal. The company has entered into fuel supply agreements with Central Coalfields Limited and Bharat Coking Coal Limited and any price fluctuation is passed on to the customers.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED

40. There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

41. **Segment Reporting**

The Company is mainly engaged in the business of generation and selling of power in India. Based on the information reported to the chief operating decision maker (CODM) for the purpose of resource allocation and assessment of performance, there are no reportable segments in accordance with the requirements of Indian Accounting Standard 108- 'Operating Segments', notified under the Companies (Indian Accounting Standards) Rules, 2015.

42. **Mega power status**

The Company had applied to the Ministry of Power, Government of India along with necessary documents for grant of Mega Power Status to the Company's 1050 MW Maithon Right Bank Thermal Power Plant. Pending receipt of the mega power certificate, the Company remains liable to pay excise and customs duty on its receipts of goods and materials wherever applicable. Accordingly, the Company had paid excise duty to its vendors and capitalised aggregating to ₹ 120.24 crores upto 31 March, 2022 (31 March, 2021: ₹ 120.24 crores).

43. **Significant Events after the Reporting Period**

There were no significant adjusting event that occurred subsequent to the reporting period.

44. **Other Statutory Information**

(i) The Company does not have any Benami property, where any proceeding has been initiated or pending against the Company for holding any Benami property.
(ii) The Company does not have any transactions with companies struck off.
(iii) The Company does not have any charges or satisfaction which is yet to be registered with ROC beyond the statutory period.
(iv) The Company has not traded or invested in Crypto currency or Virtual Currency during the financial year.
(v) The Company has not advanced or loaned or invested funds to any other person(s) or entity(ies), including foreign entities (Intermediaries) with the understanding that the Intermediary shall:
(a) directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the company (Ultimate Beneficiaries) or
(b) provide any guarantee, security or the like to or on behalf of the Ultimate Beneficiaries
(vi) The Company has not received any fund from any person(s) or entity(ies), including foreign entities (Funding Party) with the understanding (whether recorded in writing or otherwise) that the Company shall:
(a) directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party (Ultimate Beneficiaries) or
(b) provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries.

(vii) The Company has not any such transaction which is not recorded in the books of accounts that has been surrendered or disclosed as income during the year in the tax assessments under the Income Tax Act, 1961 (such as, search or survey or any other relevant provisions of the Income Tax Act, 1961.

45. Previous year's figures are regrouped / rearranged, where necessary, to confirm to the current year's presentation.

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Kamal Agarwal
Partner
Membership No: 058652
Place: Kolkata
Date: 19th April, 2022

For and on behalf of the Board,

Vijay Namjoshi
Chairman
Place: Mumbai
Date: 19th April, 2022

Joydeep Mukherjee
Director
Place: Kolkata
Date: 19th April, 2022

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 19th April, 2022

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 19th April, 2022

Mona Purandare
Company Secretary
Place: Mumbai
Date: 19th April, 2022

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata - 700 016, India
Tel : +91 33 6134 4000

INDEPENDENT AUDITOR'S REPORT

To the Members of Maithon Power Limited

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of Maithon Power Limited ("the Company"), which comprise the Balance sheet as at March 31, 2023, the Statement of Profit and Loss, including the statement of Other Comprehensive Income, the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required by the Companies Act, 2013, as amended ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2023, its profit/loss including other comprehensive income, its cash flows and the changes in equity for the year ended on that date.

Basis for Opinion

We conducted our audit of the financial statements in accordance with the Standards on Auditing (SAs), as specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of our report. We are independent of the Company in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the financial year ended March 31, 2023. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have determined the matters described below to be the key audit matters to be communicated in our report. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

Key audit matters	How our audit addressed the key audit matter
Accrual of Recoverable from Beneficiaries/Payable to Beneficiaries for items which are subject matter of true up in tariff orders *(as described in note 18 of the financial statements)*	
The Company's revenue recognition is guided by the tariff norms prescribed by	Following procedures have been performed to address this key audit matter:-

Key audit matters	How our audit addressed the key audit matter
the Central Electricity Regulatory Commission (CERC) guidelines and the tariff orders passed based on these regulations. Consequently, Recoverable from Beneficiaries/Payable to Beneficiaries is recognized for items which are subject matter of True-up in tariff orders to be notified in future years. Judgement is exercised by management in estimating recoverability / payability of such other assets and liabilities in the books of account. As on 31st March 2023, the Company is carrying an amount of Rs. 255.48 crores as Payable to Beneficiaries (Net of Recoverable from Beneficiaries of Rs. 31.53 crores) which is material to the financial statements of the Company. Considering judgements involved in estimates of various elements of capital and operational costs used in the computation of revenue as per applicable regulations, tariff order of prior year, expected true up in future tariff order and the amount involved we have determined this to be a key audit matter.	1. We have tested the design and operating effectiveness of key controls related to the estimation and realisability of such Recoverable from Beneficiaries/Payable to Beneficiaries. 2. We have evaluated the estimation by management of these Recoverable from Beneficiaries/Payable to Beneficiaries with reference to Tariff Regulations and the tariff orders of earlier years, on similar true up and underlying records of the Company. 3. We discussed with management to understand their assessment of each of the qualitative factors and ensured consistency of the management's explanation with the underlying documentation, rules and regulations. 4. We have re-calculated the workings obtained from the management to check the arithmetical accuracy of the calculations. 5. We have also checked the adequacy of the disclosure on these matters in the financial statements of the Company. 6. We have also obtained necessary management representations, as considered necessary.
Recoverability of MAT Credit Entitlement in future *(as described in note 17 of the financial statements)*	
The Company does not have normal taxable income owing to benefits of section 80IA of Income Tax Act, 1961 and therefore it has been paying Minimum Alternate Tax (MAT) under the relevant provisions of the Income Tax Act, 1961. The Act also provides that such MAT paid can be carried forward (MAT credit entitlement) for set off against regular tax payable in subsequent fifteen years period. Such MAT credit entitlements that may be utilized before the expiry of 15 years, are recognized when it is probable that future normal taxable profit will be available against which these MAT credits can be utilized. The Company's ability to recognize these MAT credit assets is assessed by management at the end of each reporting period, taking into account forecasts of future taxable profits and the law and jurisdiction of the land in force. The assumptions on these	Following procedures have been performed to address this key audit matter:- 1. We have tested the design and operating effectiveness of key controls related to the computation and recognition of such MAT credit. 2. We have assessed the methodology applied by the Company with current accounting standards and applicable taxation laws along with the future business forecast of taxable profits. 3. We have assessed the likelihood of the Company to utilize the available MAT credit entitlements in the future with underlying projections and assumptions relating to future estimated profits, future capitalization and depreciation allowance thereon and future estimates of taxable income. 4. We have tested the arithmetical accuracy of working prepared by management for determination of future taxable income against which MAT credit is expected to be realized.

Key audit matters	How our audit addressed the key audit matter
projections are determined by management. At March 31, 2023, MAT credit entitlement recognized in the Company's financial statements amounts to Rs. 513.05 crores. Given the degree of judgment involved in making a forecast of future taxable profit of the Company and the materiality of the amounts involved, we considered this to be a key audit matter.	5. We have also checked the adequacy of the disclosure on these matters in the financial statements of the Company. 6. We have also obtained necessary management representation.

Information Other than the Financial Statements and Auditor's Report Thereon

The Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Annual report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether such other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management for the Financial Statements

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation of these financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act read with [the Companies (Indian Accounting Standards) Rules, 2015, as amended. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those Board of Directors are also responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements for the financial year ended March 31, 2023 and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2020 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the "Annexure 1" a statement on the matters specified in paragraphs 3 and 4 of the Order.

2. As required by Section 143(3) of the Act, we report that:

   (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

   (b) In our opinion, proper books of account as required by law have been kept by the Company, in electronic mode on servers physically located in India so far as it appears from our examination of those books except that we were unable to verify the back up of books of accounts maintained in electronic mode for the period from August 05, 2022 to January 12, 2023, as necessary logs in respect of such period are not available with the company as stated in note 37 to the financial statements;

   (c) The Balance Sheet, the Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account;

   (d) In our opinion, the aforesaid financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;

   (e) On the basis of the written representations received from the directors as on March 31, 2023 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2023 from being appointed as a director in terms of Section 164 (2) of the Act;

   (f) With respect to the adequacy of the internal financial controls with reference to these financial statements and the operating effectiveness of such controls, refer to our separate Report in "Annexure 2" to this report;

   (g) In our opinion, the managerial remuneration for the year ended March 31, 2023 has been paid / provided by the Company to its directors in accordance with the provisions of section 197 read with Schedule V to the Act;

   (h) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended in our opinion and to the best of our information and according to the explanations given to us:

      i. The Company has disclosed the impact of pending litigations on its financial position in its financial statements – Refer Note 28 to the financial statements;

      ii. The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses;

      iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company

      iv. a) The management has represented that, to the best of its knowledge and belief, no funds have been advanced or loaned or invested (either from borrowed funds or share premium

or any other sources or kind of funds) by the Company to or in any other person or entity, including foreign entities ("Intermediaries"), with the understanding, whether recorded in writing or otherwise, that the Intermediary shall, whether, directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Company ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries;

b) The management has represented that, to the best of its knowledge and belief, no funds have been received by the Company from any person or entity, including foreign entities ("Funding Parties"), with the understanding, whether recorded in writing or otherwise, that the Company shall, whether, directly or indirectly, lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries; and

c) Based on such audit procedures performed that have been considered reasonable and appropriate in the circumstances, nothing has come to our notice that has caused us to believe that the representations under sub-clause (a) and (b) contain any material misstatement.

v. The final dividend paid by the Company during the year in respect of the same declared for the previous year is in accordance with section 123 of the Act to the extent it applies to payment of dividend.

The interim dividend declared and paid by the Company during the year and until the date of this audit report is in accordance with section 123 of the Act.

vi. As proviso to Rule 3(1) of the Companies (Accounts) Rules, 2014 is applicable for the Company only w.e.f. April 1, 2023, reporting under this clause is not applicable.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Bhaswar Sarkar
Partner
Membership Number: 055596

UDIN: 23055596BGYFRR7054

Place of Signature: Kolkata
Date: April 13, 2023

S.R. BATLIBOI & CO. LLP
Chartered Accountants

Annexure '1' referred to in paragraph under the heading "Report on other legal and regulatory requirements" of our report of even date

Re: Maithon Power Limited ("the Company")

In terms of the information and explanations sought by us and given by the company and the books of account and records examined by us in the normal course of audit and to the best of our knowledge and belief, we state that:

(i)(a)(A) The Company has maintained proper records showing full particulars, including quantitative details and situation of Property, Plant and Equipment.

(i)(a)(B) The Company has maintained proper records showing full particulars of intangibles assets.

(i)(b) The Company has verified part of its Property Plant and Equipment during the year in accordance with its regular programme of verification of these assets whereby all the assets are physically verified over a period of 3 years which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. No material discrepancies were noticed on such verification.

(i)(c) The title deeds of immovable properties (other than properties where the Company is the lessee and the valid lease agreements are duly executed in favour of the lessee) disclosed in note 5.8 to the financial statements included in Property, Plant and Equipment are held in the name of the Company, except the following:

Description of Property	Amount in INR crores	Held in the name of	Whether promoter, director or their relative or employee	Period held – indicate range, where appropriate	Reason for not being held in the name of Company
Raiyati Land (Free hold) located at Maithon, Jharkhand.	159.80	Damodar Valley Corporation (DVC)	Promoter	December 2008	In accordance with the term of agreement dated September 2, 2005 with DVC, the title deed of the land parcel were to be executed in favour of the Company by DVC. We have been informed that such title deeds are yet to be executed in favour of the Company pending mutation in favour of DVC by Government of Jharkhand.
Railway Land (Freehold Land) located at Maithon, Jharkhand.	137.12	DVC	Promoter	October 2008 to March 2015	
Forest land (Leasehold) located at Maithon, Jharkhand	11.54	Government of Jharkhand	Not applicable	May 2008	Lease deed yet to be executed in favour of the Company by the Government of Jharkhand.

GM land-Plant (Leasehold) located at Maithon, Jharkhand	18.59	Government of Jharkhand	Not applicable	July 2010	DVC had surrendered their leasehold rights over the land parcel in favour of the Government of Jharkhand in a prior year to enable the Government of Jharkhand to lease the same land parcel in favour of the Company. The Company is yet to receive a demand from the Government of Jharkhand for execution of lease and hence the lease deed in the name of the Company is yet to be executed.
GM land-Railway (Leasehold) located at Maithon, Jharkhand	5.56	Government of Jharkhand	Not applicable	July 2010	Lease deed yet to be executed in favour of the Company by the Government of Jharkhand.
GM land-Railway (Leasehold) located at Maithon, Jharkhand	5.40	Government of Jharkhand	Not applicable	July 2010	

(i)(d) The Company has not revalued its Property, Plant and Equipment (including Right of use assets) or intangible assets during the year.

(i)(e) As represented to us by the management, there are no proceedings initiated or are pending against the Company for holding any benami property under the Prohibition of Benami Property Transactions Act, 1988 and rules made thereunder.

(ii)(a) The management has conducted physical verification of inventory at reasonable intervals during the year and no material discrepancies were noticed on such physical verification. In our opinion the coverage and the procedure of such verification by the management is appropriate.

(ii)(b) As disclosed in note 19.1 to the financial statements, the Company has been sanctioned working capital limits in excess of Rs. five crores in aggregate from banks during the year on the basis of security of current assets of the Company. The quarterly returns/statements filed by the Company with such banks are in agreement with the books of account of the Company. The Company does not have any sanctioned working capital limits from financial institutions.

(iii)(a) During the year the Company has not provided advances in the nature of loans, stood guarantee or provided security to companies, firms, limited liability partnerships or any other parties other than as follows:

Particulars	Amount in INR crores
Aggregate amount granted/ provided during the year	
- Subsidiaries - Joint Ventures - Associates - Others	450.00
Balance outstanding as at balance sheet date in respect of above cases - Subsidiaries - Joint Ventures - Associates - Others	Nil

(iii)(b) During the year the Company has not provided guarantees and security and not granted advances in the nature of loans to companies, firms, Limited Liability Partnerships or any other parties. The investments made and the terms and conditions of the loans granted are not prejudicial to the Company's interest.

(iii)(c) The Company has not granted advances in the nature of loans to companies, firms, Limited Liability Partnerships or any other parties. The Company has granted loans during the year to a company where the schedule of repayment of principal and payment of interest has been stipulated and the repayment or receipts are regular.

(iii)(d) There are no amounts of loans and advances in the nature of loans granted to companies, firms, limited liability partnerships or any other parties which are overdue for more than ninety days.

(iii)(e) There were no loans or advance in the nature of loan granted to companies, firms, Limited Liability Partnerships or any other parties which was fallen due during the year, that have been renewed or extended or fresh loans granted to settle the overdues of existing loans given to the same parties.

(iii)(f) The Company has not granted any loans or advances in the nature of loans, either repayable on demand or without specifying any terms or period of repayment to companies, firms, Limited Liability Partnerships or any other parties. Therefore, the requirement to report on clause 3(iii)(f) of the Order is not applicable to the Company and hence not commented upon.

(iv) There are no loans, investments, guarantees, and security in respect of which provisions of sections 185 and 186 of the Companies Act, 2013 are applicable. Therefore, the requirement to report on clause 3(iv) of the Order is not applicable to the Company and hence not commented upon.

(v) The Company has neither accepted any deposits from the public nor accepted any amounts which are deemed to be deposits within the meaning of sections 73 to 76 of the Companies Act, 2013 and the rules made thereunder, to the extent applicable. Therefore, the requirement to report on clause 3(v) of the Order is not applicable to the Company and hence not commented upon.

(vi) We have broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section

148(1) of the Companies Act, 2013, related to the generation of electricity, and are of the opinion that, prima facie, the specified accounts and records have been made and maintained. We have not, however, made a detailed examination of the same.

(vii)(a) The Company is regular in depositing with appropriate authorities undisputed statutory dues including goods and services tax, provident fund, employees' state insurance, income-tax, cess and other statutory dues applicable to it. During the year, the Company did not have any undisputed dues towards sales-tax, service tax, duty of customs, duty of excise and value added tax. No undisputed amounts payable in respect of aforesaid dues were outstanding at the year-end for a period of more than six months from dates when they became payable.

(vii)(b) There are no dues of goods and services tax, provident fund, employees' state insurance, income tax, sales-tax, service tax, customs duty, excise duty, value added tax, cess and other applicable statutory dues which have not been deposited on account of any dispute.

(viii) As represented to us by the management, the Company has not surrendered or disclosed any transaction, previously unrecorded in the books of account, in the tax assessments under the Income Tax Act, 1961 as income during the year. Therefore, the requirement to report on clause 3(viii) of the Order is not applicable to the Company and hence not commented upon.

(ix)(a) The Company has not defaulted in repayment of loans or other borrowings or in the payment of interest thereon to any lender.

(ix)(b) As represented to us by the management, the Company has not been declared wilful defaulter by any bank or financial institution or government or any government authority.

(ix)(c) Based on an overall examination of the Balance Sheet and information, explanations and representations provided to us, term loans were applied for the purpose for which they were obtained.

(ix)(d) Based on an overall examination of the Balance Sheet and information, explanations and representations provided to us, no funds raised on short-term basis have been used for long-term purposes by the Company.

(ix)(e) and (f) The Company does not have any subsidiary, associate or joint venture. Therefore, the requirement to report on clause 3(ix)(e) and (f) of the Order are not applicable to the Company and hence not commented upon.

(x)(a) The Company has not raised any money during the year by way of initial public offer / further public offer (including debt instruments). Therefore, the requirement to report on clause 3(x)(a) of the Order is not applicable to the Company and hence not commented upon.

(x)(b) The Company has not made any preferential allotment or private placement of shares /fully or partially or optionally convertible debentures during the year under audit. Therefore, the requirement to report on clause 3(x)(b) of the Order is not applicable to the Company and hence not commented upon.

(xi)(a) As represented to us by the management, no material fraud by the Company or no material fraud on the Company has been noticed or reported during the year.

(xi)(b) During the year, no report under sub-section (12) of section 143 of the Companies Act, 2013 has been filed by cost auditor/ secretarial auditor or by us in Form ADT – 4 as prescribed under Rule 13 of Companies (Audit and Auditors) Rules, 2014 with the Central Government.

(xi)(c) As represented to us by the management, there are no whistle blower complaints received by the Company during the year.

(xii) The Company is not a nidhi Company as per the provisions of the Companies Act, 2013. Therefore, the requirement to report on clauses 3(xii)(a), (b) and (c) of the Order is not applicable to the Company and hence not commented upon.

(xiii) Transactions with the related parties are in compliance with sections 177 and 188 of Companies Act, 2013 where applicable and the details have been disclosed in the notes to the financial statements, as required by the applicable accounting standards.

(xiv)(a) The Company has an internal audit system commensurate with the size and nature of its business.

(xiv)(b) The internal audit reports of the Company for the year under audit which were issued till date of this audit report, have been considered by us.

(xv) The Company has not entered into any non-cash transactions with its directors or persons connected with its directors. Therefore, the requirement to report on clause 3(xv) of the Order is not applicable to the Company and hence not commented upon.

(xvi)(a) The provisions of section 45-IA of the Reserve Bank of India Act, 1934 (2 of 1934) are not applicable to the Company. The requirement to report on clause (xvi)(a) of the Order is not applicable to the Company and hence not commented upon.

(xvi)(b) As represented to us by management, the Company has not conducted any Non-Banking Financial or Housing Finance activities without obtained a valid Certificate of Registration (CoR) from the Reserve Bank of India as per the Reserve Bank of India Act, 1934.

(xvi)(c) The Company is not a Core Investment Company as defined in the regulations made by Reserve Bank of India. The requirement to report on clause 3(xvi) of the Order is not applicable to the Company and hence not commented upon.

(xvi)(d) As represented to us by the management, the Group has 6 Core Investment Companies as a part of the Group. However, we have not independently verified their existence.

(xvii) The Company has not incurred cash losses in the current financial year and in the immediately preceding financial year.

(xviii) There has been no resignation of the statutory auditors during the year. The requirement to report on Clause 3(xviii) of the Order is not applicable to the Company and hence not commented upon.

(xix) On the basis of the financial ratios disclosed in note 31 to the financial statements, ageing and expected dates of realization of financial assets and payment of financial liabilities, other information accompanying the financial statements, our knowledge of the Board of Directors and management plans and based on our examination of the evidence supporting the assumptions, nothing has come to our attention, which causes us to believe that any material uncertainty exists as on the date of the audit report that Company is not capable of meeting its liabilities existing at the date of balance sheet as and when they fall due within a period of one year from the balance sheet date. We, however, state that this is not an assurance as to the future viability of the Company. We further state that our reporting is based on the facts up to the date of the audit report and we neither give any guarantee nor any assurance that all liabilities falling due within a period of one year from the balance sheet date, will get discharged by the Company as and when they fall due.

(xx)(a) In respect of other than ongoing projects, there are no unspent amounts that are required to be transferred to a fund specified in Schedule VII of the Companies Act (the Act), in compliance with second proviso to sub section 5 of section 135 of the Act. This matter has been disclosed in note 25(ii) to the financial statements.

(xx)(b) The Company has not transferred the amount remaining unspent in respect of ongoing projects, to a Special Account, till the date of the report. However, the period for such transfer i.e., thirty days from the end of the financial year as permitted under sub section (6) of section 135 of the Companies Act, has not elapsed till the date of our report.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Bhaswar Sarkar
Partner
Membership Number: 055596

UDIN: 23055596BGYFRR7054

Place of Signature: Kolkata
Date: April 13, 2023

S.R. BATLIBOI & CO. LLP
Chartered Accountants

ANNEXURE TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE FINANCIAL STATEMENTS OF MAITHON POWER LIMITED

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls with reference to financial statements of Maithon Power Limited ("the Company") as of March 31, 2023 in conjunction with our audit of the financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's Management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India ("ICAI"). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditor's Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls with reference to these financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing, as specified under section 143(10) of the Act, to the extent applicable to an audit of internal financial controls, both issued by ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls with reference to these financial statements was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls with reference to these financial statements and their operating effectiveness. Our audit of internal financial controls with reference to financial statements included obtaining an understanding of internal financial controls with reference to these financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls with reference to these financial statements.

Meaning of Internal Financial Controls With Reference to these Financial Statements

A company's internal financial controls with reference to financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial controls with reference to financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in

accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls With Reference to Financial Statements

Because of the inherent limitations of internal financial controls with reference to financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls with reference to financial statements to future periods are subject to the risk that the internal financial control with reference to financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, adequate internal financial controls with reference to financial statements and such internal financial controls with reference to financial statements were operating effectively as at March 31, 2023, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note issued by the ICAI.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Bhaswar Sarkar
Partner
Membership Number: 055596

UDIN: 23055596BGYFRR7054

Place of Signature: Kolkata
Date: April 13, 2023

MAITHON POWER LIMITED
Balance Sheet as at 31st March, 2023

Particulars	Notes	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
Assets			
Non-current Assets			
(a) Property, Plant and Equipment	5.7	3,104.19	3,320.37
(b) Capital Work-in-Progress	6	395.28	206.86
(c) Intangible Assets	7	0.15	0.30
(d) Right of Use Assets	8	60.48	65.60
(e) Financial Assets			
(i) Loans	9.5	0.13	0.11
(ii) Other Financial Assets	9.6	18.57	13.49
(f) Deferred Tax Assets (Net)	17	67.36	35.61
(g) Non-current Tax Assets (Net)	10	14.01	14.09
(h) Other Non-current Assets	11	56.90	69.61
Total Non-current Assets		3,717.07	3,726.04
Current Assets			
(a) Inventories	12	258.61	212.72
(b) Financial Assets			
(i) Investments	9.1	4.00	65.55
(ii) Trade Receivables	9.2	134.50	60.03
(iii) Unbilled Revenue	9.3	47.07	45.41
(iv) Cash and Cash Equivalents	9.4	180.61	12.01
(v) Loans	9.5	0.02	450.02
(vi) Other Financial Assets	9.6	0.78	2.74
(c) Other Current Assets	11	130.40	126.99
Total Current Assets		755.99	975.47
Total Assets		**4,473.06**	**4,701.51**
Equity and Liabilities			
Equity			
(a) Equity Share Capital	13	1,508.92	1,508.92
(b) Other Equity	14	686.47	971.97
Total Equity		2,195.39	2,480.89
Liabilities			
Non-current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	15.1	1,199.01	1,334.73
(ii) Lease Liabilities	15.2	3.43	3.24
(iii) Other Financial Liabilities	15.3	73.40	6.39
(b) Provisions	16	8.66	8.08
(c) Other Non-current Liabilities	18	67.36	49.93
Total Non-current Liabilities		1,351.86	1,402.37
Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	19.1	416.17	382.15
(ii) Lease Liabilities	15.2	0.06	-
(iii) Trade Payables	19.2		
(a) Total outstanding dues of micro enterprises and small enterprises, and		21.42	3.61
(b) Total outstanding dues of creditors other than micro enterprises and small enterprises		222.41	138.51
(iv) Other Financial Liabilities	15.3	63.28	97.85
(b) Provisions	16	0.37	0.48
(c) Current Tax Liabilities (Net)	10	5.28	-
(d) Other Current Liabilities	18	196.82	195.65
Total Current Liabilities		925.81	818.25
Total Liabilities		2,277.67	2,220.62
Total Equity and Liabilities		**4,473.06**	**4,701.51**
See accompanying notes to the Financial Statements			

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: **301003E/E300005**

per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 13th April, 2023

For and on behalf of the Board,

Vijay Namjoshi
Chairman
DIN: 08626492
Place: Mumbai
Date: 13th April, 2023

Joydeep Mukherjee
Director
DIN: 08605394
Place: Kolkata
Date: 13th April, 2023

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 13th April, 2023

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 13th April, 2023

Mona Purandare
Company Secretary
Place: Mumbai
Date: 13th April, 2023

MAITHON POWER LIMITED

Statement of Profit and Loss for the year ended 31st March, 2023

	Notes	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
(I) Revenue from Operations	20	3,029.09	2780.20
(II) Other Income	21	49.67	22.28
(III) **Total Income**		**3,078.76**	**2,802.48**
(IV) **Expenses**			
Cost of Fuel Consumed		1,943.68	1,772.84
Employee Benefits Expense	22	48.45	44.96
Depreciation and Amortisation Expense	23	279.17	272.14
Finance Costs	24	119.48	137.29
Other Expenses	25	308.24	282.62
Total Expenses		**2,699.02**	**2,509.85**
(V) **Profit before Tax for the year**		**379.74**	**292.63**
(VI) **Tax Expense**			
Current Tax		**66.17**	**50.14**
Deferred Tax		(31.75)	(38.04)
Tax Expense	26	**34.42**	**12.10**
(VII) **Profit after Tax for the year**		**345.32**	**280.53**
(VIII) **Other Comprehensive Income**			
Add/(Less):			
(i) Items that will not be reclassified to profit and loss			
(a) Remeasurement of the Defined Benefit Plans		(1.00)	(0.04)
(ii) Tax relating to items that will not be reclassified to Profit & Loss			
(a) Current Tax		0.18	0.01
Total Other Comprehensive Income (Net of taxes)		**(0.82)**	**(0.03)**
(IX) **Total Comprehensive Income for the year**		**344.50**	**280.50**
(X) **Earnings Per Equity Share (Face Value ₹ 10/- Per Share)**	29		
Basic & Diluted (₹)		2.29	1.86

See accompanying notes to the Financial Statements

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: **301003E/E300005**

per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 13th April, 2023

For and on behalf of the Board,

Vijay Namjoshi
Chairman
DIN: 08626492
Place: Mumbai
Date: 13th April, 2023

Joydeep Mukherjee
Director
DIN: 08605394
Place: Kolkata
Date: 13th April, 2023

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 13th April, 2023

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 13th April, 2023

Mona Purandare
Company Secretary
Place: Mumbai
Date: 13th April, 2023

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED
Statement of Cash Flows for the year ended 31st March, 2023

Particulars	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
A. Cash Flow from Operating Activities		
Profit before Taxes for the year	379.74	292.63
Adjustments to reconcile profit before tax to net operating cash flows		
Depreciation and Amortisation Expenses	279.17	272.14
Finance Costs	119.48	137.29
Interest Income	(15.08)	(13.96)
(Gain) / Loss on disposal of Property, Plant and Equipment (Net)	3.95	0.07
Liabilities / provisions written back	(28.04)	-
Gain on sale/fair valuation of Current Investments measured at FVTPL	(3.56)	(4.32)
	355.92	391.22
Working Capital adjustments:		
Adjustments for (increase) / decrease in Assets:		
Trade Receivables	(60.75)	(29.90)
Unbilled Revenue	(1.66)	(4.79)
Inventories	(45.88)	(63.01)
Other Current Assets	(3.41)	(88.33)
Other Non-Current Assets	(3.93)	(15.85)
Other Non Current Financial Assets	(5.08)	(12.99)
	(120.71)	**(214.87)**
Adjustments for increase / (decrease) in Liabilities:		
Trade Payables	101.71	68.74
Other Non Current Liabilities	31.75	32.96
Other Current Liabilities	1.16	(36.31)
Other Current Financial liabilities	(40.28)	37.43
Other Non Current Financial liabilities	0.23	3.20
Current provisions	(1.12)	0.09
Non-Current provisions	0.58	(0.20)
	94.03	**105.91**
Cash Generated from Operations	**708.98**	**574.89**
Income taxes paid	(60.65)	(48.99)
Net Cash flow from Operating Activities	**648.33**	**525.90**
B. Cash Flow from Investing Activities		
Capital expenditure on Property, Plant and Equipment and Other Intangible assets (including capital advances)	(145.29)	(182.48)
Purchase of Current Investments	(1,575.45)	(2,147.74)
Proceeds from sale of Current Investments	1,640.57	2,248.25
Interest Received	17.04	12.32
Loan given	(450.03)	(800.00)
Loan repaid	900.00	550.04
Net Cash from/(used in) in Investing Activities	**386.84**	**(319.61)**
C. Cash Flow from Financing Activities		
Proceeds from Non Current Borrowings	235.58	100.00
Repayment of Non Current Borrowings	(325.06)	(204.62)
Proceeds from Current Borrowings	50.68	33.80
Repayment of Current Borrowings	(61.44)	(48.80)
Interest Paid	(136.33)	(142.00)
Dividend Paid	(630.00)	-
Net Cash from/(used in) Financing Activities	**(866.57)**	**(261.62)**
Net Increase/(Decrease) in Cash and Cash Equivalents	168.60	(55.33)
Cash and Cash Equivalents as at 1st April (Opening Balance)	12.01	67.34
Cash and Cash Equivalents as at 31st March (Closing Balance)	**180.61**	**12.01**

Cash and Cash Equivalents include:	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
(i) Balances with banks		
In Current Accounts	2.35	12.01
In Deposit Accounts (with original maturity less than three months)	178.26	-
	180.61	12.01

Notes:
The above cash flow has been prepared under the "Indirect Method" as set out in Indian Accounting Standard (Ind AS) 7 - Statement of Cash Flows.
See accompanying notes to the Financial Statements.

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 13th April, 2023

For and on behalf of the Board,

Vijay Namjoshi
Chairman
DIN: 08626492
Place: Mumbai
Date: 13th April, 2023

Joydeep Mukherjee
Director
DIN: 08605394
Place: Kolkata
Date: 13th April, 2023

MAITHON POWER LTD. MAITHON

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 13th April, 2023

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 13th April, 2023

Mona Purandare
Company Secretary
Place: Mumbai
Date: 13th April, 2023

MAITHON POWER LIMITED

Statement of Changes in Equity for the year ended 31st March, 2023

A. Equity Share Capital

Equity Shares of ₹ 10 each issued, subscribed and fully paid	No. of Shares	₹ Crores Amount
Balance as at 1st April, 2021	1,50,89,17,729	1,508.92
Balance as at 31st March, 2022	1,50,89,17,729	1,508.92
Balance as at 1st April, 2022	1,50,89,17,729	1,508.92
Balance as at 31st March, 2023	1,50,89,17,729	1,508.92

B. Other Equity

₹ Crores

	Debenture Redemption Reserve	Retained Earnings	Total
Balance as at 1st April, 2021	**129.05**	**562.42**	**691.47**
Profit for the year	-	280.53	**280.53**
Other Comprehensive Income for the year (Net of Tax)	-	(0.03)	**(0.03)**
Total Comprehensive Income	**-**	**280.50**	**280.50**
Balance as at 31st March, 2022	**129.05**	**842.92**	**971.97**
Balance as at 1st April, 2022	**129.05**	**842.92**	**971.97**
Profit for the period	-	345.32	**345.32**
Other Comprehensive Income for the period (Net of Tax)	-	(0.82)	**(0.82)**
Total Comprehensive Income	**-**	**344.50**	**344.50**
Dividend Paid	-	(630.00)	**(630.00)**
	-	**(630.00)**	**(630.00)**
Balance as at 31st March, 2023	**129.05**	**557.42**	**686.47**

See accompanying notes to the Financial Statements

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: **301003E/E300005**

per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 13th April, 2023

For and on behalf of the Board,

Vijay Namjoshi
Chairman
DIN: 08626492
Place: Mumbai
Date: 13th April, 2023

Joydeep Mukherjee
Director
DIN: 08605394
Place: Kolkata
Date: 13th April, 2023

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 13th April, 2023

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Place: Kolkata

Mona Purandare
Company Secretary
Place: Mumbai
Place: Kolkata

1. Corporate Information

MAITHON POWER LIMITED ('the Company'), has been set up pursuant to an agreement entered into between The Tata Power Company Limited (TPCL) and Damodar Valley Corporation (DVC) with 74% and 26% shareholding respectively, to operate and maintain Electric power generating stations. The Company has set up a thermal power generation plant (comprising of two units of 525 MW each namely 'Unit I and Unit II') at Maithon, Jharkhand with a total capacity of 1050 MW. Unit I and Unit II of the project were commissioned on 1 September, 2011 and 24 July, 2012 respectively. The registered office of the Company is Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400009, Maharashtra, India.

The financial statements have been approved for issue in accordance with a resolution of the directors on 13th April, 2023.

2. Significant Accounting Policies

2.1 Basis of preparation and presentation

The financial statements of the Company have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 (as amended from time to time) and presentation requirements of Division II of Schedule III to the Companies Act, 2013, (Ind AS compliant Schedule III).

The financial statements have been prepared on a historical cost basis except for certain financial assets and liabilities measured at fair value (refer accounting policy regarding financial instruments).

Accounting Policy are consistent with earlier years unless stated otherwise.

3. Other Significant Accounting Policies (Other than those mentioned in respective notes)

3.1 Foreign Currencies

The functional currency of the Company is Indian rupee (₹)

Income and expenses in foreign currencies are recorded at exchange rates prevailing on the date of the transaction. Foreign currency denominated monetary assets and liabilities are translated at the exchange rate prevailing on the balance sheet date and exchange gains and losses arising on settlement and restatement are recognized in the statement of profit and loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognised in OCI or profit or loss are also recognised in OCI or profit or loss, respectively).

Exchange differences on monetary items are recognized in profit or loss in the period in which they arise except for exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings.

3.2 Current versus non-current classification

The Company presents assets and liabilities in the balance sheet based on current/ non-current classification. An asset is treated as current when it is:

- Expected to be realised or intended to be sold or consumed in normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realised within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The Company has identified twelve months as its operating cycle.

3.3 Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities measured at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in statement of profit and loss.

MAITHON POWER LTD. MAITHON

3.4 Financial Assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace. Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), or fair value through profit or loss. The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them.

3.4.1 Financial assets at amortised cost

A 'financial asset' is measured at the amortised cost if both the following conditions are met:
a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. The EIR amortisation is included in finance income in the profit or loss.

3.4.2 Financial assets at fair value through other comprehensive income(FVTOCI)

A 'financial asset' is classified as at the FVTOCI if both of the following criteria are met:
a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset's contractual cash flows represent SPPI.

On initial recognition, the Company makes an irrevocable election on an instrument-by-instrument basis to present the subsequent changes in fair value in other comprehensive income pertaining to investments in equity instruments, other than equity instruments which are held for trading. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instruments through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on sale of the investments.

3.4.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Company irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading.
Other financial assets are measured at fair value through profit or loss unless it is measured at amortised cost or at fair value through other comprehensive income on initial recognition. The transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognized in statement of profit or loss.

3.4.4 Derecognition of Financial Assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the Company's balance sheet) when:

i) the right to receive cash flows from the asset have expired, or
ii) the Company has transferred its right to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its right to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Company continues to recognise the transferred asset to the extent of the Company's continuing involvement. In that case, the Company also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

3.4.5 Impairment of financial assets

The Company assesses at each date of balance sheet whether a financial asset or a group of financial assets is impaired. Ind AS 109 requires expected credit losses to be measured through a loss allowance. The Company recognises lifetime expected losses for all contract assets and / or all trade receivables that do not constitute a financing transaction. For all other financial assets, expected credit losses are measured at an amount equal to the 12 month expected credit losses or at an amount equal to the life time expected credit losses if the credit risk on the financial asset has increased significantly since initial recognition.

MAITHON POWER LTD. MAITHON

3.5 Financial Liabilities

All financial liabilities are recognised initially at fair value and in case of loans and borrowings and payables, net of directly attributable transaction cost.

For purposes of subsequent measurement, financial liabilities are classified in two categories:

a) Financial liabilities at fair value through profit or loss
b) Financial liabilities at amortised cost (loans and borrowings)

3.5.1 Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Gains or losses on liabilities held for trading are recognised in the profit or loss. The Company has not designated any financial liability as at fair value through profit or loss.

3.5.2 Financial liabilities at amortised cost (Loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process. The EIR amortisation is included as finance costs in the statement of profit and loss.

3.5.3 Derecognition of Financial Liabilities

A Financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified , such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability . The difference in the respective carrying amounts is recognised in the statement of profit and loss.

3.6 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

3.7 Dividend Distribution to equity shareholders of the Company

The Company recognises a liability to make dividend distributions to its equity holders when the distribution is authorised and the distribution is no longer at the discretion of the Company . As per the corporate laws in India, a distribution is authorised when it is approved by the shareholders. A corresponding amount is recognised directly in equity.

In case of Interim Dividend, the liability is recognised on its declaration by the Board of Directors.

3.8 Cash and cash equivalents

Cash and cash equivalents in the Balance Sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value. Cash and cash equivalents include balances with banks which are unrestricted for withdrawal and usage.

4. Critical accounting estimates and judgements

In the application of the Company's accounting policies, the management of the Company is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods. Detailed information about each of these estimates and judgements is included in relevant notes together with information about the basis of calculation for each affected line item in the financial statements.

The areas involving critical estimates or judgements are:

a) Estimation of current tax and deferred tax expense (including Minimum alternate tax credit) - Note 17 and Note 26
b) Recoverable from Beneficiaries / Payable to Beneficiaries(Net) - Note 18
c) Estimation of defined benefit obligations- Note 16

d) Judgement to estimate the amount of provision required or to determine required disclosure related to litigation and claims against the Company - Note 28.

Estimates and judgement are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the Company and that are believed to be reasonable under the circumstances.

MAITHON POWER LTD. MAITHON

5. Property, Plant and Equipment

5.1 Accounting Policy

Property, plant and equipment (PPE) is stated at cost less accumulated depreciation and accumulated impairment losses, if any. Cost includes purchase price (net of trade discount and rebates) and any directly attributable cost of bringing the asset to its working condition for its intended use and for qualifying assets, borrowing costs capitalised in accordance with Ind AS 23. Capital work in progress is stated at cost, net of accumulated impairment loss, if any. Other Indirect Expenses incurred relating to project, net of income earned during the project development stage prior to its intended use, are considered as pre-operative expenses and disclosed under Capital Work-in-Progress. When significant parts of plant and equipment are required to be replaced at intervals, the Company depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in the statement of profit and loss as incurred.

5.2 Subsequent Cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably. All other repair and maintenance costs are recognized in the statement of profit or loss as incurred.

5.3 Depreciation

Depreciation commences when the assets are ready for the intended use.

Depreciation on property, plant and equipment in respect of electricity business of the Company is covered under Part B of Schedule II of the Companies Act, 2013, has been provided on the straight line method at the rates using the methodology required by relevant provisions of Central Electricity Regulatory Commission.

Depreciation on all other assets is recognised on the cost of assets (other than freehold land) less their residual values over their estimated useful lives, using the straight-line method.

5.4 Useful lives of tangible assets:

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis. The Company, based on technical assessment made by technical expert and management estimate, depreciates certain items of building, plant and equipments over estimated useful lives which are different from the useful lifes prescribed in Schedule II to the Companies Act, 2013. The management believes that these estimated useful lives are realistic and reflect fair approximation of the period over which the assets are likely to be used.

Type of Asset	Useful Lives
Buildings-Plant	25 Years
Buildings-Others	25 Years
Plant and Equipment	25 Years
Computer	3 Years
Furniture and Fixtures	5 to 10 years
Office Equipment	5 to 10 years
Motor vehicles etc	5 Years
Railway Sidings & Overhead Electrification	25 Years

5.5 Derecognition of tangible assets

An item of Property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipments is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the statement of profit and loss.

5.6 Impairment of tangible and intangible assets

The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets of or Group of assets.

When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Impairment losses of tangible and intangible assets are recognised in the statement of profit and loss.

MAITHON POWER LTD. MAITHON

5. Property, Plant and Equipment (Continue)

5.7

₹ Crores

Description	Freehold Land	Buildings - Plant	Buildings - Others	Railway sidings	Plant and Equipment	Overhead Electrification	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation										
Balance as at 1st April, 2022	299.91	263.98	179.46	492.84	4,425.99	47.39	13.55	7.28	2.67	**5,733.07**
Additions	-	15.67	1.01	0.53	42.87	-	0.28	0.35	0.98	**61.69**
Disposals	-	-	-	-	(9.70)	-	-	(0.11)	(0.25)	**(10.06)**
Balance as at 31st March, 2023	**299.91**	**279.65**	**180.47**	**493.37**	**4,459.16**	**47.39**	**13.83**	**7.52**	**3.40**	**5,784.70**
Accumulated depreciation										
Balance as at 1st April, 2022	-	78.98	45.27	17.20	2,247.96	2.77	11.38	6.64	2.50	**2,412.70**
Depreciation Expense (Refer Note 23)	-	8.84	5.95	16.43	239.22	2.53	0.76	0.08	0.08	**273.89**
Disposal of assets	-	-	-	-	(5.73)	-	-	(0.11)	(0.24)	**(6.08)**
Balance as at 31st March, 2023		**87.82**	**51.22**	**33.63**	**2,481.45**	**5.30**	**12.14**	**6.61**	**2.34**	**2,680.51**
Net carrying amount										
As at 31st March, 2023	**299.91**	**191.83**	**129.25**	**459.74**	**1,977.71**	**42.09**	**1.69**	**0.91**	**1.06**	**3,104.19**
As at 31st March, 2022	**299.91**	**185.00**	**134.19**	**475.64**	**2,178.03**	**44.62**	**2.17**	**0.64**	**0.17**	**3,320.37**

₹ Crores

Description	Freehold Land	Buildings - Plant	Buildings - Others	Railway sidings	Plant and Equipment	Overhead Electrification	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation										
Balance as at 1st April, 2021	299.91	263.30	179.44	492.84	4,383.78	47.39	14.07	7.26	2.67	**5,690.66**
Additions	-	0.68	0.02	-	42.34	-	0.12	0.02	-	**43.18**
Disposals	-	-	-	-	(0.13)	-	(0.64)	-	-	**(0.77)**
Balance as at 31st March, 2022	**299.91**	**263.98**	**179.46**	**492.84**	**4,425.99**	**47.39**	**13.55**	**7.28**	**2.67**	**5,733.07**
Accumulated depreciation										
Balance as at 1st April, 2021	-	70.19	39.31	-	2,017.01	-	11.04	6.56	2.38	**2,146.49**
Depreciation Expense (Refer Note 23)	-	8.79	5.96	17.20	231.07	2.77	0.91	0.08	0.12	**266.90**
Disposal of assets	-	-	-	-	(0.12)	-	(0.57)	-	-	**(0.69)**
Balance as at 31st March, 2022	-	**78.98**	**45.27**	**17.20**	**2,247.96**	**2.77**	**11.38**	**6.64**	**2.50**	**2,412.70**
Net carrying amount										
As at 31st March, 2022	**299.91**	**185.00**	**134.19**	**475.64**	**2,178.03**	**44.62**	**2.17**	**0.64**	**0.17**	**3,320.37**
As at 31st March,2021	**299.91**	**193.11**	**140.13**	**492.84**	**2,366.77**	**47.39**	**3.03**	**0.70**	**0.29**	**3,544.17**

Note: The Company has elected to fair value its freehold land and use that fair value in its opening Ind AS Balance Sheet as at 1 April, 2015 as deemed cost. Accordingly, the freehold land is carried at fair value of ₹296.22 crores and carrying amount reported under previous GAAP was ₹ 172.71 crores. Accordingly an amount of ₹ 123.51 crores has been credited to retained earnings as at 1 April, 2015 (transition date).

MAITHON POWER LTD. MAITHON

5. Property, Plant and Equipment (Continue)

5.8 Immovable properties whose title deeds are not in the name of the Company

As on 31st March, 2023

₹ crore

Description	Relevant line item in the Balance Sheet	Carrying value	Title deeds held in the name of	Whether title deed holder is a promoter, director or relative of promoter / director or employee of promoter / director	Property held since which date	Reason for not being held in the name of the company
Raiyati Land (Free hold) located at Maithon, Jharkhand.	PPE	159.80	Damodar Valley Corporation	Promoters	December 2008	Refer Note (a)
Railway Land (Freehold Land) located at Maithon, Jharkhand.	PPE	137.12	Damodar Valley Corporation	Promoters	Oct 2008 to Mar 2015	Refer Note (b)
Forest land (Leasehold) located at Maithon, Jharkhand	Right of use Assets	11.54	GOJ*	Not Applicable	May 2008	Refer Note (c)
GM land - Plant (Leasehold) located at Maithon, Jharkhand	Right of use Assets	18.59	GOJ*	Not Applicable	July 2010	Refer Note (d)
GM land - Railway (Leasehold) located at Maithon, Jharkhand	Right of use Assets	10.97	GOJ*	Not Applicable	July 2010	Refer Note (e)

As on 31st March, 2022

₹ crore

Description	Relevant line item in the Balance Sheet	Carrying value	Title deeds held in the name of	Whether title deed holder is a promoter, director or relative of promoter / director or employee of promoter / director	Property held since which date	Reason for not being held in the name of the company
Raiyati Land (Free hold) located at Maithon, Jharkhand.	PPE	159.80	Damodar Valley Corporation	Promoters	December 2008	Refer Note (a)
Railway Land (Freehold Land) located at Maithon, Jharkhand.	PPE	137.12	Damodar Valley Corporation	Promoters	Oct 2008 to Mar 2015	Refer Note (b)
Forest land (Leasehold) located at Maithon, Jharkhand	Right of use Assets	12.40	GOJ*	Not Applicable	May 2008	Refer Note (c)
GM land - Plant (Leasehold) located at Maithon, Jharkhand	Right of use Assets	7.06	GOJ*	Not Applicable	July 2010	Refer Note (d)
GM land - Railway (Leasehold) located at Maithon, Jharkhand	Right of use Assets	5.91	GOJ*	Not Applicable	July 2010	Refer Note (e)

*Government of Jharkhand

(a) The Land was acquired by Damodar Valley Corporation (DVC) exclusively for the Maithon Right Bank Thermal Power Project (MRBTPP). As per the Shareholders Agreement, the title is to be transferred to the Company. Pending transfer of title as stated above, the Company had entered into an Indenture Deed with DVC on 5 December, 2008, which provided inter-alia, lease of private land for a period of 35 years (and extendable for another 35 years at the option of the Company) and provision to create security in favour of Lenders and transfer this land to the Company at the cost at which it was acquired subject to approval of the Government of the State of Jharkhand. Mutation of Land in the name of MRBTPP, DVC is completed for 471.20 acres as on 31.03.2023 (470.16 acres as on 31.03.2022) out of 564.67 acres.

(b) The Land was acquired by Damodar Valley Corporation (DVC) exclusively for the MRBTPP. As per the shareholders agreement, the title of these lands is to be transferred to the Company. DVC is in the process of transferring title of these lands in favour of the Company as per applicable laws of the State of Jharkhand. Mutation of Land in the name of MRBTPP, DVC is completed for 37.78 acres as on 31.03.2023 (Nil acres as on 31.03.2022) out of 66.74 acres.

(c) The Company has received demand for 191.67 acres of Jungle Jhar (Forest Land) from Government of Jharkhand and has made payment of requisite amount and is in process of execution of lease from Government of Jharkhand in the name of Company.

(d) The Land was acquired by Damodar Valley Corporation (DVC) exclusively for the MRBTPP. As per the shareholders agreement, the lease of these lands is to be transferred to the Company. Accordingly, DVC has surrender the land to facilitate the process of transferring lease of lands in favour of the Company as per applicable laws of the State of Jharkhand. The Company is yet to receive demand from Government of Jharkhand for payment and execution of lease in the name of Company. Refer note 8.1

(e) The Company has applied lease of the land and made partial payment to GoJ. Final Demand is yet to receive from Government of Jharkhand for balance payment and execution of lease in the name of Company.

(f) The expenditure in connection with private land including land compensation and rehabilitation and resettlement expenses has been capitalised as freehold land and the expenditure in connection with GM land and Forest land has been included in Right of Use Assets.

(g) Freehold land with a carrying amount of ₹299.91 crores (as at 31st March, 2022 ₹299.91 crores) has been mortgaged to secure borrowings of the Company (Refer Note 15.1 & 19.1).

MAITHON POWER LTD. MAITHON

6. Capital Work-in-Progress

Accounting Policy

Capital work in progress is stated at cost, net of accumulated impairment loss, if any.

CWIP ageing Schedule as at 31st March 2023

₹ crore

Capital Work in Progress	Amount in CWIP for a period of				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Projects in progress	205.89	124.51	61.70	3.18	395.28

CWIP ageing Schedule as at 31st March 2022

₹ crore

Capital Work in Progress	Amount in CWIP for a period of				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Projects in progress	125.73	62.40	2.85	15.88	206.86

Note:- There is no project whose completion is overdue or its cost has exceeded the original plan as at 31st March, 2023 as well as 31st March, 2022.

7. Intangible Assets

7.1 Accounting Policy

Intangible assets acquired separately

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses, If any.

7.2 Subsequent Cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably.

7.3 Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset is measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

7.4 Amortisation of intangible assets

Intangible assets with finite lives are amortised over the useful economic life on straight line basis and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life is reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

Estimated useful lives of the intangible assets are as follows:

Type of Asset	Useful Lives
Computer Software	5 years

₹ Crores

Description	Computer software	Total
Cost		
Balance as at 1st April, 2022	1.26	**1.26**
Additions	0.01	**0.01**
Balance as at 31st March, 2023	**1.27**	**1.27**
Accumulated amortisation		
Balance as at 1st April, 2022	0.96	**0.96**
Amortisation expense (Refer Note 23)	0.16	**0.16**
Balance as at 31st March, 2023	**1.12**	**1.12**
Net Book Value		
As at 31st March, 2023	**0.15**	**0.15**
As at 31st March, 2022	**0.30**	**0.30**

Description	Computer software	Total
Cost		
Balance as at 1st April, 2021	1.26	**1.26**
Additions	-	-
Balance as at 31st March, 2022	**1.26**	**1.26**
Accumulated amortisation		
Balance as at 1st April, 2021	0.81	**0.81**
Amortisation expense (Refer Note 23)	0.15	**0.15**
Balance as at 31st March, 2022	**0.96**	**0.96**
Net Book Value		
As at 31st March, 2022	**0.30**	**0.30**
As at 31st March,2021	**0.45**	**0.45**

MAITHON POWER LTD. MAITHON

8. Right - of - use - assets

The Company recognizes right-of-use assets at the date of commencement of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, lease payments made at or before the commencement date less any lease incentives received and estimate of costs to dismantle. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

- Land: 05 to 35 years

The right-of-use assets are also subject to impairment in accordance with Ind AS 36 "Impairment of assets". The Company presents right-of-use assets that do not meet the definition of investment property in 'Property, plant and equipment'.

₹ Crores

Description	ROU-Land	Total
Cost		
Balance as on 1st April, 2022	105.30	**105.30**
Additions	-	-
Balance as at 31st March, 2023	**105.30**	**105.30**
Accumulated depreciation		
Balance as on 1st April, 2022	39.70	**39.70**
Depreciation Expense (Refer Note 23)	5.12	**5.12**
Balance as at 31st March, 2023	**44.82**	**44.82**
Net carrying amount		
As at 31st March, 2023	**60.48**	**60.48**
As at 31st March, 2022	**65.60**	**65.60**

₹ Crores

Description	ROU-Land	Total
Cost		
Balance as at 1st April, 2021	102.05	**102.05**
Additions	3.25	**3.25**
Balance as at 31st March, 2022	**105.30**	**105.30**
Accumulated depreciation		
Balance as at 1st April, 2021	34.61	**34.61**
Depreciation Expense (Refer Note 23)	5.09	**5.09**
Balance as at 31st March, 2022	**39.70**	**39.70**
Net carrying amount		
As at 31st March, 2022	**65.60**	**65.60**
As at 1st April, 2021	**67.44**	**67.44**

8.1 In terms of the Shareholders' Agreement dated 2nd September 2005 between Damodar Valley Corporation (DVC) and The Tata Power Company Limited, DVC was to transfer its leasehold rights over certain land parcels measuring 114.95 acres to the Company. Unamortised consideration paid by the Company to DVC for such leasehold rights is ₹ 1.03 Cr as on March 31, 2023. Based on information received by the management during the quarter/year, DVC had surrendered its aforesaid leasehold rights in favour of the Government of Jharkhand (GoJ) in a prior year for grant of leasehold rights over those land parcels directly to the Company. Pending execution of revised lease deeds by GoJ in favour of the Company, the financial impact of such lease arrangement including lease premium and amortisation thereof based on the terms of the lease agreement to be entered into is not ascertainable at this stage and will be recognised as and when the revised lease deed is executed. Management does not expect that resultant impact, if any, will be material to these financial statements.

MAITHON POWER LTD. MAITHON

9. Financial Assets

9.1 Investments - Current

		As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
At Fair Value through Profit and Loss (FVTPL)			
Mutual Funds (Unquoted)			
i.	SBI Liquid Fund - Direct Plan - Growth Nil Units (31st March 2022: 60,015.389 Units)	-	20.00
ii.	IDFC Cash Fund - Direct Plan - Growth Nil Units (31st March 2022: 177,155.187 Units)	-	45.55
iii.	Mirae Liquid Fund - Direct Plan - Growth 8,419.848 Units Units (31st March 2022: Nil Units)	2.00	-
iv.	Bandhan Liquid Fund - Direct Plan - Growth (Erstwhile IDFC Cash Fund) 7,360.545 Units (31st March 2022: Nil Units)	2.00	-
		4.00	**65.55**
Notes:			
1. Aggregate Carrying Value of Unquoted Investments		4.00	65.55

9.2 Trade Receivables

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
Secured, Considered good	134.50	60.03
	134.50	**60.03**

The average credit period for the Company's receivable from sale of power is 45 to 60 days. As per the relevant provisions of the Central Electricity Regulatory Commission Regulations, penal interest @ 18% p.a. is claimable from the customers as Late payment Surcharge (LPS).

No Trade or Other receivable are due from directors or other officers of the company either severally or jointly with any other person. No Trade or Other receivable are due from firms or private companies respectively in which any director is a partner, a director or a member.

Trade Receivables Ageing schedule:

There is no outstanding balance of Trade Receivable which are due for payment as on 31st March, 2023 and as on 31st March, 2022, therefore ageing schedule has not been disclosed. Further the outstanding balance of trade receivables are undisputed as on year end.

9.3 Unbilled Revenue

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
Secured, Considered good	47.07	45.41
	47.07	**45.41**

MAITHON POWER LTD. MAITHON

9.4 Cash and cash equivalents

For the purpose of the statement of cash flows, cash and cash equivalents consist of cash at bank, cash/cheques on hand and short-term deposits, as defined above as they are considered an integral part of the Company's cash management.

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
(i) Balances with Banks:		
In Current Accounts	2.35	12.01
In Deposit Accounts (with original maturity less than three months)	178.26	-
Cash and Cash Equivalents as per Balance Sheet	**180.61**	**12.01**
Cash and Cash Equivalents as per Statement of Cash Flows	**180.61**	**12.01**

Reconciliation of liabilities from Financing Activities

₹ Crores

Particulars	As at 31st March, 2022	Cash flows		Non Cash Transactions	As at 31st March, 2023
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	1,659.79	235.58	(325.06)	(1.44)	1,568.87
Current Borrowings (excluding Bank Overdraft)	57.09	50.68	(61.44)	-	46.33
Total	**1,716.88**	**286.25**	**(386.50)**	**(1.44)**	**1,615.20**

₹ Crores

Particulars	As at 31st March, 2021	Cash flows		Non Cash Transactions	As at 31st March, 2022
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	1,763.41	100.00	(204.62)	1.00	1,659.79
Current Borrowings (excluding Bank Overdraft)	15.00	90.89	(48.80)	-	57.09
Total	**1,778.41**	**190.89**	**(253.42)**	**1.00**	**1,716.88**

Note - Figures in brackets represents Cash outflow.

9.5 Loans

(Unsecured and considered good unless otherwise stated)

Non-current		
Loans to Employees Including loans due by officers of the Company - ₹ 0.05 Crores (As at March 31, 2022 - ₹ 0.05 Crores)	0.13	0.11
	0.13	**0.11**
Current		
Loan to Related Party (Refer Note 30)	-	450.00
Loans to Employees Including loans due by officers of the Company - ₹ 0.00 Crores* (As at March 31, 2022 - ₹ 0.00 Crores)*	0.02	0.02
* Amount is lesser than the rounding off norms followed by the Company.	**0.02**	**450.02**

Note-There is no Loan or Advance in the nature of Loan given to specified persons without specific terms of period of repayment.

9.6 Other Financial Assets

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
(Unsecured and considered good unless otherwise stated)		
Non - Current		
Security Deposit		
With Related Parties (Refer Note 30)	0.28	0.28
With Others	0.28	0.20
With bank in deposit accounts*	18.01	13.01
* Includes deposit for Debt Service Reserve Account	**18.57**	**13.49**
Current		
Interest Accrued on Bank Deposits	0.78	0.14
Interest Accrued on loan to related party	-	2.60
	0.78	**2.74**

MAITHON POWER LTD. MAITHON

10. Tax Assets / Liabilities

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
Non-current tax assets		
Advance Income Tax (Net)	14.01	14.09
	14.01	**14.09**
Current tax liabilities		
Income Tax Payable (Net)	5.28	-
	5.28	**-**

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
11. Other Assets		
(Unsecured and considered good unless otherwise stated)		
Non-current		
Capital Advances	20.38	37.02
Claims Receivable from Suppliers	36.52	32.59
	56.90	**69.61**
Current		
Prepaid Expenses	3.20	7.27
Advances to Vendors	127.17	119.65
Other Advances	0.03	0.07
	130.40	**126.99**

12. Inventories

Inventories are stated at the lower of cost and net realisable value. Cost of inventory includes cost of purchase and other costs incurred in bringing the inventories to their present location and condition. Costs of inventories are determined on weighted average basis. Finished goods and work in progress: cost includes cost of direct materials and labour and a proportion of manufacturing overheads based on the normal operating capacity, but excluding borrowing costs. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale. Unserviceable/damaged stores and spares are identified and written down based on technical evaluation.

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
(a) Raw Materials		
Fuel (in transit of Rs.23.65 Cr. (31st March 2022: Rs. 3.71 Cr.))	200.33	157.12
(b) Stores and Spares		
Stores and Spare Parts	58.25	55.56
(c) Loose Tools	0.03	0.04
	258.61	**212.72**

Notes:-Refer Note 15.1 & 19.1 for Inventories pledged as security for borrowings.

MAITHON POWER LTD. MAITHON

13. Equity - Share Capital

	As at 31st March, 2023		As at 31st March, 2022	
	Number	₹ Crores	Number	₹ Crores
Authorised				
Equity Shares of ₹ 10/- each	2,00,00,00,000	2,000.00	2,00,00,00,000	2,000.00
		2,000.00		2,000.00
Issued, Subscribed and Paid-up Capital				
Equity shares of ₹ 10/- each fully paid up	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

(i) Reconciliation of the shares outstanding at the beginning and at the end of the reporting year

	As at 31st March, 2023		As at 31st March, 2022	
	Number	₹ Crores	Number	₹ Crores
Equity Shares				
At the beginning of the year and at the end of the year	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

Terms/rights attached to Equity Shares
The Company has issued only one class of Equity Shares having a par value of ₹ 10/- per share. Each holder of Equity Shares is entitled to one vote per share. The final dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting.

In the event of liquidation of the Company, the holders of Equity Shares will be entitled to receive remaining assets of the Company, after distribution of all preferential amounts. The distribution will be in proportion to the number of Equity Shares held by the shareholders.

(ii) Details of shareholders holding more than 5% shares in the Company and shares held by holding Company

	As at 31st March, 2023		As at 31st March, 2022	
	Number	% Holding	Number	% Holding
Equity Shares of ₹10/- each fully paid				
The Tata Power Company Limited (the holding company)	1,11,65,99,120	74%	1,11,65,99,120	74%
Damodar Valley Corporation	39,23,18,609	26%	39,23,18,609	26%

(ii) Shares held by promoters

	As at 31st March, 2023		As at 31st March, 2022		
	No. of shares	% of total shares	No. of shares	% of total shares	% change during the year
The Tata Power Company Limited (TPCL) (the holding company)	1,11,65,99,114	74%	1,11,65,99,114	74%	-
Others jointly held with with TPCL	6	0%	6	0%	-
Damodar Valley Corporation (DVC)	39,23,18,009	26%	39,23,18,009	26%	-
Others jointly held with with DVC	600	0%	600	0%	-

MAITHON POWER LTD. MAITHON

14. Other Equity	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
(i) Debenture Redemption Reserve (DRR)		
As at the beginning of the year	129.05	129.05
As at the end of the year	**129.05**	**129.05**
(ii) Retained Earnings		
As at the beginning of the year	842.92	562.42
Add: Remeasurement of Defined Benefit Obligation (Net of Tax)	(0.82)	(0.03)
Profit for the year	345.32	280.53
Less: Dividend Paid	630.00	-
Movement for the year	(285.50)	280.50
As at the end of the year	**557.42**	**842.92**
	686.47	**971.97**

Note:
The Company paid final dividend of ₹ 450 Crore for the financial year 2021-22 at ₹ 2.98 per share during the year and interim dividend of ₹180 Crore during the year.

Nature and purpose of reserves:

Debenture Redemption Reserve
The Company was required to create a Debenture Redemption Reserve out of the profits which are available for payment of dividend for the purpose of redemption of debentures. Pursuant to Companies (Share Capital and Debentures) Amendment Rules, 2019 dated 16th August, 2019, the Company is not required to create Debenture Redemption Reserve (DRR). Accordingly, the Company has not created DRR during the year and DRR created till previous years will be transferred to retained earnings on redemption of debentures.

Retained Earnings
Retained Earnings are the profits of the Company earned till date net of appropriations.

MAITHON POWER LTD. MAITHON

15. Financial Liabilities	As at 31st March, 2023 ₹ Crores		As at 31st March, 2022 ₹ Crores	
	Non-current	Current Maturities*	Non-current	Current Maturities*
15.1 Non-current Borrowings Secured (At amortised Cost)				
(i) Redeemable Non-Convertible Debentures (See Note I, II & III below)	456.14	309.80	765.09	265.00
(ii) Term Loans from Banks (See Note IV & V below)				
(a) Union Bank of India	118.76	12.51	131.26	12.51
(b) Axis Bank	390.98	47.55	438.38	47.55
(c) State Bank of India	233.13	-	-	
	742.87	60.06	569.64	60.06
* (Refer Note 19.1)	1,199.01	369.86	1,334.73	325.06

I. Redeemable Non-Convertible Debentures issued on 30th November 2015

(a) The Company has issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹10.00 lakhs each on 30 November, 2015, at par. The debentures have been issued for the part-refinancing of the outstanding term loan from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures are secured in favour of the debenture trustee by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land) of the issuer, both present and future.

(c) These debentures carry a floating rate which is base rate of HDFC Bank Limited plus 15 basis points. Interest is payable on the 30th of November each year.

II. Redeemable Non-Convertible Debentures issued on 9th February 2017

(a) The Company has issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹50.00 Lakhs on 9 February, 2017 at par respectively. The debentures have been issued for the part-refinancing of the outstanding term loan from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures have been secured by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land), all movable properties and assets, all the bank accounts, all current assets, all intangible assets, both present and future.
Assignment by way of security over letter of credit, performance bonds or guarantees provided by any person, all the rights, title, interest, benefits, claims and demands, whatsoever of the Issuer in each of the Project Documents, all Insurance Contracts/proceeds under Insurance Contracts, in relation to the Project of the issuer .
The above security will at all times, rank pari-passu inter se the Existing Lenders and the Debenture holders.

(c) These debentures carry a fixed rate of interest of 8% per annum. Interest is payable on the 9th of February each year.
The Company will have to take a prior written no-objection certificate from the debenture holders in the event it intends to create a security over the above secured properties in favour of its working capital lenders over and above ₹ 1000.00 crores.

III. Redeemable Non-Convertible Debentures issued on 24th December 2020

(a) The Company has issued ₹ 199.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹10.00 Lakhs each on 24th December, 2020 at par respectively. The debentures have been issued for the part-repayment of the existing term loan availed from SBI. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These Debentures have been secured by Security as mentioned in above para II-(b).

(c) These debentures carry a fixed coupon rate of 6.25% per annum. Interest is payable on 24th December each year.

IV. Term Loan from Axis Bank & Union Bank of India

(a) The Company has entered into a Loan Agreement of ₹ 500 Crore for Railway Infra with Axis Bank on 28th January, 2020. Axis bank has down sell borrowings of ₹ 150 Crs to Union Bank of India with same terms & condition on 6th January 2021.

(b) These loan have been secured by Security as mentioned in above para II-(b).

(c) Interest rate term loan is Axis bank 12 Month MCLR plus 25 basis points.

V. Term Loans from Axis Bank (Refinancing)

(a) The Company has entered into a Loan Agreement of ₹ 225 Crore with Axis Bank on 29th December, 2020 for the part-refinancing of the outstanding term loan from SBI.

(b) These loan have been secured by Security as mentioned in above para II-(b).

(c) Interest rate term loan is Axis Bank 12 month MCLR plus 5 basis points.

VI. Term Loans from State Bank of India

(a) The Company has entered into a Loan Agreement of ₹ 537 Crore with SBI on 9th July, 2021 for FGD Project.

(b) These loan have been secured by Security as mentioned in above para II-(b).

(c) Interest rate term loan is SBI 6 month MCLR plus 50 basis points.

VII Non Current borrowings secured against current assets

The quarterly returns or statements of current assets filed by the company with banks or financial institutions are in agreement with the books of accounts and there are no discrepancies.

MAITHON POWER LTD. MAITHON

Terms of Repayment As at 31st March, 2023

₹ crore

Particulars		Amount Outstanding	Repayments						
			FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29 to FY 32-33	FY 33-34 & onwards
(i)	Non-Convertible Debentures issued on 30th Nov , 2015	170.00	170.00						
(ii)	Non-Convertible Debentures issued on 09th Feb , 2017	400.00	100.00	100.00	100.00	100.00			
(iii)	Non-Convertible Debentures issued on 24th Dec , 2020	199.00	39.80	59.70	99.50				
(iv)	Term Loan - Axis Bank	269.89	28.41	28.41	28.41	28.41	28.41	127.84	
(v)	Term Loan - Union Bank of India	118.75	12.50	12.50	12.50	12.50	12.50	56.25	
(vi)	Term Loan - Axis Bank (Refinancing)	181.91	19.15	19.15	19.15	19.15	19.15	86.17	
(vii)	Term Loan - State Bank of India	235.57	-	3.25	16.23	25.91	25.91	129.57	34.70
Less: Impact of recognition of borrowings at amortised cost using EIR		6.26							
Total		1,568.87							

Terms of Repayment As at 31st March, 2022

₹ crore

Particulars		Amount Outstanding	Repayments						
			FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28 to FY 31-32	FY 32-33 & onwards
(i)	Non-Convertible Debentures issued on 30th Nov , 2015	335.00	165.00	170.00	0.00	-	-	-	-
(ii)	Non-Convertible Debentures issued on 09th Feb , 2017	500.00	100.00	100.00	100.00	100.00	100.00	-	-
(iii)	Non-Convertible Debentures issued on 24th Dec , 2020	199.00	-	39.80	59.70	99.50	-	-	-
(iv)	Term Loan - Axis Bank	298.30	28.41	28.41	28.41	28.41	28.41	114.77	41.48
(v)	Term Loan - Union Bank of India	131.25	12.50	12.50	12.50	12.50	12.50	62.50	6.25
(vi)	Term Loan - Axis Bank (Refinancing)	201.06	19.15	19.15	19.15	19.15	19.15	95.74	9.57
Less: Impact of recognition of borrowings at amortised cost using EIR		4.82							
Total		1,659.79							

MAITHON POWER LTD. MAITHON

15.2 Lease Liabilities

Accounting Policy

At inception of contract, the Company assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. At inception or on reassessment of a contract that contains a lease component, the Company allocates consideration in the contract to each lease component on the basis of their relative standalone price.

As a lessee

i) Lease liabilities

At the commencement date of the lease, the Company recognises lease liabilities measured at the present value of lease payments to be made over the lease term. In calculating the present value of lease payments, the Company generally uses its incremental borrowing rate at the lease commencement date if the discount rate implicit in the lease is not readily determinable.

After the commencement date , the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. The carrying amount is remeasured when there is a change in future lease payments arising from a change in index or rate. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

ii) Short term leases and leases of low value of assets

The Company applies the short-term lease recognition exemption to its short-term leases (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption that are considered to be low value. Lease payments on short-term leases and leases of low value assets are recognised as expense on a straight-line basis over the lease term.

Leasing arrangement as Lessee

The Company has lease contracts for various items of plant, machinery, land, vehicles and other equipment used in its operations. Leases of land generally have lease terms between 05 and 35 years. Expenses related to leases of low value asset has been charged to statement of profit and loss account as lease rent amounting ₹0.61 crores during the current year (31st March 2022 - ₹0.59 crores).

₹ crore

Amount recognised in the Statement of Profit and Loss	For the year ended 31st March, 2023	For the year ended 31st March, 2022
Depreciation of Right-of-use assets	5.12	5.09
Interest on lease liabilities	0.25	0.04
Expenses related to short term leases	0.61	0.59

Refer Note (8) for additions to Right-of-Use Assets and the carrying amount of Right-of-Use Assets as at 31st March, 2023. Further, Refer Note 32.3.3 for maturity analysis of lease liabilities.

	As at 31st March, 2023 ₹ crore	As at 31st March, 2022 ₹ crore
Non-current		
Lease Liabilities	3.43	3.24
Total	3.43	3.24
Current		
Lease Liabilities	0.06	-
Total	0.06	-

MAITHON POWER LTD. MAITHON

15.3 Other Financial Liabilities	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
Non-current		
(a) Security Deposits from Customers	0.23	-
(b) Payables towards Purchase of Property, Plant and Equipment	73.17	6.39
	73.40	**6.39**
Current		
(a) Interest accrued but not due on Borrowings	14.30	17.46
(b) Payables towards Purchase of Property, Plant and Equipment	47.56	38.70
(c) Security Deposits from Others	1.42	1.03
(d) Tender Deposits from Vendors	-	0.10
(e) Other Financial Liabilities	-	40.56
	63.28	**97.85**

16. Provisions

Accounting Policy

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of time value of money is material).
Present obligations arising under onerous contracts are recognised and measured as provisions with charge to statement of profit and loss. An onerous contract is considered to exist where the Company has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Defined contribution plans
Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

Defined benefits plans

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liabilities and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the balance sheet with a corresponding debit or credit to retained earnings through other comprehensive income in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognised in the statement of profit and loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Company recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liabilities or asset. The Company recognises the following changes in the net defined benefit obligation as an expense in the statement of profit and loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non routine settlements; and
- Net interest expense or income.

A liability for a termination benefit is recognised at the earlier of when the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs.

The cost of the defined benefit gratuity plan and other post-employment medical benefits and the present value of the gratuity obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases and mortality rates. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

The parameter most subject to change is the discount rate. In determining the appropriate discount rate for plans operated in India, the management considers the interest rates of government bonds. The mortality rate is based on publicly available mortality tables. Those mortality tables tend to change only at interval in response to demographic changes. Future salary increases and gratuity increases are based on expected future inflation rates.

Current and other non-current employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of current employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other non-current employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date.

MAITHON POWER LTD. MAITHON

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
16. Provisions (Continue)		
Non-Current		
Compensated Absences	5.06	4.93
Gratuity (Net)	0.34	-
Post-Employment Medical Benefits	0.94	0.98
Other Defined Benefit Plans	1.22	1.13
Other Employee Benefits	1.10	1.04
	8.66	**8.08**
Current		
Compensated Absences	0.20	0.31
Other Defined Benefit Plans	0.14	0.14
Other Employee Benefits	0.03	0.03
	0.37	**0.48**

Employee Benefit Plans

16.1 Defined Contribution plan

The Company makes Provident Fund and Superannuation Fund contributions to defined contribution retirement benefit plans for eligible employees. The provident fund plan is operated by the Regional Provident Fund Commissioner. The Superannuation fund is managed by LIC of India. Under the schemes, the Company is required to contribute a specified percentage of the payroll costs to fund the benefits. The only obligation of the Company with respect to the retirement benefit scheme is to make the specified contributions.

The Company has recognized ₹ 1.35 crores (31st March, 2022 ₹ 1.28 crores) for provident fund contributions and ₹ 0.42 crores (31st March, 2022 ₹ 0.37 crores) for superannuation contributions in the Statement of Profit and Loss. The contributions payable to these plans by the Company are at rates specified in the rules of the schemes.

16.2 Defined benefit plans

(i) Unfunded

Post-Employment Medical Benefits
The Company provides certain post-employment health care benefits to superannuated employees at some of its locations. In terms of the plan, the retired employees can avail free medical check-up and medicines at Company's facilities.

Pension
The Company operates a defined benefit pension plan for employees who have completed 15 years of continuous service. The plan provides benefits to members in the form of a pre-determined lumpsum payment on retirement. Executive Director, on retirement, is entitled to pension payable for life including HRA benefit. The level of benefit is approved by the Board of Directors of the Company from time to time.

Ex-Gratia Death Benefit

The Company has a defined benefit plan granting ex-gratia in case of death during service. The benefit consists of a pre-determined lumpsum amount along with a sum determined based on the last drawn basic salary per month and the length of service.

Retirement Gift
The Company has a defined benefit plan granting a pre-determined sum as retirement gift on superannuation of an employee.

(ii) Funded

Gratuity Plan
The Company has a defined benefit gratuity plan. The gratuity plan is primarily governed by the Payment of Gratuity Act, 1972. Employees who are in continuous service for a period of five years are eligible for gratuity. The level of benefits provided depends on the member's length of service and salary at the retirement, withdrawal, resignation or death of an employee. The gratuity plan is funded plan. The gratuity fund is managed by Aditya Birla Sun Life Insurance Company Limited. The fund has the form of a trust and is governed by Trustees appointed by the Company. The Trustees are responsible for the administration of the plan assets and for the definition of the investment strategy in accordance with the regulations. The funds are deployed in recognized insurer managed funds in India. The Company does not fully fund the liability and maintains a target level of funding to be maintained over a period of time based on estimates of expected gratuity payments.

The Plan assets include investments in G-Sec Bonds and accordingly exposed to financial risk.

MAITHON POWER LTD. MAITHON

(iii) **Risks associated with Plan Provisions**

Risks associated with the plan provisions are actuarial risks. These risks are: - (i) investment risk, (ii) interest risk (discount rate risk), (iii) mortality risk and (iv) salary risk.

Investment risk	The present value of the defined benefit plan liability is calculated using a discount rate determined by reference to Government Bonds Yield. If plan liability is funded and return on plan assets is below this rate, it will create a plan deficit.
Interest rate risk (discount rate risk)	A decrease in the bond interest rate (discount rate) will increase the plan liability; however , this will be partially offset by an increase in the return on the plan debt investments.
Mortality risk	The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after the employment. Indian Assured Lives Mortality (2006-08) ultimate table has been used in respect of the above. An increase in the life expectancy of the plan participants such as, an increase in the salary of the plan participants will increase the plan's liability.
Salary escalation risk	The present value of the defined benefit plan liability is calculated with the assumption of salary increase rate of plan participants in future. Deviation in the rate of increase of salary in future for plan participants from the rate of increase in salary used to determine the present value of obligation will have a bearing on the plan's liability.
Demographic risk	This is the risk of variability of results due to unsystematic nature of decrements that include mortality, withdrawal, disability and retirement. The effect of these decrements on the defined benefit obligations is not straight forward and depends upon the combination of salary increase, discount rate and vesting criterion.
Medical Inflation rate risk	Higher than expected increase in salary and medical cost will increase the defined benefit obligation.
Change in Leave Balances	This is the risk of variability of results due to a significant variation from expected accumulation of leave balances. All other aspects remaining same, higher than expected increase in the leave balances will increase the defined benefit obligation.

(iv) The principal assumptions used for the purposes of the actuarial valuations were as follows:

S. No.	Particulars	Refer note below	As at 31st March, 2023	As at 31st March, 2022
i.	Discount rate (p.a)	1	7.30%	6.80%
ii.	Salary escalation rate (p.a)	2		
	Management		7.00%	7.00%
	Non-Management		6.00%	6.00%
iii.	Retirement Age		60 years	60 years
iv.	Mortality Table		Indian Assured Lives Mortality (2006-08) Ult	Indian Assured Lives Mortality (2006-08) Ult
v.	Withdrawal Rate			
	Management: 21-44 years		6.00%	6.00%
	45 years and above		2.00%	2.00%
	Non-Management		0.50%	0.50%
vi.	Rate of Gold Inflation		8.00%	8.00%
vii.	Rate of Medical inflation (p.a)		8.00%	8.00%

Note:

1. The discount rate is based on the prevailing market yields of Indian Government securities as at the balance sheet date for the estimated term of obligations
2. The gratuity plan is funded
3. The estimates of future salary increases considered take into account the inflation, seniority, promotion and other relevant factors.

MAITHON POWER LTD. MAITHON

16.3 The amounts recognized in the financial statements and the movements in the net defined benefit obligations (DBO) over the year are as follows:

i. Amounts recognized in the Statement of Profit and Loss in respect of the funded defined benefits plans are as follows:

Particulars	For Year ended 31st March, 2023 ₹ crores	For Year ended 31st March, 2022 ₹ crores
Current service cost	0.97	1.04
Net interest on net defined liability / (asset)	(0.13)	(0.14)
Components of defined benefit costs recognized in profit or loss	**0.84**	**0.90**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March, 2023 ₹ crores	For Year ended 31st March, 2022 ₹ crores
Actuarial (gain)/Loss due to DBO Experience	1.43	0.20
Actuarial (gain)/Loss due to assumption changes	(0.62)	(0.24)
Actuarial (gain)/loss arising during period	0.80	(0.03)
Return on plan assets (greater)/less than discounting rate	0.51	0.40
Component of defined benefit costs recognized in Other Comprehensive Income	**1.31**	**0.37**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. The amount included in the Balance Sheet arising from the entity's obligation in respect of its defined benefits plans as follows:

Particulars	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Present value of funded defined benefit obligation	(13.70)	(12.59)
Fair value of plan assets	13.37	14.17
Funded status surplus/(deficit)	**(0.34)**	**1.57**

iv. Movement in the fair value of the defined benefit obligation:

Particulars	For Year ended 31st March, 2023 ₹ crores	For Year ended 31st March, 2022 ₹ crores
Opening defined benefit obligation	12.59	11.72
Current service cost	0.97	1.04
Interest cost on defined benefit obligation	0.79	0.76
Acquisitions (credit) / cost	0.37	(0.42)
Actuarial (gains) / loss arising from changes in experience	1.43	0.20
Actuarial (gains) / loss arising from changes in financial assumption	(0.62)	(0.24)
Benefits paid directly by the company	(1.82)	(0.47)
Closing defined benefit obligations	**13.70**	**12.59**

MAITHON POWER LTD. MAITHON

v. Movement in the fair value of the plan assets are as follows:

Particulars	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Opening fair value of plan assets	14.17	13.66
Interest income on plan assets	0.92	0.90
Return on plan assets (greater)/less than discounting rate	(0.51)	(0.40)
Benefits paid	(1.21)	-
Closing fair value of plan assets	**13.37**	**14.17**

Note:

1) The plan assets of the Company managed through a trust are managed by Birla Sun Life Insurance (BSLI) Company Limited. The details of investments relating to these assets are not shown by BSLI. Hence, the composition of each major category of plan assets, the percentage or amount that each major category constitutes to the fair value of the total plan assets has not been disclosed.

2) The Company expects to make a contribution of ₹ Nil (as at 31 March, 2022: ₹ Nil) to defined benefit plan during the next financial year.

vi. Sensitivity analysis

Significant actuarial assumptions for the determination of the defined benefit obligation are discount rate, expected salary increase and mortality. The sensitivity analysis below have been determined based on reasonably possible changes of the assumptions occurring at the end of the reporting period, while holding all other assumptions constant.
The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

Particulars	31st March, 2023 ₹ Crores		31st March, 2022 ₹ Crores	
	Increase	Decrease	Increase	Decrease
Discount Rate (-/+0.5%)	0.62	(0.58)	(0.56)	0.60
Salary Growth Rate (+/-0.5%)	(0.58)	0.62	0.60	(0.56)
Withdrawal Rate (-/+ 5%)	-	(0.48)	(0.65)	-

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit liability recognized in the Balance sheet.

There was no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

vii. The expected maturity analysis of defined benefit obligation is as follows:

Time Period	31st March, 2023 ₹ Crores	31st March, 2022 ₹ Crores
Within 1 year	0.52	1.05
Between 1-2 years	0.55	0.58
Between 2-3 years	1.95	0.52
Between 3-4 years	2.05	1.90
Between 4-5 years	1.12	2.27
Beyond 5 years	9.99	8.28

Particulars	31st March, 2023	31st March, 2022
The weighted average duration of the defined benefit plan obligation represents average duration for active members	7.4 years	7.6 years

MAITHON POWER LTD. MAITHON

16.4 Other Defined benefit plans

The amounts recognized in the financial statements and the movements in the net defined benefit obligations over the year are as follows:

i. Amounts recognized in the Statement of Profit and Loss in respect of these defined benefits plans are as follows:

Particulars	For Year ended 31st March, 2023 ₹ crores	For Year ended 31st March, 2022 ₹ crores
Current service cost	0.64	0.64
Past Service Cost	0.01	-
Net interest expenses	0.57	0.55
Actuarial (Gain)/ Loss	0.22	0.22
Components of defined benefit costs recognized in profit or loss	**1.44**	**1.41**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March, 2023 ₹ crores	For Year ended 31st March, 2022 ₹ crores
Actuarial (gain)/Loss due to Defined Benefit Obligation Experience	0.12	0.01
Actuarial (gain)/Loss due to assumption Changes	(0.52)	(0.12)
	(0.40)	(0.11)
Return on plan assets (greater)/less than discounting rate	0.09	0.22
Component of defined benefit costs recognized in Other Comprehensive Income	**(0.31)**	**0.12**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. Reconciliation of Net Balance Sheet Position

Particulars	For Year ended 31st March, 2023 ₹ crores	For Year ended 31st March, 2022 ₹ crores
Opening Net defined benefit asset/ (liability)	**(8.65)**	**(8.63)**
Current service cost	(0.65)	(0.64)
Net interest on net defined benefit liability/ (asset)	(0.57)	(0.55)
Amount recognized in OCI	0.31	0.33
Actuarial Gains/ (Losses)	0.09	(0.22)
Benefit paid directly by the Company	0.47	0.74
Acquisitions credit/ (cost)	0.22	0.32
Closing Net defined benefit asset/ (liability)	**(8.78)**	**(8.65)**

iv. Sensitivity analysis

Particulars	31st March, 2023 ₹ crores		31st March, 2022 ₹ crores	
	Increase	Decrease	Increase	Decrease
Discount Rate (-/+0.5%)	(0.47)	0.52	(0.48)	0.54
Salary Growth Rate (+/-0.5%)	0.30	(0.28)	0.31	(0.28)
Withdrawal Rate (-/+ 5%)	(1.96)	-	(1.96)	-
Gold Inflation Rate (+/- 5%)	0.07	(0.07)	0.07	(0.06)
Medical Inflation Rate (+/- 5%)	0.13	(0.11)	0.14	(0.12)
Mortality Rate (+/- 5%)	0.04	(0.04)	0.05	(0.04)

vi. The expected maturity analysis of defined benefit obligations

Time Period	31st March, 2023 ₹ crores	31st March, 2022 ₹ crores
Within 1 year	0.38	0.50
Between 1-2 years	0.39	0.51
Between 2-3 years	0.76	0.37
Between 3-4 years	0.78	0.75
Between 4-5 years	0.64	1.08
Beyond 5 years	4.82	4.07

Particulars	31st March, 2023	31st March, 2022
The weighted average duration of the Post Retirement Medical Benefit represents average duration for active members	17 years	17 years

MAITHON POWER LTD. MAITHON

17. Deferred Tax Assets / Liabilities (Net)

Accounting Policy

Deferred Tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

For operations carried out under tax holiday period (80IA benefits of Income Tax Act, 1961), deferred tax assets or liabilities, if any, have been established for the tax consequences of those temporary differences between the carrying values of assets and liabilities and their respective tax bases that reverse after the tax holiday ends.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss (either in other comprehensive income or in equity). Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the relevant entity intends to settle its current tax assets and liabilities on a net basis.

Deferred tax assets include Minimum Alternative Tax (MAT) paid in accordance with the tax laws in India, which is likely to give future economic benefits in the form of availability of set off against future income tax liability. Accordingly, MAT is recognised as deferred tax asset in the balance sheet when the asset can be measured reliably and it is probable that the future economic benefit associated with the asset will be realised. The Company reviews the "MAT credit entitlement" asset at each reporting date and writes down the asset to the extent that it is no longer probable that it will pay normal tax during the specified period.

In the situations where one or more units of the Company are entitled to a tax holiday under the tax law, no deferred tax (asset or liability) is recognized in respect of temporary differences which reverse during the tax holiday period, to the extent the concerned unit's gross total income is subject to the deduction during the tax holiday period. Deferred tax in respect of temporary differences which reverse after the tax holiday period is recognized in the year in which the temporary differences originate. However, the Company restricts recognition of deferred tax assets to the extent it is probable that sufficient future taxable income will be available against which such deferred tax assets can be realized. For recognition of deferred taxes, the temporary differences which originate first are considered to reverse first.

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

Minimum alternate tax (MAT) paid in a year is charged to the statement of profit and loss as current tax for the year. The deferred tax asset is recognised for MAT credit available only to the extent that it is probable that the Company will pay normal income tax during the specified period, i.e., the period for which MAT credit is allowed to be carried forward. In the year in which the Company recognizes MAT credit as an asset, it is created by way of credit to the statement of profit and loss and shown as part of deferred tax asset. The Company reviews the "MAT credit entitlement" asset at each reporting date.

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
Deferred Tax Liabilities (Net)	445.69	427.62
Less: MAT Credit entitlement	513.05	463.23
Deferred Tax Assets (Net)	**67.36**	**35.61**

For Year ended 31st March, 2023 ₹ Crores

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive Income	Closing balance
MAT credit entitlement	**463.23**	**49.82**	-	**513.05**
Deferred Tax Liabilities (Net) in relation to:				
Difference in WDV of PPE between books of accounts and for tax purpose	**427.63**	21.43		**449.06**
Borrowings	**1.69**	0.50	-	**2.19**
Investments	**(0.04)**	0.04	-	-
Provision for compensated absences	**(1.66)**	0.60	-	**(1.06)**
Interest Accrued But not due on borrowings	-	(4.50)		**(4.50)**
	427.62	**18.07**	-	**445.69**
Total Deferred Tax Liabilities/(Assets)(Net)	**(35.61)**	**(31.75)**	-	**(67.36)**

For Year ended 31st March, 2022 ₹ Crores

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive Income	Closing balance
MAT credit entitlement	**418.68**	**44.55**	-	**463.23**
Deferred Tax Liabilities (Net) in relation to:				
Difference in WDV of PPE between books of accounts and for tax purpose	**421.33**	6.30		**427.63**
Borrowings	**2.03**	(0.34)	-	**1.69**
Investments	**(0.35)**	0.31	-	**(0.04)**
Provision for compensated absences	**(1.89)**	0.23	-	**(1.66)**
	421.12	**6.50**	-	**427.62**
Total Deferred Tax Liabilities/(Assets)(Net)	**2.44**	**(38.05)**	-	**(35.61)**

MAITHON POWER LTD. MAITHON

Note:

a. Deferred tax assets and liabilities are being offset as they relate to taxes on income levied by the same governing taxation laws.

b. The Company is entitled for availing the tax benefit under section 80IA of the Income-tax Act, 1961, with effect from the financial year 2016-17 for 10 years. Deferred tax liabilities as at 31 March, 2023, reflect the quantum of tax liabilities accrued upto the period end but payable after the expiry of the tax holiday period.

c. The Company has recognised MAT credit entitlement of ₹ 513.05 crores as at March 31, 2023 (as at March 31, 2022: ₹ 463.23 crores). Basis the existing tax laws and the projections of future profitability considering definitive Power purchase agreements which are completely tied up with the plant capacity, the management is confident of earning taxable profits each year and will be able to utilise the entire amount of MAT credit entitlement recognised in the financial Statement.

	As at 31st March, 2023 ₹ Crores	As at 31st March, 2022 ₹ Crores
18. Other Liabilities		
Non-current		
Consumers' Benefit Account	-	14.32
Payable to Beneficiaries (Net)	67.36	35.61
	67.36	**49.93**
Current		
Payable to Beneficiaries (Net)	188.12	185.93
Statutory Liabilities	5.82	7.57
Liability towards Corporate Social Responsibility	2.88	2.15
	196.82	**195.65**
19. Current Financial Liabilities		
19.1 Current Borrowings		
Secured - At amortised Cost		
From Banks		
(a) Short term loan from Bank	46.31	57.09
(b) Current Maturities of Long-term Debt (Refer Note 19)	369.86	325.06
	416.17	**382.15**
	416.17	**382.15**

Note:

i. The Company has entered into 'Working Capital Facility Agreement' with State Bank of India, Axis Bank, Kotak Mahindra Bank and HDFC Bank for availing fund for managing working capital requirement.

ii Security offered to State Bank of India secured by way of first charge on movable and immovable assets of the Company present and future, ranking pari passu with first charge in favour of other lenders for term loans and working capital loans.

iii Kotak Mahindra Bank working capital facilities is secured by way of first hypothecation charge on all the existing and future current assets of the borrower ranking pari passu with first charge in favour of other lenders for term loans and working capital loans.

iv HDFC Bank working capital facilities is secured by way of first charge on current assets ranking pari passu with first charge in favour of other lenders for term loans and working capital loans.

v Axis Bank working capital facilities is secured by way of first charge on current assets ranking pari passu with first charge in favour of other lenders for term loans and working capital loans.

vi The quarterly returns or statements of current assets filed by the Company with banks or financial institutions are in agreement with the books of account and there are no discrepancies.

19.2 Trade Payables

	As at 31st March, 2023 ₹ crore	As at 31st March, 2022 ₹ crore
Current		
Outstanding dues of micro enterprises and small enterprises	21.42	3.61
Outstanding dues of trade payables other than micro enterprises and small enterprises	222.41	138.51
Total		
	243.83	**142.12**

MAITHON POWER LTD. MAITHON

Trade Payables Ageing schedule as at 31st March , 2023

₹ crore

Particulars	Outstanding for following periods from due date of payment #				Total
	Less than 1 Year	1-2 Years	2-3 years	More than 3 years	
(i) Undisputed Trade Payables					
a) MSME	21.01	0.35	0.06	-	21.42
b) Others	194.55	15.85	9.40	2.61	222.41

Where due date of payment is not available date of transaction has been considered

Trade Payables Ageing schedule as at 31st March , 2022

₹ crore

Particulars	Outstanding for following periods from due date of payment #				Total
	Less than 1 Year	1-2 Years	2-3 years	More than 3 years	
(i) Undisputed Trade Payables					
a) MSME	3.48	0.13	-	-	3.61
b) Others	114.29	18.58	(3.29)	8.93	138.51

Where due date of payment is not available date of transaction has been considered

Note : There are no disputed Trade Payables.

	As at 31st March, 2023 ₹ crore	As at 31st March, 2022 ₹ crore
MSME Disclosure		
Micro and small enterprises under the Micro, Small and Medium Enterprises Development Act, 2006:		
The principal amount and the interest due thereon remaining unpaid to any supplier as at the end of each accounting year		
(a) Principal amount remaining unpaid	21.42	3.61
(b) Interest* due thereon	-	-
(c) The amount of Interest* paid along with the amounts of the payment made to the supplier beyond the appointed day	-	-
(d) The amount of Interest* due and payable for the year	-	-
(e) The amount of Interest* accrued and remaining unpaid	-	-
(f) The amount of further interest* due and payable even in the succeeding years, until such date when the interest* dues as above are actually paid	-	-
	21.42	3.61

* Amounts unpaid to Micro and Small Enterprises vendors on account of retention money have not been considered for the purpose of interest calculation.

MAITHON POWER LTD. MAITHON

20. Revenue from Operations
Accounting Policy

Revenue recognition
Revenue from contracts with customers is recognised when control of the goods or services are transferred to customers for a consideration that the Company expects to be entitled as per terms of relevant contracts and orders of applicable regulatory authorities.

Description of performance obligations are as follows :

Sale of Power - Generation (Thermal)
Revenue from sale of power is recognised net of cash discount over time for each unit of electricity delivered.

Contract price determined as per tariff regulations
The Company as per the prevalent tariff regulations is required to recover its Annual Revenue Requirement ('ARR') comprising of expenditure on account of fuel cost, operations and maintenance expenses, financing costs, taxes and assured return on regulator approved equity with incentive for operational efficiencies. Accordingly, rate per unit of power supplied is determined using cost of inputs for generation of power based on the Company's efforts to the satisfaction of a performance obligation to deliver power. As per tariff regulations, the Company determines ARR and any surplus/shortfall in recovery of the same is accounted as revenue.

The difference between the revenue recognised and amount invoiced has been presented as deferred revenue/unbilled revenue.

Deferred tax recoverable/payable
The Income tax cost is pass through cost and accordingly the Company recognises Deferred tax recoverable/payable against any Deferred tax expense/ income. The same is included in Revenue from Operations.

Late Payment Surcharge
Late payment surcharge leviable as per CERC Regulations are recognised on accural basis when the company considers that its realisation is probable based on customers acknowledgement or orders issued by relevant regulatory authorities.

No Late Payment Surcharge ('LPS') is charged for the initial 45 to 60 days from the date of receipt of invoice by customer. Thereafter, LPS is charged at the rate prescribed by CERC Regulations on the outstanding balance once the dues are received. Revenue in respect of late payment surcharge leviable as per the relevant contracts are recognised on actual realisation or accrued based on an assessment of certainty of realization supported by either an acknowledgement from customers or on receipt of favourable order from regulatory authorities.

Dividend and interest income
Dividend income from investments is recognized when the shareholder's right to receive payment has been established.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected or contracted life of the financial asset to that asset's net carrying amount on initial recognition.

MAITHON POWER LTD. MAITHON

		For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
20. Revenue from Operations (Continue)			
(a) Revenue from Power Operations		3,108.70	2,841.99
Less: Cash Discount		(58.39)	(55.88)
		3,050.31	**2,786.11**
Less: Income to be adjusted in future tariff determination (Net)		(22.02)	(5.95)
		3,028.29	**2,780.16**
(b) Other Operating Revenue			
Rental of Buildings		0.03	0.04
Sale of Fly Ash		0.77	-
		0.80	**0.04**
		3,029.09	**2,780.20**

Note:-
Tariff to be charged under terms of Long term power supply agreements are determined by Central Electricity Regulatory Commission (CERC) in accordance with its notified tariff regulations or norms. The tariff consists of two parts namely, capacity charge (for recovery of fixed cost based on plant availability) and energy charges (for recovery of fuel costs). The Company has received true-up order for the control period 2014-19 and also the Tariff order for the control period 2019-24, issued by CERC on 8th January, 2022. Further, the tariff order for 2019-24 has considered a significant cost element that has hitherto not been considered in tariff order till date and also in the true-up order for 2014-19, in respect of which the Company has filed review petition with the relevant appellate authority, and has recognised revenue as per the tariff order, on a conservative basis. Further adjustments could arise upon disposal of company's review petition.

		For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
21. Other Income			
(a) Interest Income			
On Financial Assets held at amortised cost			
Interest on Banks Deposits		4.01	1.96
Interest on loan to related party (Refer Note 30)		11.06	11.99
Other Interest		0.01	0.01
		15.08	**13.96**
(b) Gain on Investments			
Gain on sale/fair valuation of Current Investments measured at FVTPL		3.56	4.32
		3.56	**4.32**
(c) Other Non Operating Income			
Gain/(Loss) on Disposal of Property, Plant and Equipment (Net)		(3.95)	(0.07)
Miscellaneous Income (Refer note below)		34.98	4.07
		31.03	**4.00**
		49.67	**22.28**

Note- Pursuant to order of the Hon'ble Central Electricity Regulatory Authority, New Delhi, the Company has entered into a Memorandum of Understanding on March 31, 2023 (MoU) with a former customer for resolution of disputes towards supply of electricity. As per the terms of the MoU, the Company is entitled to receive an amount of ₹13.72 Cr towards full and final settlement of such disputes that has been reported as trade receivable in these financial statements. Accordingly, provision of ₹14.32 Cr towards claims received from the said party and provision for doubtful receivable of ₹13.72 Cr recognised in prior years have been reversed during the quarter/year.

MAITHON POWER LTD. MAITHON

22. Employee Benefits Expenses

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Salaries and Wages	41.40	37.37
Contribution to Provident Fund	1.35	1.28
Contribution to Superannuation Fund	0.42	0.37
Retiring Gratuities	0.84	0.56
Leave Encashment Scheme	0.71	1.11
Pension Scheme	0.75	0.69
Staff Welfare Expenses	7.14	7.13
	52.61	**48.51**
Less:		
Employee Cost Capitalised	4.16	3.55
	4.16	**3.55**
	48.45	**44.96**

23. Depreciation and Amortisation expenses:

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Depreciation on Property, Plant & Equipment (Refer Note 5.7)	273.89	266.90
Depreciation on Right of use Assets (Refer Note 8)	5.12	5.09
Amortisation on Intangible Assets (Refer Note 7)	0.16	0.15
	279.17	**272.14**

24. Finance Costs

Accounting Policy

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Interest income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognized in statement of profit and loss in the period in which they are incurred.

(a) Interest Expense:

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Borrowings		
Interest on Debentures	75.81	87.03
Interest on Loans from banks	54.30	47.95
Others		
Other Interest and Commitment Charges	-	0.01
Interest on Lease Liability - At Amortised cost	0.25	0.04
	130.36	**135.03**
Less: Interest Capitalised	12.51	-
	117.85	**135.03**
(b) Other Borrowing Cost:		
Other Finance Costs	1.63	2.26
	1.63	**2.26**
	119.48	**137.29**

MAITHON POWER LTD. MAITHON

25. Other Expenses

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Consumption of Stores, Oil, etc.	14.43	11.90
Rental of Land, Buildings etc.	0.11	3.49
Repairs and Maintenance -		
(i) To Buildings and Civil Works	3.32	4.22
(ii) To Machinery and Hydraulic Works	100.43	97.51
(iii) To Furniture, Vehicles, etc.	3.78	3.19
Water Charges & Others Taxes	22.46	21.58
Insurance	9.82	8.57
Ash Disposal Expenses	43.98	30.24
Travelling and Conveyance Expenses	1.60	1.35
Auditor's Remuneration (Refer - i)	0.50	0.42
Engineering and consulting services	79.84	75.33
Security Expenses	10.57	9.19
Corporate Social Responsibility Expenses (Refer - ii)	7.04	7.55
Miscellaneous Expenses	10.36	8.08
	308.24	**282.62**

(i) Payment to the Auditors

Audit Fee & Limited Review	0.37	0.38
Tax Audit Fees	0.05	0.02
Other Services (Certification Fees)	0.04	0.01
Reimbursement of Expenses	0.04	0.01
	0.50	**0.42**

(ii) Corporate Social Responsibility Expenses

(a) Amount required to be spent as per Sec 135 of the Companies Act 2013 :	7.04	7.55
(b) Amount spent during the year:		
i. Construction/acquisition of any asset	-	0.28
ii. On purposes other than (i) above	7.04	7.27
	7.04	**7.55**
(c) Details related to spent / unspent obligations:		
i. Contribution to Charitable Trust	3.46	3.17
ii. Unspent amount in relation to:		
-Ongoing project	2.88	2.15
-Other than ongoing project	-	-
(d) Details of ongoing project and other than ongoing project	5.55	

Ongoing Project as per Sec 135(6) of the Companies Act 2013:

Opening Balance	As on 31st March, 2023	As on 31st March, 2022
With Company	-	-
In Separate CSR Unspent A/c	2.15	-
Amount required to be spent during the year	5.55	3.51
Amount spent during the year		
From Company's bank A/c	2.67	1.36
In Separate CSR Unspent A/c	2.15	-
Closing Balance		
With Company	2.88	-
In Separate CSR Unspent A/c	-	2.15

Other than ongoing Project as per Sec 135(5) of the Companies Act 2013:

Opening Balance	-	-
Amount deposited in Specified Fund of Sch. VII within 6 months	-	-
Amount required to be spent during the year	1.14	4.04
Amount spent during the year	1.14	4.04
Closing Balance	-	-

(e)	Amount spent on administrative overhead	0.35	0.38

MAITHON POWER LTD. MAITHON

26. Income taxes

Accounting Policy

Current Tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date in the countries where the Company operates and generates taxable income.

Current income tax relating to items recognised outside statement of profit and loss is recognised outside statement of profit and loss (either in other comprehensive income or in equity). Current tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

(i) Income tax recognised in profit and loss

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Current tax		
For the year	66.17	51.13
In respect of earlier years	-	(0.99)
Current Tax (Including adjustment of tax relating to earlier year)	**66.17**	**50.14**
Deferred tax	18.07	6.50
MAT Credit	(49.82)	(44.54)
Deferred Tax (Net)	**(31.75)**	**(38.04)**
Income tax expense reported in the Statement of Profit and Loss	**34.42**	**12.10**

(ii) Reconciliation of tax expense as per the effective rate of tax and India's statutory rate of tax

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Profit before tax	**379.74**	**292.63**
Applicable income tax rate	34.94%	34.94%
Income tax expense calculated at applicable rate	132.70	102.26
Temporary difference reversed during tax holiday period.	40.18	27.57
On account of 80IA benefits	(146.64)	(121.15)
Other Adjustments	8.18	3.42
Total income tax expense	**34.42**	**12.10**

1. The tax rate used for the financial years 2022-23 and 2021-22 reconciliations above is the corporate tax rate of 34.94% and 34.94% respectively payable by the corporate entities in India on taxable profits under the Indian tax law.
2. The rate used for calculation of deferred tax is @34.94% for FY 2022-23 & for FY 2021-22 being statutory enacted rates at respective Balance Sheet Dates.

(iii) Income tax recognised in other comprehensive income

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Arising on income and expenses reclassified in other comprehensive income:		
Remeasurement of the defined benefit plan	(1.00)	(0.04)
Total income tax expense recognised in other comprehensive income	**(1.00)**	**(0.04)**
Bifurcation of the income tax recognised in other comprehensive income into:		
- Items that will not be reclassified to profit or loss	0.18	0.01
	0.18	**0.01**

27. Commitments

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Estimated amount of contracts remaining to be executed on capital account and not provided for	70.63	358.79
	70.63	**358.79**

MAITHON POWER LTD. MAITHON

28. Contingent liabilities

(a) Claims against the Company not acknowledged as debts for demands raised by the office of the Zonal Jt. Director General Trade for revocation of grant of deemed export benefits which has been disputed by the Company ₹ 36.41 crores (31 March, 2022 : ₹ 36.41 crores).

(b) Demand in respect of lease rent for GM Land as referred in note 5.8 (d) and (e).

(c) The Code on Social Security 2020 has been notified in the Official Gazette on 29th September, 2020. The effective date from which the changes are applicable is yet to be notified and the rules are yet to be framed. Impact if any of the change will be assessed and accounted in the period in which said Code becomes effective and the rules framed thereunder are notified.

29. Earnings per share (EPS)

Accounting Policy

Basic earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares outstanding during the period. Diluted earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares considered for deriving basic earnings per equity share and also the weighted average number of equity shares that could have been issued upon conversion of all dilutive potential equity shares. The dilutive potential equity shares are adjusted for the proceeds receivable had the equity shares been actually issued at fair value (i.e. The average market value of the outstanding equity shares). Dilutive potential equity shares are deemed converted as of the beginning of the period, unless issued at a later date. Dilutive potential equity shares are determined independently for each period presented.

The number of equity shares and potentially dilutive equity shares are adjusted retrospectively for all periods presented for any share splits and bonus shares issues including for changes effected prior to the approval of the financial statements by the Board of Directors.

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Basic and diluted earnings per share (face value of ₹ 10/- each)	2.29	1.86
Basic and diluted earnings per share	**2.29**	**1.86**

The earnings and weighted average number of equity shares used in the calculation of basic and diluted earnings per share are as follows:

	For Year ended 31st March, 2023 ₹ Crores	For Year ended 31st March, 2022 ₹ Crores
Profit After Tax	345.32	280.53
The weighted average number of equity shares for Basic and Diluted EPS	1,50,89,17,729	1,50,89,17,729

Note:
There have been no other transactions involving Equity Shares or Potential Equity Shares between the Reporting date and the date of authorisation of these financial statements.

MAITHON POWER LTD. MAITHON

30. Related Party Transactions

a. List of related parties

i. **Controlling Entity (CE)**

The Tata Power Company Limited (TPCL) (Holding Company)

ii. **Entity exercising significant influence (SI)**

Damodar Valley Corporation (DVC)

iii. **Subsidiaries and Jointly Controlled Entities of Promoter or Ultimate promoter - Promoter Group**
(With whom the Company has entered transaction during the reporting period)

Tata Power Trading Company Limited (TPTCL)
Tata Power Renewable Energy Limited (TPREL)
TP Ajmer Distribution Limited (TPADL)
Tata Power Solar System Ltd (TPSSL)
Tata Power Renewable Microgrid Limited (TPRML)
TP Solapur Limited (TPSL)
Tata Technologies Limited (TTL)
Tata Steel Ltd. (TSL)
Voltas Limited (VL)
Tata Aig General Insurance Co. Ltd (TAGICL)
Tata Capital Financial Services Limited (TCFSL)
Tata Consulting Engineers Ltd (TCEL)
Tata Consultancy Services Ltd (TCS)

iv. **Directors & Key Managerial Personnel**

Vijay Namjoshi (Chairman)
Krishnava Dutt (Independent Director) (Till 19th March 2023)
Ashok Sinha (Independent Director) (Till 22th March 2023)
Rita Sinha (Independent Director) (Till 22th March 2023)
Joydeep Mukherjee (Non Executive Director)
Ramesh Narayan (Non Executive Director) (Till 22th March 2023)
Amarjit Chopra (Independent Director) (w.e.f. 31st March 2022)
Anandakumar Prabhakaran (Non Executive Director) (Till 22nd June 2022)
Abhijit Basu (Non Executive Director) (Till 2th March 2023)
Vijayant Ranjan (Chief Executive Officer) (w.e.f. 15th February 2022)
Ramesh Jha (Chief Executive Officer)(Till 14th February 2022)
Kajal Kumar Singh (Chief Financial Officer)
Mona Purandare (Company Secretary) (w.e.f 1st November 2021)
Poonam Shirke (Company Secretary) (Till 31st October 2021)
Mr P R Ravi Mohan (Independent Director) (w.e.f. 20th March 2023)
Mr Narendra Nath Misra (Independent Director) (w.e.f. 20th March 2023)
Ms. Nita Jha (Independent Director) (w.e.f. 20th March 2023)

MAITHON POWER LTD. MAITHON

30. Related Party Transactions (Continue)

b. Transactions/balances outstanding with related parties

i) Transactions for the half year ended 31st March, 2023

₹ Crores

Particulars	CE	SI	Fellow Subsidiaries (FS)						Subsidiaries and Jointly Controlled Entities of Promoter or Ultimate promoter - Promoter Group							KMP & Directors	Total
	TPCL	DVC	TPTCL	TPREL	TPSL	TPADL	TPSSL	TPRML	TTL	TCS	TSL	VL	TAGICL	TCFSL	TCEL		
Revenue from power supply	-	457.74	1,806.46	-	-	-	-		-	-	-	-	-	-	-	-	2,264.21
	-	(423.04)	(1,593.09)	-	-	-	-		-	-	-	-	-	-	-	-	(2,016.12)
Cash discount on power sales	-	-	38.26	-	-	-			-	-	-	-	-	-	-	-	38.26
	-	-	(37.4)	-	-	-	-		-	-	-	-	-	-	-	-	(-37.44)
Reimbursement of RRAS/SCED/Others refund by the company	-	0.30	1.91	-	-	-	-		-	-	-	-	-	-	-	-	2.21
	-	(-1.07)	(11.72)	-	-	-	-		-	-	-	-	-	-	-	-	(10.66)
Interest income	7.76	-	-	2.19	1.11	-	-		-	-	-	-	-	-	-	-	11.06
	(11.99)	-	-	-	-	-	-		-	-	-	-	-	-	-	-	(11.99)
Electricity Charges	-	0.37	-	-	-		-		-	-	-	-	-	-	-	-	0.37
	-	(0.38)	-	-	-	-	-		-	-	-	-	-	-	-	-	(0.38)
Water charges	-	22.51	-	-	-	-	-		-	-	-	-	-	-	-	-	22.51
		(21.49)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(21.49)
Rent and hire charges	-	0.19	-	-	-	-	-		-	-	-	-	-	-	-	-	0.19
	-	(3.44)	-	-	-	-	-		-	-	-	-	-	-	-	-	(3.44)
Cost of Services Procured	73.20	-	-	-	-	-	-	-	-	-	-	-	-	-	0.12	-	73.32
	(68.38)	-	-	-	-	-	-	-	-	(0.27)	-	-	-	-	(0.46)	-	(69.11)
Loan Novated [From]/To	(300.34)*	-	-	222.70	77.64	-	-									-	
	-	-	-	-	-	-	-									-	-
Loan Given	450.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	450.00
	(800.00)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(800.00)
Loan Repaid	599.66	-	-	222.70	77.64	-	-	-	-	-	-	-	-	-	-	-	900.00
	(550.00)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(550.00)
Reimbursement of expenses to the Company		0.17	0.65	-	-		-	-	-	-	-	-	-	-	-	-	0.82
		(0.12)	(0.54)	-	-	-	-	-	-	-	-	-	-	-	-	-	(0.66)
Reimbursement of expenses by the Company	3.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.16
	(2.36)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(2.36)
Service received related to CWIP	5.38	-	-	-	-		-	-	-	-	-	-	-	-	-	-	5.38
	(10.47)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(10.47)
KMP Remuneration	-	-	-	-	-	-	-		-	-	-	-	-	-	-	2.49	2.49
	-	-	-	-	-	-	-		-	-	-	-	-	-	-	(1.99)	(1.99)
Director's sitting fees	-	-	-	-	-	-	-		-	-	-	-	-	-	-	0.28	0.28
	-	-	-	-	-	-	-		-	-	-	-	-	-	-	(0.27)	(0.27)
O&M-Insurance Services/Material procurement & Others	-	-	-	-	-		-		-	0.00	20.16	0.75	2.01	-	-	-	22.92
			-	-	-	-	-		-	-	(1.24)	(0.71)	(0.21)	-	-	-	(2.17)
Lease services	-	-	-	-	-	-	-		-	-	-	-	-	0.23	-	-	0.23
	-	-	-	-	-	-	-		-	-	-	-	-	(0.27)	-	-	(0.27)
Dividend Paid	466.20	163.80		-	-	-	-		-	-	-	-	-		-	-	630.00
	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-

Figures in brackets stated pertain to the year ended 31st March, 2022

*Figure in bracket related to novation of Loan From Tata Power to TP Renewables and TP Solapur.

MAITHON POWER LTD. MAITHON

30. Related Party Transactions (Continue)

ii) Balances outstanding as at 31st March, 2023

₹ Crores

Particulars	CE	SI	Fellow Subsidiaries (FS)						Subsidiaries and Jointly Controlled Entities of Promoter or Ultimate promoter - Promoter Group							KMP & Directors	Total
	TPCL	DVC	TPTCL	TPREL	TPSL	TPADL	TPSSL	TPRML	TTL	TCS	TSL	VL	TAGICL	TCFSL	TCEL		
Trade receivables																	
As at 31st March, 2023	-	26.13	77.16	-		-		-	-	-	-	-	-	-	-	-	103.30
As at 31st March, 2022	-	(53.99)	(-36.19)	-	-	-	-	-	-	-	-	-	-	-	-	-	(17.80)
Other receivables																	
As at 31st March, 2023	-	1.70	-	0.03	-	0.00	-		0.01	0.02	-	-	-	0.00	0.00	-	1.76
As at 31st March, 2022	-	-	-	-	-	-	-		(0.01)	(0.02)	(0.09)			(0.00)	-	-	(0.12)
Loans given (including interest thereon)																	
As at 31st March, 2023	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
As at 31st March, 2022	(452.60)	-	-	-	-	-	-		-	-	-	-	-	-	-	-	(452.60)
Unbilled revenue																	
As at 31st March, 2023	-	40.53	3.44	-	-		-									-	43.97
As at 31st March, 2022	-	(29.94)	(17.02)	-	-	-	-									-	(46.96)
Security deposits																	
As at 31st March, 2023	-	0.28	-	-	-		-									-	0.28
As at 31st March, 2022	-	(0.28)	-	-	-	-	-									-	(0.28)
Trade payables																	
As at 31st March, 2023	8.47	2.30	-				-				-	-	-		-	-	10.77
As at 31st March, 2022	(6.25)	(2.99)	(0.01)	-	-	-	-	-	-		-	-	-		-	-	(9.25)
Other payables																	
As at 31st March, 2023	-	-	-	-	-	-	0.22				0.14	0.01	0.01		-	-	0.37
As at 31st March, 2022	-	-	-	-	-	-	-	-	-		-	(0.02)	(0.00)		0.17	-	(0.15)
Letter of credit (LC)																	
As at 31st March, 2023	-	37.07	148.78	-	-		-									-	185.85
As at 31st March, 2022	-	(24.10)	(134.53)	-	-	-	-									-	(158.63)

* Amount is lesser than the rounding off norms followed by the Company.

Notes:

(i) Figures in brackets stated pertain to the year ended 31st March,2022.

(ii) Trade Receivable & Unbilled Revenue are secured to the extent of outstanding LC amount and remaining balance are unsecured.

(iii) All transactions with the related parties have been done at arms length.

(iv) Key Managerial Personnel are entitled to post-employment benefits and other long term employee benefits recognised as per Ind AS 19 - 'Employee Benefits' in the financial statements. As these employee benefits are lump sum amounts provided on the basis of actuarial valuation, the same is included above on payment basis.

MAITHON POWER LTD. MAITHON

31. Financial Ratios

Sl No	Ratios	Numerator	Denominator	As at 31st March, 2023	As at 31st March, 2022	% of Variance	Reason for Variance in excess of 25 %
a)	Current Ratio	Current Assets	Current Liabilities	0.82	1.19	-31.50	Decrease in loan given
b)	Debt-equity ratio	Total Debt	Shareholders Equity	0.78	0.73	7.07	
c)	Debt service coverage ratio	Earnings for debt service= Net Profit After Tax + Non-cash operating expenses	Debt Service = Interest & Lease Payments + Principal Repayments	1.63	2.02	-19.49	
d)	Return on equity ratio	Net Profits after taxes - Interest on Perpetual securities	Average Shareholder's Equity	14.77	11.99	23.23	
e)	Inventory turnover ratio	Cost of goods sold	Average Inventories	10.88	14.09	-22.81	
f)	Trade receivables turnover ratio	Net credit sales = Gross credit sales - sales return	Average Trade Receivables	21.40	44.40	-51.81	Decrease in ratio due to higher revenue.
g)	Trade payables turnover ratio	Net credit purchase = Gross credit purchase - purchase return	Average Trade Payables	11.63	10.01	16.23	
h)	Net capital turnover ratio	Net sales = Total sales - sales return	Working capital = Current assets - Current liabilities	-17.84	17.68	-200.87	Ratio is dicreased due to Loan repaid
i)	Net profit ratio	Net Profit	Net sales = Total sales - sales return	11.37	10.09	12.72	
j)	Return on capital employed	Earning after taxes + interest	Capital Employed = Tangible Net worth + Total Debt + Deferred Tax Employed	12.14	9.89	22.71	
k)	Return on investment	Interest income + Dividend income + Gain on fair value of current investment at FVTPL	Average (Investment + Fixed deposit+ Loans Given)	0.05	0.04	28.19	Ratio is increased due to lower loan given

32. Financial Instruments

This section gives an overview of the significance of financial instruments for the company and provides additional information on balance sheet items that contain financial instruments. The details of significant accounting policies, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised in respect of each class of financial asset, financial liability and equity instrument are disclosed in the financial statements.

32.1 Financial assets and liabilities

The carrying value and fair value of financial instruments by categories as of 31st March, 2023 is as follows:

₹ Crores

Particulars	Fair Value through P&L	Fair Value through OCI	Amortised Cost	Total Carrying value	Total Fair Value
Assets					
Cash and Cash Equivalents	-	-	0.02	0.02	0.02
Trade Receivables	-	-	47.07	47.07	47.07
Investments	134.50	-	-	134.50	134.50
Unbilled Revenues	-	-	180.61	180.61	180.61
Loans	-	-	4.13	4.13	4.13
Other financial Assets	-	-	19.35	19.35	19.35
Total	**134.50**	**-**	**251.18**	**385.68**	**385.68**
Liabilities:					
Trade Payables	-	-	243.83	243.83	243.83
Fixed Rate Borrowings (Includes Current Maturities)	-	-	969.87	969.87	969.87
Floating Rate Borrowings (Includes Current Maturities)	-	-	599.00	599.00	599.00
Short term borrowings- Letter of credit	-	-	46.31	46.31	46.31
Lease Liability	-	-	3.49	3.49	3.49
Other Financial Liabilities	-	-	136.68	136.68	136.68
Total	**-**	**-**	**1,999.18**	**1,999.18**	**1,999.18**

The carrying value and fair value of financial instruments by categories as of 31st March, 2022 is as follows:

Particulars	Fair Value through P&L	Fair Value through OCI	Amortised Cost	Total Carrying value	Total Fair Value
Assets					
Cash and Cash Equivalents	-	-	450.02	450.02	450.02
Trade Receivables	-	-	45.41	45.41	45.41
Investments	60.03	-	-	60.03	60.03
Unbilled Revenues	-	-	12.01	12.01	12.01
Loans	-	-	65.66	65.66	65.66
Other Financial Assets	-	-	16.23	16.23	16.23
Total	**60.03**	**-**	**589.33**	**649.36**	**649.36**
Liabilities:					
Trade Payables	-	-	142.12	142.12	142.12
Fixed Rate Borrowings (Includes Current Maturities)	-	-	964.16	964.16	964.16
Floating Rate Borrowings (Includes Current Maturities)	-	-	695.63	695.63	695.63
Short term borrowings- Letter of credit			57.09	57.09	57.09
Lease Liability	-		3.24	3.24	3.24
Other Financial Liabilities	-		104.24	104.24	104.24
Total	-		1,966.48	1,966.48	1,966.48

MAITHON POWER LTD.

The management assessed that the fair value of cash and cash equivalents, other balances with bank, trade receivables, loans, unbilled revenues, trade payables, other financial assets and liabilities approximate their carrying amounts largely due to the short term maturities of these instruments.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties. The following methods and assumptions were used to estimate the fair values.

Fair value hierarchy

The fair value hierarchy is based on inputs to valuation techniques that are used to measure fair value that are either observable or unobservable and consists of the following three levels.

Level 1 : Quoted prices in an active market : Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities and net assets value of mutual funds declared by the issuer

Level 2 : Valuation techniques with observable inputs : Inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices)

Level 3 : Valuation techniques with significant unobservable inputs : Inputs are not based on observable market data (unobservable inputs). Fair values are determined in whole or in part using a valuation model based on assumptions that are neither supported by prices from observable current market transactions in the same instrument nor are they based on available market data.

The following table provides the fair value measurement hierarchy of the Company's assets and liabilities. :

		Fair value hierarchy as at 31st March, 2023			
	Date of valuation	Level 1	Level 2	Level 3	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
At Fair Value through Profit and Loss (FVTPL) (Unquoted Mutual Funds)	31st March, 2023	134.50	-	-	134.50
		134.50	**-**	**-**	**134.50**
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March, 2023	-	969.87	-	969.87
Floating rate borrowings	31st March, 2023	-	599.00	-	599.00
Total		**-**	**1,568.87**	**-**	**1,568.87**

		Fair value hierarchy as at 31st March, 2022			
	Date of valuation	Level 1	Level 2	Level 3	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
At Fair Value through Profit and Loss (FVTPL) (Unquoted Mutual Funds)	31st March, 2022	60.03	-	-	60.03
		60.03	**-**	**-**	**60.03**
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March, 2022	-	964.16	-	964.16
Floating rate borrowings	31st March, 2022	-	695.63	-	695.63
Total		**-**	**1,659.79**	**-**	**1,659.79**

There has been no transfer between level 1 and level 2 during the year.

32.2 Capital Management & Gearing Ratio

For the purpose of the Company's capital management, capital includes issued equity capital and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's capital management is to maximize the value for shareholders.

The Company manages its capital structure and makes adjustments in light of changes in economic conditions and the requirements of the financial covenants. From time to time, the Company reviews its policy related to dividend payment to shareholders, return capital to shareholders or fresh issue of shares. The Company monitors capital using gearing ratio, which is net debt divided by total capital plus net debt. The Company's policy is to keep the gearing ratio around 50%. The Company includes within net debt, interest bearing loans and borrowings, less cash and bank balances, excluding discontinued operations as detailed in the notes below.

The Company's capital management is intended to create value for shareholders by facilitating the meeting of its long-term and short-term goals. Its Capital structure consists of net debt (borrowings as detailed in notes below) and total equity.

Gearing ratio

The gearing ratio at the end of the reporting year was as follows:

	₹ crore	
	As at 31st March, 2023	As at 31st March, 2022
Debt (i)	1,615.18	1,716.88
Less: Cash and Bank balances	180.61	12.01
Net debt	**1,434.57**	**1,704.87**
Total Capital (ii)	2,195.39	2,480.89
Capital and net debt	**3,629.96**	**4,185.76**
Gearing ratio (%)	39.52	40.73

(i) Debt is defined as Non-current borrowings (including current maturities) and Current borrowings (excluding derivative, financial guarantee contracts and contingent considerations) and interest accrued on Non-current and Current borrowings.

(ii) Equity is defined as Equity share capital and other equity including reserves and surplus.

In order to achieve this overall objective, the Company's capital management, amongst other things, aims to ensure that it meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the bank to immediately call loans and borrowings. There have been no significant breaches in the financial covenants of any interest-bearing loans and borrowing in the current year.

No changes were made in the objectives, policies or processes for managing capital during the years ended 31st March, 2023 and 31st March, 2022.

MAITHON POWER LTD.

32. Financial Instruments

32.3 Financial risk management objectives and policies

The Company's principal financial liabilities, comprise borrowings, trade and other payables and other financial liabilities. The main purpose of these financial liabilities is to finance the Company's operations and to provide guarantees to support its operations. The Company's principal financial assets include investments, loans, trade and other receivables, cash and cash equivalents, other bank balances, unbilled receivables and other financial assets that derive directly from its operations.

The Company is exposed to market risk, credit risk and liquidity risk. The Company's senior management oversees the management of these risks. The Company's senior management is supported by a risk committee that reviews the financial risks and the appropriate financial risk governance framework for the Company. The Company's financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with the Company's policies and risk objectives. The risk management polices is approved by the board of directors, which is summarized below.

32.3.1 Market risk management

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risk: currency risk, interest rate risk and equity price risk. The impact of equity price risk and currency risk is not material. Financial instruments affected by market risk are loans and borrowings.

The following sensitivity analysis relates to borrowings as at 31st March, 2023 and 31st March, 2022.

a) Interest rate risk management

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to the risk of changes in market interest rates relates primarily to the company's long-term debt obligations with floating interest rates.

The Company manages its interest rate risk by having a balanced portfolio of fixed and variable rate loans and borrowings. The exposure of the Company's borrowings to interest rate changes at the end of the reporting period are as follows :

Particulars	31st March, 2023		31st March, 2022	
	Balance	Percentage	Balance	Percentage
Fixed Rate Borrowings (Includes Current Maturities)	969.87	62%	964.16	58%
Floating Rate Borrowings (Includes Current Maturities)	599.00	38%	695.63	42%
Total	**1,568.87**		**1,659.79**	

Interest rate sensitivity:

The sensitivity analysis below have been determined based on exposure to interest rates for term loans and debentures at the end of the reporting period and the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period in case of term loans and debentures that have floating rates.

If the interest rates had been 50 basis points higher or lower and all the other variables were held constant, the effect on Interest expense for the respective financial years and consequent effect on Company's profit in that financial year would have been as below:

Particulars	31st March, 2023		31st March, 2022	
	50 bps increase	50 bps decrease	50 bps increase	50 bps decrease
Interest expense on loan	(+) ₹ 3.00	(-) ₹ 3.00	(+) ₹ 3.48	(-) ₹ 3.48
Effect on profit before tax	(-) ₹ 3.00	(+) ₹ 3.00	(-) ₹ 3.48	(+) ₹ 3.48

MAITHON POWER LTD. ★ MAITHON ★

32.3.2 Credit risk management

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (i.e. Primarily trade receivables and unbilled revenue) and from its financing activities including loans, foreign exchange transactions and other financial instruments.

Collateral held as security

The Company holds collateral i.e. letter of credit and bank guarantee to partly secure its outstanding trade receivables. Credit risk associated with receivables is mitigated because the receivables are partly secure.

₹ crore

	31st March, 2023	31st March, 2022
Trade Receivables	47.07	45.41
Loans	4.13	65.66
Other Financial Assets	19.35	16.23
Unbilled Revenue	180.61	12.01
Total	**251.16**	**139.31**

Refer Note 9.2 for credit risk and other information in respect of trade receivables. Other receivables as stated above are due from the parties under normal course of the business and as such the Company believes exposure to credit risk to be minimal.

32.3.3 Liquidity risk management

Liquidity risk is the risk that the company will encounter difficulty in meeting obligation, associated with financial liabilities that are settled by delivering cash or another financial asset.

The Company manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities. The Company has access to a sufficient variety of sources of funding. Having regards to the nature of the business wherein the Company is able to generate fixed cash flows over a period of time and to optimize the cost of funding, the Company, from time to time, funds its long -term investment from short-term sources. The short-term borrowings can be rollforward or, if required, can be refinanced from long term borrowings.

	Up to 1 year	1 to 5 years	5+ years	Total	Carrying Amount
31st March, 2023					
Non-Derivatives					
Borrowings #	369.86	850.71	354.56	**1,575.13**	**1,583.17**
Trade Payables	243.83	-	-	**243.83**	**243.83**
Lease Liability	0.31	1.55	4.68	**6.54**	**3.43**
Other Financial Liabilities	48.98	73.40	-	**122.38**	**122.38**
Total Non-Derivative Liabilities	**662.97**	**925.66**	**359.24**	**1,947.87**	**1,952.81**
31st March, 2022					
Borrowings #	325.06	1,063.84	275.71	**1,664.61**	**1,677.25**
Trade Payables	142.12	-	-	**142.12**	**142.12**
Lease Liability	0.36	1.80	4.74	**6.90**	**3.24**
Other Financial Liabilities	80.29	6.39	-	**86.68**	**86.68**
Total Non-Derivative Liabilities	**547.83**	**1,072.03**	**280.45**	**1,900.31**	**1,909.29**

The table has been drawn up based on the undiscounted contractual maturities of the financial liabilities including interest that will be paid on those liabilities upto the maturity of the instruments.

32.4 Commodity price risk

The operating activity of the company involves generation of power and therefore requires continuous supply of coal. The company has entered into fuel supply agreements with Central Coalfields Limited and Bharat Coking Coal Limited and any price fluctuation is passed on to the customers.

MAITHON POWER LTD. ★ MAITHON ★

33. There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

34. **Segment Reporting**

The Company is mainly engaged in the business of generation and selling of power in India. Based on the information reported to the chief operating decision maker (CODM) for the purpose of resource allocation and assessment of performance, there are no other reportable segments in accordance with the requirements of Indian Accounting Standard 108-'Operating Segments', notified under the Companies (Indian Accounting Standards) Rules, 2015.

35. **Significant Events after the Reporting Period**

There were no significant adjusting event that occurred subsequent to the reporting period.

36. **Other Statutory Information**

(i) The Company does not have any Benami property, where any proceeding has been initiated or pending against the Company for holding any Benami property.
(ii) The Company does not have any transactions with companies struck off.
(iii) The Company does not have any charges or satisfaction which is yet to be registered with ROC beyond the statutory period.
(iv) The Company has not traded or invested in Crypto currency or Virtual Currency during the financial year.
(v) The Company has not advanced or loaned or invested funds to any other person(s) or entity(ies), including foreign entities (Intermediaries) with the understanding that the Intermediary shall:
(a) directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the company (Ultimate Beneficiaries) or
(b) provide any guarantee, security or the like to or on behalf of the Ultimate Beneficiaries.
(vi) The Company have not received any fund from any person(s) or entity(ies), including foreign entities (Funding Party) with the understanding (whether recorded in writing or otherwise) that the Company shall:
(a) directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party (Ultimate Beneficiaries) or
(b) provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries.

(vii) The Company have not any such transaction which is not recorded in the books of accounts that has been surrendered or disclosed as income during the year in the tax assessments under the Income Tax Act, 1961 (such as, search or survey or any other relevant provisions of the Income Tax Act, 1961.

37. The Company has defined process to take daily back-up of books of account maintained electronically and maintain the logs of the back-up of such books of account for cyclic period of 90 days only. Hence, this is not been considered as non-compliance with the provisions of The Companies (Accounts) Rules, 2014 (as amended), since, at any point of time, logs are available for a period upto 90 days. However, management is taking steps to configure systems to ensure that logs of daily back up for books of account is maintained on a daily basis so long as they are required to be maintained under applicable statute.

38. Previous year's figures are regrouped / rearranged, where necessary, to confirm to the current year's presentation.

As per our report of even date

For S.R.Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 13th April, 2023

For and on behalf of the Board,

Vijay Namjoshi
Chairman
DIN: 08626492
Place: Mumbai
Date: 13th April, 2023

Joydeep Mukherjee
Director
DIN: 08605394
Place: Kolkata
Date: 13th April, 2023

MAITHON POWER LTD. MAITHON

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 13th April, 2023

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 13th April, 2023

Mona Purandare
Company Secretary
Place: Mumbai
Date: 13th April, 2023

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata - 700 016, India
Tel : +91 33 6134 4000

INDEPENDENT AUDITOR'S REPORT

To the Members of Maithon Power Limited

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of Maithon Power Limited ("the Company"), which comprise the Balance sheet as at March 31 2024, the Statement of Profit and Loss, including the statement of Other Comprehensive Income, the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and notes to the financial statements, including a summary of material accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required by the Companies Act, 2013, as amended ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2024, its profit including other comprehensive income, its cash flows and the changes in equity for the year ended on that date.

Basis for Opinion

We conducted our audit of the financial statements in accordance with the Standards on Auditing (SAs), as specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of our report. We are independent of the Company in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Emphasis of Matter

We draw attention to Note 33 of the financial statements which describes the impact of adjustment related to enabling assets, which had led to a restatement of the financial statements for the year ended March 31, 2023. Our opinion is not modified in respect of this matter.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the financial year ended March 31, 2024. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.
We have determined the matters described below to be the key audit matters to be communicated in our report. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

S.R. Batliboi & Co. LLP

Key audit matters	How our audit addressed the key audit matter
Accrual of Recoverable from Beneficiaries/Payable to Beneficiaries for items which are subject matter of true up in tariff orders *(as described in note 18 of the financial statements)*	
The Company's revenue recognition is guided by the tariff norms prescribed by the Central Electricity Regulatory Commission (CERC) guidelines and the tariff orders passed based on these regulations. Consequently, Recoverable from Beneficiaries/Payable to Beneficiaries is recognized for items which are subject matter of True-up in tariff orders to be notified in future years. Judgement is exercised by management in estimating recoverability / payability of such other assets and liabilities in the books of account. As on 31st March 2024, the Company is carrying an amount of Rs. 272.83 crores as Payable to Beneficiaries (Net of Recoverable from Beneficiaries of Rs. 70.98 crores) which is material to the financial statements of the Company. Considering judgements and estimates involved in various elements of capital and operational costs used in the computation of revenue as per applicable regulations, tariff order of prior year, expected true up in future tariff order and the amount involved we have determined this to be a key audit matter.	Following procedures have been performed to address this key audit matter:- 1. We obtained an understanding from the management, assessed and tested the design and operating effectiveness of the Company's key controls related to accrual/provision of such Recoverable from Beneficiaries/Payable to Beneficiaries. 2. We discussed with the management on the key assumptions and estimates used for recognition of these Recoverable from Beneficiaries/Payable to Beneficiaries with reference to Tariff Regulations and the tariff orders of earlier years, on similar true up and underlying records of the Company. 3. We discussed with management to understand their assessment of each of the qualitative factors and ensured consistency of the management's explanation with the underlying documentation, rules and regulations. 4. We have re-calculated the workings obtained from the management to check the arithmetical accuracy of the calculations. 5. We have also checked the adequacy of the disclosure on these matters in the financial statements of the Company. 6. We have also obtained necessary management representations, as considered necessary.

Other Information

The Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Annual report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether such other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.



Responsibilities of Management for the Financial Statements

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation of these financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act read with the Companies (Indian Accounting Standards) Rules, 2015, as amended. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those Board of Directors are also responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going



concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements for the financial year ended March 31, 2024 and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2020 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the "Annexure 1" a statement on the matters specified in paragraphs 3 and 4 of the Order.
2. As required by Section 143(3) of the Act, we report, to the extent applicable, that:

   (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

   (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books except for the matters stated in the paragraph i(vi) below on reporting under Rule 11(g);

   (c) The Balance Sheet, the Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account;

   (d) In our opinion, the aforesaid financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;

   (e) On the basis of the written representations received from the directors as on March 31, 2024 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2024 from being appointed as a director in terms of Section 164 (2) of the Act;



(f) The modification relating to the maintenance of accounts and other matters connected therewith are as stated in the paragraph (b) above on reporting under Section 143(3)(b) and paragraph (i) vi below on reporting under Rule 11(g);

(g) With respect to the adequacy of the internal financial controls with reference to financial statements and the operating effectiveness of such controls, refer to our separate Report in "Annexure 2" to this report;

(h) In our opinion, the managerial remuneration for the year ended March 31, 2024 has been paid / provided by the Company to its directors in accordance with the provisions of section 197 read with Schedule V to the Act;

(i) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended in our opinion and to the best of our information and according to the explanations given to us:

i. The Company has disclosed the impact of pending litigations on its financial position in its financial statements – Refer Note 28 to the financial statements;

ii. The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses;

iii. There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

iv. a) The management has represented that, to the best of its knowledge and belief, no funds have been advanced or loaned or invested (either from borrowed funds or share premium or any other sources or kind of funds) by the Company to or in any other person(s) or entity(ies), including foreign entities ("Intermediaries"), with the understanding, whether recorded in writing or otherwise, that the Intermediary shall, whether, directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Company ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries;

b) The management has represented that, to the best of its knowledge and belief, no funds have been received by the Company from any person(s) or entity(ies), including foreign entities ("Funding Parties"), with the understanding, whether recorded in writing or otherwise, that the Company shall, whether, directly or indirectly, lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries; and

c) Based on such audit procedures performed that have been considered reasonable and appropriate in the circumstances, nothing has come to our notice that has caused us to believe that the representations under sub-clause (a) and (b) contain any material misstatement.

v. The interim dividend declared and paid by the Company during the year is in accordance with section 123 of the Act.

As stated in note 14 to the financial statements, the Board of Directors of the Company has proposed final dividend for the year which is subject to the approval of the members at the



ensuing Annual General Meeting. The dividend declared is in accordance with section 123 of the Act to the extent it applies to declaration of dividend.

vi. Based on our examination which included test checks, the Company has used accounting software for maintaining its books of account which has a feature of recording audit trail (edit log) facility and the same has operated throughout the year for all relevant transactions recorded in the software except that, audit trail feature is not enabled for direct changes to data when using certain access rights, as described in note 38 to the financial statements. Further, during the course of our audit we did not come across any instance of audit trail feature being tampered with in respect of the accounting software.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar Sarkar

per Bhaswar Sarkar
Partner
Membership Number: 055596
UDIN: 24055596BKFNZX9465
Place of Signature: Kolkata
Date: April 16, 2024

S R Batliboi & Co. LLP Kolkata

S.R. BATLIBOI & CO. LLP
Chartered Accountants

Annexure '1' referred to in paragraph under the heading "Report on other legal and regulatory requirements" of our report of even date

Re: Maithon Power Limited ("the Company")

In terms of the information and explanations sought by us and given by the Company and the books of account and records examined by us in the normal course of audit and to the best of our knowledge and belief, we state that:

(i)(a)(A) The Company has maintained proper records showing full particulars, including quantitative details and situation of property, plant and equipment.

(i)(a)(B) The Company has maintained proper records showing full particulars of intangibles assets.

(i)(b) The Company has verified part of its property plant and equipment during the year in accordance with its regular programme of verification of these assets whereby all the assets are physically verified over a period of 3 years which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. No material discrepancies were noticed on such verification.

(i)(c) The title deeds of immovable properties (other than properties where the Company is the lessee and valid lease agreements are duly executed in favour of the lessee) disclosed in note 5.8 to the financial statements included in Property, Plant and Equipment are held in the name of the Company, except the following:

Description of Property	Amount in INR crores	Held in the name of	Whether promoter, director or their relative or employee	Period held – indicate range, where appropriate	Reason for not being held in the name of Company
Raiyati Land (Free hold) located at Maithon, Jharkhand.	159.80	Damodar Valley Corporation (DVC)	Promoter	December 2008	In accordance with the term of agreement dated September 2, 2005 with DVC, the title deed of the land parcel were to be executed in favour of the Company by DVC. We have been informed that such title deeds are yet to be executed in favour of the Company pending mutation in favour of DVC by Government of Jharkhand.
Railway Land (Freehold Land) located at Maithon, Jharkhand.	137.12	DVC	Promoter	October 2008 to March 2015	

Forest land (Leasehold) located at Maithon, Jharkhand	10.68	Government of Jharkhand	No	May 2008	Lease deed yet to be executed in favour of the Company by the Government of Jharkhand.
GM land-Plant (Leasehold) located at Maithon, Jharkhand	37.05	Government of Jharkhand	No	July 2010	DVC had surrendered their leasehold rights over the land parcel in favour of the Government of Jharkhand in a prior year to enable the Government of Jharkhand to lease the same land parcel in favour of the Company. The Company is yet to receive a demand from the Government of Jharkhand for execution of lease and hence the lease deed in the name of the Company is yet to be executed.
GM land-Railway (Leasehold) located at Maithon, Jharkhand	8.96	Government of Jharkhand	No	July 2010	Lease deed yet to be executed in favour of the Company by the Government of Jharkhand.
GM land-Railway (Leasehold) located at Maithon, Jharkhand	5.02	Government of Jharkhand	No	July 2010	

(i)(d) The Company has not revalued its Property, Plant and Equipment (including Right of use assets) or intangible assets during the year.

(i)(e) As represented to us by the management, there are no proceedings initiated or are pending against the Company for holding any benami property under the Prohibition of Benami Property Transactions Act, 1988 and rules made thereunder.

(ii)(a) The management has conducted physical verification of inventory at reasonable intervals during the year and no material discrepancies were noticed on such physical verification. In



our opinion the coverage and the procedure of such verification by the management is appropriate.

(ii)(b) As disclosed in note 19.1 to the financial statements, the Company has been sanctioned working capital limits in excess of Rs. five crores in aggregate from banks during the year on the basis of security of current assets of the Company. The quarterly returns/statements filed by the Company with such banks are in agreement with the books of account of the Company. The Company does not have any sanctioned working capital limits from financial institutions.

(iii)(a) During the year the Company has not provided advances in the nature of loans, stood guarantee or provided security to companies, firms, limited liability partnerships or any other parties. During the year, the Company has provided loan to a Company as follows:

Particulars	Amount in INR crores
Aggregate amount granted/ provided during the year	
- Subsidiaries - Joint Ventures - Associates - Others	150.00
Balance outstanding as at balance sheet date in respect of above cases - Subsidiaries - Joint Ventures - Associates - Others	Nil

(iii)(b) During the year the Company has not provided any guarantee or security and has not granted advances in the nature of loans to companies, firms, limited liability partnerships or any other parties. The investments made and the terms and conditions of the loans granted are not prejudicial to the Company's interest.

(iii)(c) The Company has not granted advances in the nature of loans to companies, firms, Limited Liability Partnerships or any other parties. The Company has granted loans during the year to a company where the schedule of repayment of principal and payment of interest has been stipulated and the repayment or receipts are regular.

(iii)(d) There are no amounts of loans and advances in the nature of loans granted to companies, firms, limited liability partnerships or any other parties which are overdue for more than ninety days.

(iii)(e) There were no loans or advances in the nature of loan granted to companies, firms, Limited Liability Partnerships or any other parties which was fallen due during the year, that have been renewed or extended or fresh loans granted to settle the overdues of existing loans given to the same parties.

(iii)(f) The Company has not granted any loans or advances in the nature of loans, either repayable on demand or without specifying any terms or period of repayment to companies, firms, Limited Liability Partnerships or any other parties. Accordingly, the requirement to report on clause 3(iii)(f) of the Order is not applicable to the Company and hence not commented upon.



(iv) There are no loans, investments, guarantees, and security in respect of which provisions of sections 185 and 186 of the Companies Act, 2013 are applicable. Therefore, the requirement to report on clause 3(iv) of the Order is not applicable to the Company and hence not commented upon.

(v) The Company has neither accepted any deposits from the public nor accepted any amounts which are deemed to be deposits within the meaning of sections 73 to 76 of the Companies Act, 2013 and the rules made thereunder, to the extent applicable. Therefore, the requirement to report on clause 3(v) of the Order is not applicable to the Company and hence not commented upon.

(vi) We have broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section 148(1) of the Companies Act, 2013, related to the generation of electricity, and are of the opinion that, prima facie, the specified accounts and records have been made and maintained. We have not, however, made a detailed examination of the same.

(vii)(a) The Company is regular in depositing with appropriate authorities undisputed statutory dues including goods and services tax, provident fund, employees' state insurance, income-tax, cess and other statutory dues applicable to it. During the year, the Company did not have any undisputed dues towards sales-tax, service tax, duty of customs, duty of excise and value added tax. No undisputed amounts payable in respect of aforesaid dues were outstanding at the year-end for a period of more than six months from dates when they became payable.

(vii)(b) There are no dues of goods and services tax, provident fund, employees' state insurance, income tax, sales-tax, service tax, customs duty, excise duty, value added tax, cess and other applicable statutory dues which have not been deposited on account of any dispute.

(viii) As represented to us by the management, the Company has not surrendered or disclosed any transaction, previously unrecorded in the books of account, in the tax assessments under the Income Tax Act, 1961 as income during the year. Therefore, the requirement to report on clause 3(viii) of the Order is not applicable to the Company and hence not commented upon.

(ix)(a) The Company has not defaulted in repayment of loans or other borrowings or in the payment of interest thereon to any lender.

(ix)(b) As represented to us by the management, the Company has not been declared wilful defaulter by any bank or financial institution or government or any government authority.

(ix)(c) Based on an overall examination of the Balance Sheet and information, explanations and representations provided to us, term loans were applied for the purpose for which they were obtained.

(ix)(d) Based on an overall examination of the Balance Sheet and information, explanations and representations provided to us, no funds raised on short-term basis have been used for long-term purposes by the Company.

(ix)(e) and (f) The Company does not have any subsidiary, associate or joint venture. Therefore, the requirement to report on clause 3(ix)(e) and (f) of the Order are not applicable to the Company and hence not commented upon.



(x)(a) The Company has not raised any money during the year by way of initial public offer / further public offer (including debt instruments). Therefore, the requirement to report on clause 3(x)(a) of the Order is not applicable to the Company and hence not commented upon.

(x)(b) The Company has not made any preferential allotment or private placement of shares /fully or partially or optionally convertible debentures during the year under audit. Therefore, the requirement to report on clause 3(x)(b) of the Order is not applicable to the Company and hence not commented upon.

(xi)(a) As represented to us by the management, no fraud by the Company or no material fraud on the Company has been noticed or reported during the year.

(xi)(b) During the year, no report under sub-section (12) of section 143 of the Companies Act, 2013 has been filed by cost auditor/ secretarial auditor or by us in Form ADT – 4 as prescribed under Rule 13 of Companies (Audit and Auditors) Rules, 2014 with the Central Government.

(xi)(c) We have taken into consideration the whistle blower complaints received by the Company during the year while determining the nature, timing and extent of audit procedures.

(xii) The Company is not a nidhi Company as per the provisions of the Companies Act, 2013. Therefore, the requirement to report on clauses 3(xii)(a), (b) and (c) of the Order is not applicable to the Company and hence not commented upon.

(xiii) Transactions with the related parties are in compliance with sections 177 and 188 of Companies Act, 2013 where applicable and the details have been disclosed in the notes to the financial statements, as required by the applicable accounting standards.

(xiv)(a) The Company has an internal audit system commensurate with the size and nature of its business.

(xiv)(b) The internal audit reports of the Company for the year under audit which were issued till date of this audit report, have been considered by us.

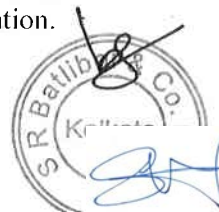
(xv) The Company has not entered into any non-cash transactions with its directors or persons connected with its directors. Therefore, the requirement to report on clause 3(xv) of the Order is not applicable to the Company and hence not commented upon.

(xvi)(a) The provisions of section 45-IA of the Reserve Bank of India Act, 1934 (2 of 1934) are not applicable to the Company. The requirement to report on clause (xvi)(a) of the Order is not applicable to the Company and hence not commented upon.

(xvi)(b) As represented to us by management, the Company has not conducted any Non-Banking Financial or Housing Finance activities without obtained a valid Certificate of Registration (CoR) from the Reserve Bank of India as per the Reserve Bank of India Act, 1934.

(xvi)(c) The Company is not a Core Investment Company (CIC) as defined in the regulations made by Reserve Bank of India. The requirement to report on clause 3(xvi) of the Order is not applicable to the Company and hence not commented upon.

(xvi)(d) As represented to us by the management, the Group has five CICs which are registered with the Reserve Bank of India and two CICs which are not required to be registered with the Reserve Bank of India. However, we have not independently verified such representation.



(xvii) The Company has not incurred cash losses in the current financial year and in the immediately preceding financial year.

(xviii) There has been no resignation of the statutory auditors during the year. The requirement to report on Clause 3(xviii) of the Order is not applicable to the Company and hence not commented upon.

(xix) On the basis of the financial ratios disclosed in note 31 to the financial statements, ageing and expected dates of realization of financial assets and payment of financial liabilities, other information accompanying the financial statements, our knowledge of the Board of Directors and management plans and based on our examination of the evidence supporting the assumptions, nothing has come to our attention, which causes us to believe that any material uncertainty exists as on the date of the audit report that Company is not capable of meeting its liabilities existing at the date of balance sheet as and when they fall due within a period of one year from the balance sheet date. We, however, state that this is not an assurance as to the future viability of the Company. We further state that our reporting is based on the facts up to the date of the audit report and we neither give any guarantee nor any assurance that all liabilities falling due within a period of one year from the balance sheet date, will get discharged by the Company as and when they fall due.

(xx)(a) In respect of other than ongoing projects, there are no unspent amounts that are required to be transferred to a fund specified in Schedule VII of the Companies Act (the Act), in compliance with second proviso to sub section 5 of section 135 of the Act. This matter has been disclosed in note 25(ii) to the financial statements.

(xx)(b) All amounts that are unspent under section (5) of section 135 of Companies Act, pursuant to any ongoing project, has been transferred to special account in compliance of with provisions of sub section (6) of section 135 of the said Act. This matter has been disclosed in note 25(ii) to the financial statements.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar Sarkar

per Bhaswar Sarkar
Partner
Membership Number: 055596
UDIN: 24055596BKFNZX9465
Place of Signature: Kolkata
Date: April 16, 2024



S.R. BATLIBOI & CO. LLP
Chartered Accountants

ANNEXURE TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE FINANCIAL STATEMENTS OF MAITHON POWER LIMTED

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls with reference to financial statements of ("the Company") as of March 31, 2024 in conjunction with our audit of the financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's Management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India ("ICAI"). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditor's Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls with reference to these financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing, as specified under section 143(10) of the Act, to the extent applicable to an audit of internal financial controls, both issued by ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls with reference to these [standalone]financial statements was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls with reference to these financial statements and their operating effectiveness. Our audit of internal financial controls with reference to financial statements included obtaining an understanding of internal financial controls with reference to these financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls with reference to these financial statements.

Meaning of Internal Financial Controls With Reference to these Financial Statements

A company's internal financial controls with reference to financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

S R Batliboi & Co. LLP Kolkata

A company's internal financial controls with reference to financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls With Reference to Financial Statements

Because of the inherent limitations of internal financial controls with reference to financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls with reference to financial statements to future periods are subject to the risk that the internal financial control with reference to financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, adequate internal financial controls with reference to financial statements and such internal financial controls with reference to financial statements were operating effectively as at March 31, 2024, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note issued by the ICAI.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar Sarkar

per Bhaswar Sarkar
Partner
Membership Number: 055596
UDIN: 24055596BKFNZX9465
Place of Signature: Kolkata
Date: April 16, 2024



MAITHON POWER LIMITED
Balance Sheet as at 31st March, 2024

Particulars	Notes	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores (Restated)
Assets			
Non-current Assets			
(a) Property, Plant and Equipment	5.7	2,867.31	3,096.53
(b) Capital Work-in-Progress	6	576.27	395.28
(c) Other Intangible Assets	7	0.08	0.15
(d) Right of Use Assets	8	90.73	60.48
(e) Financial Assets			
(i) Loans	9.5	0.11	0.13
(ii) Other Financial Assets	9.6	10.10	18.57
(f) Deferred Tax Assets (Net)	17	141.66	68.50
(g) Non-current Tax Assets (Net)	10	15.65	14.01
(h) Other Non-current Assets	11	24.56	56.90
Total Non-current Assets		3,726.47	3,710.55
Current Assets			
(a) Inventories	12	303.79	258.61
(b) Financial Assets			
(i) Investments	9.1	105.82	4.00
(ii) Trade Receivables	9.2	451.96	134.50
(iii) Unbilled Revenue	9.3	70.76	47.07
(iv) Cash and Cash Equivalents	9.4	21.15	180.61
(v) Loans	9.5	0.02	0.02
(vi) Other Financial Assets	9.6	0.65	0.78
(c) Other Current Assets	11	66.87	130.40
Total Current Assets		1,021.02	755.99
Total Assets		**4,747.49**	**4,466.54**
Equity and Liabilities			
Equity			
(a) Equity Share Capital	13	1,508.92	1,508.92
(b) Other Equity	14	878.00	680.35
Total Equity		2,386.92	2,189.27
Liabilities			
Non-current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	15.1	1,109.78	1,199.01
(ii) Lease Liabilities	15.2	51.03	3.43
(iii) Other Financial Liabilities	15.3	47.31	73.40
(b) Provisions	16	12.14	8.66
(c) Other Non-current Liabilities	18	141.66	68.50
Total Non-current Liabilities		1,361.92	1,353.00
Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	19.1	490.66	416.17
(ii) Lease Liabilities	15.2	0.33	0.06
(iii) Trade Payables	19.2		
(a) Total outstanding dues of micro enterprises and small enterprises, and		31.99	21.42
(b) Total outstanding dues of trade payables other than micro enterprises and small enterprises		294.84	222.41
(iv) Other Financial Liabilities	15.3	41.75	63.28
(b) Provisions	16	1.20	0.37
(c) Current Tax Liabilities (Net)	10	-	3.74
(d) Other Current Liabilities	18	137.88	196.82
Total Current Liabilities		998.65	924.27
Total Liabilities		2,360.57	2,277.27
Total Equity and Liabilities		**4,747.49**	**4,466.54**

The accompanying notes form an integral part of the Financial Statements

As per our report of even date

For S. R. Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: **301003E/E300005**

per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 16th April, 2024

S.R. Batliboi & Co. LLP Kolkata

For and on behalf of the Board,
CIN : U74899MH2000PLC267297

MAITHON POWER LTD. MAITHON

Ashish Khanna
Chairman
DIN: 06699527
Place: Mumbai
Date: 16th April, 2024

Joydeep Mukherjee
Director
DIN: 08605394
Place: Kolkata
Date: 16th April, 2024

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 16th April, 2024

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 16th April, 2024

Mona Purandare
Company Secretary
Place: Mumbai
Date: 16th April, 2024

MAITHON POWER LIMITED

Statement of Profit and Loss for the year ended 31st March, 2024

	Notes	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores (Restated)
(I) Revenue from Operations	20	3,360.32	3027.95
(II) Other Income	21	15.13	49.67
(III) **Total Income**		**3,375.45**	**3,077.62**
(IV) Expenses			
Cost of Fuel Consumed		2,137.75	1,943.68
Employee Benefits Expense	22	51.87	48.45
Depreciation and Amortisation Expense	23	297.30	286.83
Finance Costs	24	111.94	119.48
Other Expenses	25	320.96	308.24
Total Expenses		**2,919.82**	**2,706.68**
(V) **Profit before tax for the year**		**455.63**	**370.94**
(VI) **Tax Expense**	26		
Current Tax expenses (Including tax in respect of earlier years)		80.09	64.63
Deferred Tax Charge/(Credit)		(73.16)	(32.89)
		6.93	**31.74**
(VII) **Profit after tax for the year**		**448.70**	**339.20**
(VIII) **Other Comprehensive Income**			
Add/(Less):			
(i) Items that will not be reclassified to Profit and Loss			
(a) Remeasurement (loss) on Defined Benefit Plans		(1.28)	(1.00)
(ii) Tax relating to items that will not be reclassified to Profit & Loss			
(a) Current Tax on above		0.22	0.18
Total Other Comprehensive Income (Net of taxes)		**(1.06)**	**(0.82)**
(IX) **Total Comprehensive Income for the year**		**447.64**	**338.38**
(X) **Earnings Per Equity Share (Face Value ₹ 10/- Per Share)**	29		
Basic & Diluted (₹)		2.97	2.25

The accompanying notes form an integral part of the Financial Statements

As per our report of even date

For S. R. Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 16th April, 2024

For and on behalf of the Board,
CIN : U74899MH2000PLC267297

Ashish Khanna
Chairman
DIN: 06699527
Place: Mumbai
Date: 16th April, 2024

Joydeep Mukherjee
Director
DIN: 08605394
Place: Kolkata
Date: 16th April, 2024

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 16th April, 2024

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 16th April, 2024

Mona Purandare
Company Secretary
Place: Mumbai
Date: 16th April, 2024

MAITHON POWER LIMITED

Statement of Cash Flow for the year ended 31st March, 2024

Particulars	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores (Restated)
A. Cash Flow from Operating Activities		
Profit before Taxes for the year	**455.63**	**370.94**
Adjustments to reconcile profit before tax to net operating cash flows		
Depreciation and Amortisation Expenses	297.30	286.83
Finance Costs	111.94	119.48
Interest Income	(15.45)	(15.08)
Loss on disposal of Property, Plant and Equipment (Net)	7.12	3.95
Liabilities / provisions written back	-	(28.04)
Gain on sale/fair valuation of Current Investments measured at FVTPL	(2.17)	(3.56)
	398.75	**363.58**
Operating profit before changes in Operating Assets & Liabilities	**854.38**	**734.52**
Working Capital adjustments:		
Adjustments for (increase) / decrease in Assets:		
Trade Receivables	(317.45)	(60.75)
Unbilled Revenue	(23.69)	(1.66)
Inventories	(45.18)	(45.88)
Other Current Assets	63.53	(3.41)
Other Non-Current Assets	16.74	(3.93)
Other Current Financial Assets	(0.03)	-
Other Non Current Financial Assets	8.47	(5.08)
	(297.61)	**(120.71)**
Adjustments for increase / (decrease) in Liabilities:		
Trade Payables	81.64	101.71
Other Non Current Liabilities	73.16	32.89
Other Current Liabilities	(58.94)	1.16
Other Current Financial liabilities	-	(40.28)
Other Non Current Financial liabilities	(0.23)	0.23
Current provisions	0.83	(1.12)
Non-Current provisions	3.50	0.58
	99.96	**95.17**
Cash Generated from Operations	**656.73**	**708.98**
Income taxes paid (Net of Refund)	(85.24)	(60.65)
Net Cash flow from Operating Activities	**571.49**	**648.33**
B. Cash Flow from Investing Activities		
Capital expenditure on Property, Plant and Equipment and Other Intangible assets (including capital advances)	(236.02)	(145.29)
Purchase of Current Investments	(1,477.79)	(1,575.45)
Proceeds from sale of Current Investments	1,378.13	1,640.57
Interest Received	15.80	17.04
Loan given	(150.00)	(450.03)
Loan repaid	150.02	900.00
Net Cash from/(used in) in Investing Activities	**(319.86)**	**386.84**
C. Cash Flow from Financing Activities		
Proceeds from Non Current Borrowings	129.10	235.58
Repayment of Non Current Borrowings	(369.86)	(325.06)
Proceeds from Current Borrowings	244.57	50.68
Repayment of Current Borrowings	(18.35)	(61.44)
Interest Paid	(145.05)	(136.33)
Dividend Paid	(250.00)	(630.00)
Repayment of Lease Liability	(1.49)	-
Net Cash from/(used in) Financing Activities	**(411.08)**	**(866.57)**
Net Increase/(Decrease) in Cash and Cash Equivalents	(159.45)	168.60
Cash and Cash Equivalents as at 1st April (Opening Balance)	180.61	12.01
Cash and Cash Equivalents as at 31st March (Closing Balance)	**21.15**	**180.61**

Cash and Cash Equivalents include:	**As at 31st March, 2024 ₹ Crores**	**As at 31st March, 2023 ₹ Crores**
(i) Balances with banks		
In Current Accounts	6.15	180.61
In Deposit Accounts (with original maturity less than three months)	15.00	-
	21.15	**180.61**

Notes:

The above cash flow has been prepared under the "Indirect Method" as set out in Indian Accounting Standard (Ind AS) 7 - Statement of Cash Flows.

The accompanying notes form an integral part of the Financial Statements

As per our report of even date

For S. R. Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

Bhaswar Sarkar

per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 16th April, 2024

S R Batliboi & Co. LLP Kolkata

For and on behalf of the Board,
CIN : U74899MH2000PLC267297

Ashish Khanna	**Joydeep Mukherjee**	
Chairman	Director	
DIN: 06699527	DIN: 08605394	
Place: Mumbai	Place: Kolkata	
Date: 16th April, 2024	Date: 16th April, 2024	
Vijayant Ranjan	**Kajal Kumar Singh**	**Mona Purandare**
Chief Executive Officer	Chief Financial Officer	Company Secretary
Place: Dhanbad	Place: Dhanbad	Place: Mumbai
Date: 16th April, 2024	Date: 16th April, 2024	Date: 16th April, 2024

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED

Statement of Changes in Equity for the year ended 31st March, 2024

A. Equity Share Capital

Equity Shares of ₹ 10 each issued, subscribed and fully paid	No. of Shares	Amount (₹ Crores)
Balance as at 1st April, 2022	1,50,89,17,729	1,508.92
Balance as at 31st March, 2023	1,50,89,17,729	1,508.92
Balance as at 1st April, 2023	1,50,89,17,729	1,508.92
Balance as at 31st March, 2024	1,50,89,17,729	1,508.92

B. Other Equity

₹ Crores

	Debenture Redemption Reserve	Retained Earnings	Total
Balance as at 1st April, 2022	**129.05**	**842.92**	**971.97**
Profit for the year (Previously reported)	-	345.32	**345.32**
Impact of incremental depreciation (Refer note 33)		(6.12)	**(6.12)**
Other Comprehensive Income for the year (Net of Tax)	-	(0.82)	**(0.82)**
Total Comprehensive Income	**-**	**338.38**	**338.38**
Dividend Paid	-	(630.00)	**(630.00)**
	-	**(630.00)**	**(630.00)**
Balance as at 31st March, 2023 (Restated)	**129.05**	**551.30**	**680.35**
Balance as at 1st April, 2023 (Restated)	**129.05**	**551.30**	**680.35**
Profit for the year	-	448.70	**448.70**
Other Comprehensive Income for the year (Net of Tax)	-	(1.06)	**(1.06)**
Total Comprehensive Income	**-**	**447.64**	**447.64**
Dividend Paid	-	(250.00)	**(250.00)**
Transfer from Debenture Redemption Reserve	(79.42)	79.42	-
	(79.42)	**(170.58)**	**(250.00)**
Balance as at 31st March, 2024	**49.63**	**828.37**	**878.00**

The accompanying notes form an integral part of the Financial Statements

As per our report of even date

For S. R. Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 16th April, 2024

For and on behalf of the Board,
CIN-U74899MH2000PLC267297

Ashish Khanna
Chairman
DIN: 06699527
Place: Mumbai
Date: 16th April, 2024

Joydeep Mukherjee
Director
DIN: 08605394
Place: Kolkata
Date: 16th April, 2024

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 16th April, 2024

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 16th April, 2024

Mona Purandare
Company Secretary
Place: Mumbai
Date: 16th April, 2024

1. Corporate Information

MAITHON POWER LIMITED ('the Company'), has been set up pursuant to an agreement entered into between The Tata Power Company Limited (TPCL) and Damodar Valley Corporation (DVC) with 74% and 26% shareholding respectively, to operate and maintain Electric power generating stations. The Company has set up a thermal power generation plant (comprising of two units of 525 MW each namely 'Unit I and Unit II') at Maithon, Jharkhand with a total capacity of 1050 MW. Unit I and Unit II of the project were commissioned on 1st September, 2011 and 24th July, 2012 respectively. The registered office of the Company is Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400009, Maharashtra, India.

The financial statements were approved for issue in accordance with a resolution of the directors on 16th April, 2024.

2. Material Accounting Policies

2.1 Statement of compliance and basis of preparation

The financial statements of the Company have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 (as amended from time to time) and presentation requirements of Division II of Schedule III to the Companies Act, 2013, (Ind AS compliant Schedule III).

The financial statements have been prepared on a historical cost basis except for certain financial assets and liabilities measured at fair value (refer accounting policy regarding financial instruments).

The financial statements are presented in Indian Rupees (₹) and all amounts are in Crore unless otherwise stated.

The Company has prepared the financial statements on the basis that it will continue to operate as a going concern.

3. Other Material Accounting Policies (Other than those mentioned in respective notes)

3.1 Current versus non-current classification

The Company presents assets and liabilities in the balance sheet based on current/ non-current classification. An asset is treated as current when it is:

- Expected to be realised or intended to be sold or consumed in normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realised within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The Company has identified twelve months as its operating cycle.

3.2 Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities measured at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in statement of profit and loss.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

3. Other Material Accounting Policies (Other than those mentioned in respective notes) (Continue)

3.3 Financial Assets

All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis.Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets with in the time frame established by regulation or convention in the market place. All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value,depending on the classification of the financial assets.

3.3.1 Financial assets at amortised cost

A 'financial asset' is measured at the amortised cost if both the following conditions are met:
a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate EIR((Effective interest method). The EIR((Effective interest method) amortisation is included in finance income in the statement of profit or loss.

3.3.2 Financial assets at fair value through other comprehensive income(FVTOCI)

A 'financial asset' is classified as at the FVTOCI if both of the following criteria are met:
a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset's contractual cash flows represent SPPI.

On initial recognition, the Company makes an irrevocable election on an instrument-by-instrument basis to present the subsequent changes in fair value in other comprehensive income pertaining to investments in equity instruments, other than equity instruments which are held for trading. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instruments through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on sale of the investments.

3.3.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Company irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading.
Other financial assets are measured at fair value through profit or loss unless it is measured at amortised cost or at fair value through other comprehensive income on initial recognition. The transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognized in statement of profit or loss.

3.3.4 Derecognition of Financial Assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the Company's balance sheet) when:

i) the right to receive cash flows from the asset have expired, or
ii) the Company has transferred its right to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its right to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Company continues to recognise the transferred asset to the extent of the Company's continuing involvement. In that case, the Company also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

3.3.5 Impairment of financial assets

The Company assesses at each date of balance sheet whether a financial asset or a group of financial assets is impaired. Ind AS 109 requires expected credit losses to be measured through a loss allowance. The Company recognises lifetime expected losses for all contract assets and / or all trade receivables that do not constitute a financing transaction. For all other financial assets, expected credit losses are measured at an amount equal to the 12 month expected credit losses or at an amount equal to the life time expected credit losses if the credit risk on the financial asset has increased significantly since initial recognition.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD.

3. **Other Material Accounting Policies (Other than those mentioned in respective notes) (Continue)**

3.4 Financial Liabilities

All financial liabilities are recognised initially at fair value and in case of borrowings and payables, net of directly attributable transaction cost. For purposes of subsequent measurement, financial liabilities are classified in two categories:

a) Financial liabilities at fair value through profit or loss
b) Financial liabilities at amortised cost (borrowings)

3.4.1 Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Gains or losses on liabilities held for trading are recognised in the profit or loss. The Company has not designated any financial liability as at fair value through profit or loss.

3.4.2 Financial liabilities at amortised cost (borrowings)

After initial recognition, interest-bearing borrowings are subsequently measured at amortised cost using the EIR(Effective interest Rate). Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR(Effective interest Rate) amortisation process. The EIR(Effective interest Rate) amortisation is included as finance costs in the statement of profit and loss.

3.4.3 Derecognition of Financial Liabilities

A Financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified , such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability . The difference in the respective carrying amounts is recognised in the statement of profit and loss.

3.5 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is an enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

3.6 Dividend Distribution to equity shareholders of the Company

The Company recognises a liability to make dividend distributions to its equity holders when the distribution is authorised and the distribution is no longer at the discretion of the Company . As per the corporate laws in India, a distribution is authorised when it is approved by the shareholders. A corresponding amount is recognised directly in equity.
In case of Interim Dividend, the liability is recognised on its declaration by the Board of Directors.

3.7 Cash and cash equivalents

Cash and cash equivalents in the Balance Sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less,that are readily convertible to a known amount of cash and subject to an insignificant risk of changes in value. Cash and cash equivalents include balances with banks which are unrestricted for withdrawal and usage.

4. **Significant accounting judgements, estimates and assumptions**

In the application of the Company's accounting policies, the management of the Company is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods. Detailed information about each of these estimates and judgements is included in relevant notes together with information about the basis of calculation for each affected line item in the financial statements.

The areas involving critical estimates or judgements are:

a) Estimation of current tax and deferred tax expense (including Minimum alternate tax credit) - Note 17 and Note 26
b) Recoverable from Beneficiaries / Payable to Beneficiaries(Net) - Note 18
c) Estimation of defined benefit obligations- Note 16

d) Judgement to estimate the amount of provision required or to determine required disclosure related to litigation and claims against the Company - Note 28.

Estimates and judgement are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the Company and that are believed to be reasonable under the circumstances.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD.

5. Property, Plant and Equipment

5.1 Accounting Policy

Property, plant and equipment (PPE) is stated at cost less accumulated depreciation and accumulated impairment losses, if any. Cost includes purchase price (net of trade discount and rebates) and any directly attributable cost of bringing the asset to its working condition for its intended use and for qualifying assets, borrowing costs capitalised in accordance with Ind AS 23. When significant parts of plant and equipment are required to be replaced at intervals, the Company depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in the statement of profit and loss as incurred.

Certain capital expenditures incurred by the Company, which although does not directly increase the future economic benefits of any particular existing items of property, plant and equipment (PPE), may be necessary for the Company to obtain future economic benefits from its other assets. Such capital expenditures are allocated to the major items of property, plant and equipment as enabling asset in accordance with Indian Accounting Standard (Ind AS) 16 "Property, Plant and Equipment".

5.2 Subsequent Cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably. All other repair and maintenance costs are recognized in the statement of profit or loss as incurred.

5.3 Depreciation

Depreciation commences when the assets are ready for the intended use.

Regulatory Assets

Depreciation on property, plant and equipment in respect of electricity business of the Company is covered under Part B of Schedule II of the Companies Act, 2013, has been provided on the straight line method at the rates using the methodology required by relevant provisions of Central Electricity Regulatory Commission (CERC).

Depreciation is calculated annually based on Straight Line Method and at rates specified in Appendix-I to CERC regulations for a period of 12 years from the date of commercial operation of the station. The remaining depreciable value as on 31st March of the year closing after a period of 12 years is spread over the balance useful life of the assets.

Non-Regulatory Assets:

Depreciation on all other assets is recognised on the cost of assets (other than freehold land) less their residual values over their estimated useful lives, using the straight-line method.

5.4 Useful lives of tangible assets:

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis. The Company, based on technical assessment made by technical expert and management estimate, depreciates certain items of building, plant and equipments over estimated useful lives which are different from the useful lifes prescribed in Schedule II to the Companies Act, 2013. The management believes that these estimated useful lives are realistic and reflect fair approximation of the period over which the assets are likely to be used.

Type of Asset	Useful Lives
Buildings-Plant	25 Years
Buildings-Others	25 Years
Plant and Equipment	25 Years
Computer	3 Years
Furniture and Fixtures	5 to 10 years
Office Equipment	5 to 10 years
Motor vehicles etc	5 Years

5.5 Derecognition of tangible assets

An item of Property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipments is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the statement of profit and loss.

5.6 Impairment of tangible and intangible assets

The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets of or Group of assets.

When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Impairment losses of tangible and intangible assets are recognised in the statement of profit and loss.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March, 2024

5.7. Property, Plant and Equipment (Continue)

₹ Crores

Description	Freehold Land	Buildings - Plant	Buildings - Others	Railway sidings	Plant and Equipment	Overhead Electrification	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation (Refer note below)										
Balance as at 1st April, 2023	299.91	299.79	199.83	-	4,960.42	-	13.83	7.52	3.40	**5,784.70**
Additions	-	3.97	3.44	-	46.81	-	0.29	0.30	1.79	**56.60**
Disposals	-	(0.16)	(0.03)	-	(17.05)	-	(0.55)	(1.09)	-	**(18.88)**
Balance as at 31st March, 2024	**299.91**	**303.60**	**203.24**	**-**	**4,990.18**	**-**	**13.57**	**6.73**	**5.19**	**5,822.42**
Accumulated depreciation										
Balance as at 1st April, 2023	-	91.28	51.63	-	2,524.17	-	12.14	6.61	2.34	**2,688.17**
Depreciation Expense (Refer Note 23)	-	5.14	7.39	-	265.35	-	0.34	0.21	0.23	**278.66**
Disposal of assets	-	(0.06)	(0.02)	-	(10.13)	-	(0.49)	(1.02)	-	**(11.72)**
Balance as at 31st March, 2024	**-**	**96.36**	**59.00**	**-**	**2,779.39**	**-**	**11.99**	**5.80**	**2.57**	**2,955.11**
Net carrying amount										
As at 31st March, 2024	**299.91**	**207.24**	**144.24**	**-**	**2,210.79**	**-**	**1.58**	**0.93**	**2.62**	**2,867.31**
As at 31st March, 2023	**299.91**	**208.51**	**148.20**	**-**	**2,436.25**	**-**	**1.69**	**0.91**	**1.06**	**3,096.53**

₹ Crores

Description	Freehold Land	Buildings - Plant	Buildings - Others	Railway sidings	Plant and Equipment	Overhead Electrification	Furniture and Fixtures	Office Equipment	Motor Vehicles	Total
Cost or Valuation (Refer note below)										
Balance as at 1st April, 2022	299.91	263.98	179.46	492.84	4,425.99	47.39	13.55	7.28	2.67	**5,733.07**
Additions	-	15.67	1.01	0.53	42.87	-	0.28	0.35	0.98	**61.69**
Disposals/Adjustments (Refer Note 33)	-	20.14	19.36	(493.37)	491.56	(47.39)	-	(0.11)	(0.25)	**(10.06)**
Balance as at 31st March, 2023	**299.91**	**299.79**	**199.83**	**-**	**4,960.42**	**-**	**13.83**	**7.52**	**3.40**	**5,784.70**
Accumulated depreciation										
Balance as at 1st April, 2022	-	78.98	45.27	17.20	2,247.96	2.77	11.38	6.64	2.50	**2,412.70**
Depreciation Expense (Refer Note 23)	-	8.84	5.95	16.43	239.22	2.53	0.76	0.08	0.08	**273.89**
Disposals/Adjustments (Refer Note 33)	-	3.46	0.41	(33.63)	36.99	(5.30)	-	(0.11)	(0.24)	**1.58**
Balance as at 31st March, 2023	**-**	**91.28**	**51.63**	**-**	**2,524.17**	**-**	**12.14**	**6.61**	**2.34**	**2,688.17**
Net carrying amount										
As at 31st March, 2023	**299.91**	**208.51**	**148.20**	**-**	**2,436.25**	**-**	**1.69**	**0.91**	**1.06**	**3,096.53**
As at 31st March,2022	**299.91**	**185.00**	**134.19**	**475.64**	**2,178.03**	**44.62**	**2.17**	**0.64**	**0.17**	**3,320.37**

Note : The Company has elected to fair value its freehold land and use that fair value in its opening Ind AS Balance Sheet as at 1 April, 2015 as deemed cost. Accordingly, the freehold land is carried at fair value of ₹296.22 crores and carrying amount reported under previous GAAP was ₹ 172.71 crores. Accordingly an amount of ₹ 123.51 crores has been credited to retained earnings as at 1 April, 2015 (transition date).

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

5. Property, Plant and Equipment (Continue)

5.8 Immovable properties whose title deeds are not in the name of the Company

₹ crore

As on 31st March, 2024

Description	Relevant line item in the Balance Sheet	Carrying value	Title deeds held in the name of	Whether title deed holder is a promoter, director or relative of promoter / director or employee of promoter / director	Property held since which date	Reason for not being held in the name of the company
Raiyati Land (Free hold) located at Maithon, Jharkhand.	PPE	159.80	Damodar Valley Corporation	Promoters	December 2008	Refer Note (a)
Railway Land (Freehold Land) located at Maithon, Jharkhand.	PPE	137.12	Damodar Valley Corporation	Promoters	Oct 2008 to Mar 2015	Refer Note (b)
Forest land (Leasehold) located at Maithon, Jharkhand	Right of use Assets	10.68	GOJ*	No	May 2008	Refer Note (c)
GM land - Plant (Leasehold) located at Maithon, Jharkhand	Right of use Assets	37.06	GOJ*	No	July 2010	Refer Note (d)
GM land - Railway (Leasehold) located at Maithon, Jharkhand	Right of use Assets	8.96	GOJ*	No	July 2010	Refer Note (e)
GM land - Railway (Leasehold) located at Maithon, Jharkhand	Right of use Assets	5.02	GOJ*	No	July 2010	Refer Note (f)

₹ crore

As on 31st March, 2023

Description	Relevant line item in the Balance Sheet	Carrying value	Title deeds held in the name of	Whether title deed holder is a promoter, director or relative of promoter / director or employee of promoter / director	Property held since which date	Reason for not being held in the name of the company
Raiyati Land (Free hold) located at Maithon, Jharkhand.	PPE	159.80	Damodar Valley Corporation	Promoters	December 2008	Refer Note (a)
Railway Land (Freehold Land) located at Maithon, Jharkhand.	PPE	137.12	Damodar Valley Corporation	Promoters	Oct 2008 to Mar 2015	Refer Note (b)
Forest land (Leasehold) located at Maithon, Jharkhand	Right of use Assets	11.54	GOJ*	No	May 2008	Refer Note (c)
GM land - Plant (Leasehold) located at Maithon, Jharkhand	Right of use Assets	18.59	GOJ*	No	July 2010	Refer Note (d)
GM land - Railway (Leasehold) located at Maithon, Jharkhand	Right of use Assets	5.56	GOJ*	No	July 2010	Refer Note (e)
GM land - Railway (Leasehold) located at Maithon, Jharkhand	Right of use Assets	5.41	GOJ*	No	July 2010	Refer Note (f)

*Government of Jharkhand

(a) The Land was acquired by Damodar Valley Corporation (DVC) ,a member of the Company exclusively for the Maithon Right Bank Thermal Power Project (MRBTPP). As per the Shareholders Agreement, the title is to be transferred to the Company. Pending transfer of title as stated above, the Company had entered into an Indenture Deed with DVC on 5 December, 2008, which provided inter-alia, lease of private land for a period of 35 years (and extendable for another 35 years at the option of the Company) and provision to create security in favour of Lenders and transfer these land to the Company at the cost at which it was acquired subject to approval of the Government of the State of Jharkhand and may be subject to such terms and conditions including financial conditions that may be applied. Mutation of Land in the name of MRBTPP, DVC is completed for 496.54 acres as on 31.03.2024 (471.20 acres as on 31.03.2023) out of 564.67 acres.

(b) The Land was acquired by Damodar Valley Corporation (DVC) ,a member of the Company exclusively for the MRBTPP. As per the shareholders agreement, the title of these lands is to be transferred to the Company. DVC is in the process of transferring these land to the Company at the cost at which it was acquired subject to approval of the Government of the State of Jharkhand and may be subject to such terms and conditions including financial conditions that may be applied. Mutation of Land in the name of MRBTPP, DVC is completed for 37.78 acres as on 31.03.2024 (37.78 acres as on 31.03.2023) out of 66.74 acres.

(c) The Company has received demand for 191.67 acres of Jungle Jhar (Forest Land) from Government of Jharkhand and has made payment of requisite amount and is in process of execution of lease from Government of Jharkhand in the name of Company.

(d) The Land was acquired by Damodar Valley Corporation (DVC) exclusively for the MRBTPP. As per the shareholders agreement, the lease of these lands of 114.95 acres is to be transferred to the Company. Accordingly, DVC has surrendered the land to facilitate the process of transferring lease of lands in favour of the Company as per applicable laws of the State of Jharkhand. The Company is yet to receive demand from Government of Jharkhand for payment and execution of lease in the name of Company. (Refer Note 8.1)

(e) The Company has applied lease of the land of 17.78 acres and made partial payment to GoJ. Final Demand is yet to receive from Government of Jharkhand for balance payment and execution of lease in the name of Company. (Refer Note 8.1)

(f) The Company has applied lease of the land of 10.56 acres and has made payment of requisite amount and is in process of execution of lease from Government of Jharkhand in the name of Company.

(g) The expenditure in connection with private land including land compensation and rehabilitation and resettlement expenses has been capitalised as freehold land and the expenditure in connection with GM land and Forest land has been included in Right of Use Assets.

(h) Freehold land with a carrying amount of ₹299.91 crores (as at 31st March, 2023 ₹299.91 crores) has been mortgaged to secure borrowings of the Company (Refer Note 15.1 & 19.1).

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

6. Capital Work-in-Progress

Accounting Policy

Capital work in progress is stated at cost, net of accumulated impairment loss, if any. Other Indirect Expenses incurred relating to project, net of income earned during the project development stage prior to its intended use, are considered as pre-operative expenses and disclosed under Capital Work-in-Progress.

	As at 31st March, 2024	As at 31st March, 2023
Balance at the beginning	**395.28**	**206.86**
Additions during the year	237.60	250.11
Less: Capitalised during the year	(56.60)	(61.69)
Balance at the end	**576.27**	**395.28**

CWIP ageing Schedule as at 31st March 2024

₹ crore

Capital Work in Progress	Amount in CWIP for a period of				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Projects in progress	181.41	205.51	124.51	64.85	**576.27**

CWIP ageing Schedule as at 31st March 2023

₹ crore

Capital Work in Progress	Amount in CWIP for a period of				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Projects in progress	205.89	124.51	61.70	3.18	**395.28**

Note:- There is no project whose completion is overdue or its cost has exceeded the original plan as at 31st March, 2024 as well as 31st March, 2023.

7. Other Intangible Assets

7.1 Accounting Policy

Intangible assets acquired separately

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses, if any.

7.2 Subsequent Cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the entity and the cost can be measured reliably.

7.3 Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset is measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

7.4 Amortisation of intangible assets

Intangible assets with finite lives are amortised over the useful economic life on straight line basis and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life is reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

Estimated useful lives of the intangible assets are as follows:

Type of Asset	Useful Lives
Computer Software	5 years

₹ Crores

Description	Computer software	Total
Cost		
Balance as at 1st April, 2023	1.27	**1.27**
Additions	-	-
Balance as at 31st March, 2024	**1.27**	**1.27**
Accumulated amortisation		
Balance as at 1st April, 2023	1.12	**1.12**
Amortisation expense (Refer Note 23)	0.07	**0.07**
Balance as at 31st March, 2024	**1.19**	**1.19**
Net Book Value		
As at 31st March, 2024	**0.08**	**0.08**
As at 31st March, 2023	**0.15**	**0.15**

Description	Computer software	Total
Cost		
Balance as at 1st April, 2022	1.26	**1.26**
Additions	0.01	**0.01**
Balance as at 31st March, 2023	**1.27**	**1.27**
Accumulated amortisation		
Balance as at 1st April, 2022	0.96	**0.96**
Amortisation expense (Refer Note 23)	0.16	**0.16**
Balance as at 31st March, 2023	**1.12**	**1.12**
Net Book Value		
As at 31st March, 2023	**0.15**	**0.15**
As at 31st March,2022	**0.30**	**0.30**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

8. **Right - of - use - assets**

The Company recognizes right-of-use assets at the date of commencement of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, lease payments made at or before the commencement date less any lease incentives received and estimate of costs to dismantle. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

- Land: 05 to 35 years depending upon period of lease

The right-of-use assets are also subject to impairment in accordance with Ind AS 36 "Impairment of assets".

₹ Crores

Description	ROU-Land	Total
Cost		
Balance as on 1st April, 2023	105.30	105.30
Additions	48.69	48.69
Balance as at 31st March, 2024	153.99	153.99
Accumulated depreciation		
Balance as on 1st April, 2023	44.82	44.82
Depreciation (Refer Note 23)	18.44	18.44
Balance as at 31st March, 2024	63.26	63.26
Net carrying amount		
As at 31st March, 2024	90.73	90.73
As at 31st March, 2023	60.48	60.48

₹ Crores

Description	ROU-Land	Total
Cost		
Balance as at 1st April, 2022	105.30	105.30
Additions	-	-
Balance as at 31st March, 2023	105.30	105.30
Accumulated depreciation		
Balance as at 1st April, 2022	39.70	39.70
Depreciation (Refer Note 23)	5.12	5.12
Balance as at 31st March, 2023	44.82	44.82
Net carrying amount		
As at 31st March, 2023	60.48	60.48
As at 1st April, 2022	65.60	65.60

8.1 The management has made an estimate of the amount payable to the government for direct leasing of land referred in Note No 5.8 (d) & (e) and recognized "Right of use" (ROU) assets and consequential lease liability of ₹30.54 Cr and ₹5.85 Cr respectively during the current year. This will be further trued up on receipt of final demand from the government.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

9. Financial Assets

9.1 Investments - Current

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
Carried at fair value through profit and loss (FVTPL)		
Mutual Funds (Unquoted)	105.82	4.00
	105.82	**4.00**
Notes:		
Aggregate Carrying Value of Unquoted Investments	105.82	4.00

9.2 Trade Receivables

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
(Considered good)		
Secured*	420.95	134.50
Unsecured*	31.01	-
	451.96	**134.50**

*Include receivable from related parties ₹194.81 Crore (31st March 2023: ₹ 103.30 Crore)

The average credit period for the Company's receivable from sale of power is 45 to 60 days. As per the relevant provisions of the Central Electricity Regulatory Commission Regulations, penal interest @ 18% p.a. is claimable from the customers as Late payment Surcharge (LPS) for late payments beyond due dates.

No Trade or other receivable are due from directors or other officers of the Company either severally or jointly with any other person. No Trade or Other receivable are due from firms or private companies respectively in which any director is a partner, a director or a member.

Trade Receivables Ageing schedule:

There is no outstanding balances of Trade Receivable that have fallen due for payment as on 31st March, 2024 and as on 31st March, 2023, therefore ageing schedule has not been disclosed. Further the outstanding balance of trade receivables are undisputed as on year end.

9.3 Unbilled Revenue

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
(Considered good)		
Secured*	2.23	47.07
Unsecured*	68.53	-
	70.76	**47.07**

*Include receivable from related parties ₹53.45 Crore (31st March 2023: ₹ 43.97 Crore)

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

9.4 Cash and cash equivalents

Accounting Policy

For the purpose of the cash flow statement, cash and cash equivalents consist of cash at bank, cash/cheques on hand and short-term deposits, as defined above as they are considered an integral part of the Company's cash management.

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
Balances with Banks:		
In Current Accounts	6.15	2.35
In Deposit Accounts (with original maturity less than three months)	15.00	178.26
Cash and Cash Equivalents as per Balance Sheet	**21.15**	**180.61**

Reconciliation of liabilities from Financing Activities

₹ Crores

Particulars	As at 31st March, 2023	Cash flows*		Non Cash Transactions	As at 31st March, 2024
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	1,568.87	129.10	(369.86)	1.42	1,329.54
Current Borrowings	46.31	244.57	(18.35)	(1.63)	270.90
Lease Liabilities (Refer note 15.2 and note 8.1)	3.49	-	(1.49)	49.36	51.36
Total	**1,618.67**	**373.67**	**(389.70)**	**49.15**	**1,651.80**

₹ Crores

Particulars	As at 31st March, 2022	Cash flows*		Non Cash Transactions	As at 31st March, 2023
		Proceeds	Repayment		
Non-current Borrowings (including Current Maturity of Non-current Borrowings)	1,659.79	235.58	(325.06)	(1.44)	1,568.87
Current Borrowings	57.09	50.68	(61.44)	(0.02)	46.31
Lease Liabilities (Refer note 15.2)	3.24	-	-	0.25	3.49
Total	**1,716.88**	**286.25**	**(386.50)**	**(1.46)**	**1,618.67**

*Figures in brackets represents Cash outflow.

9.5 Loans

(Unsecured and considered good unless otherwise stated)

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
Non-current		
Loans to Employees [Including loans due from officers of the Company - ₹ 0.06 Crores (As at March 31, 2023 - ₹ 0.07 Crores)*]	0.11	0.13
	0.11	**0.13**
Current		
Loans to Employees [Including loans due from officers of the Company - ₹ 0.01 Crores* (As at March 31, 2023 - ₹ 0.01 Crores)*]	0.02	0.02
* Amount is lesser than the rounding off norms followed by the Company.	**0.02**	**0.02**

Note-There is no Loan or Advance in the nature of Loan given to specified persons without specific terms of period of repayment.

9.6 Other Financial Assets (at amortised cost)

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
Non - Current		
(Considered Good)		
Security Deposit		
With Related Parties (Refer Note 30)	0.59	0.28
With Others	0.21	0.28
Others		
With bank in deposit accounts (with remaining maturity more than twelve months)	9.30	18.01
	10.10	**18.57**
Current		
(Unsecured, considered good)		
Receivable on sale of Fixed Assets	0.20	-
Interest Accrued on Bank Deposits	0.42	0.78
Other deposits	0.03	-
	0.65	**0.78**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

10. Tax Assets / Liabilities

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
Non-current tax assets		
Advance Income Tax [Net of provisions ₹ 298.84 Cr (31st March 2023 ₹ 219.24 Cr)]	15.65	14.01
	15.65	**14.01**
Current tax liabilities		
Income Tax Payable [Net of Advance Tax Nil (31st March 2023 ₹ 59.52 Cr)]	-	3.74
	-	**3.74**

11. Other Assets

(Unsecured and considered good unless otherwise stated)

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
Non-current		
Capital Advances	4.77	20.38
Advance to Suppliers	19.79	36.52
	24.56	**56.90**
Current		
Prepaid Expenses	2.29	3.20
Advance to Suppliers	64.56	127.17
Advance to Employees	0.02	0.03
	66.87	**130.40**

12. Inventories

Inventories are stated at the lower of cost and net realisable value. Cost of inventory includes cost of purchase and other costs incurred in bringing the inventories to their present location and condition. Costs of inventories are determined on weighted average basis. Obsolete and slow moving inventories are identified at the time of physical verification and provided for, where necessary.

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
(a) **Raw Materials**		
Fuel [in transit of ₹ 19.27 Cr. (31st March 2023: ₹ 23.65 Cr)]	239.55	200.33
(b) **Stores and Spares**		
Stores and Spare Parts	64.24	58.28
	303.79	**258.61**

Notes:-Refer Note 15.1 & 19.1 for Inventories pledged as security for borrowings.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March, 2024

13. Equity - Share Capital

	As at 31st March, 2024		As at 31st March, 2023	
	Number	₹ Crores	Number	₹ Crores
Authorised				
Equity Shares of ₹ 10/- each	2,00,00,00,000	2,000.00	2,00,00,00,000	2,000.00
		2,000.00		2,000.00
Issued, Subscribed and Paid-up Capital				
Equity shares of ₹ 10/- each fully paid up	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

(i) Reconciliation of the shares outstanding at the beginning and at the end of the reporting year

	As at 31st March, 2024		As at 31st March, 2023	
	Number	₹ Crores	Number	₹ Crores
Equity Shares				
At the beginning of the year and at the end of the year	1,50,89,17,729	1,508.92	1,50,89,17,729	1,508.92

Terms/rights attached to Equity Shares
The Company has issued only one class of Equity Shares having a par value of ₹ 10/- per share. Each holder of Equity Shares is entitled to one vote per share. Final dividend proposed by the Board of Directors will be subject to approval of the shareholders in ensuing Annual General Meeting.

In the event of liquidation of the Company, the holders of Equity Shares will be entitled to receive remaining assets of the Company, after distribution of all preferential amounts. The distribution will be in proportion to the number of Equity Shares held by the shareholders.

(ii) Details of shareholders holding more than 5% shares in the Company and shares held by holding Company

	As at 31st March, 2024		As at 31st March, 2023	
	Number	% Holding	Number	% Holding
Equity Shares of ₹10/- each fully paid				
The Tata Power Company Limited (the holding company)	1,11,65,99,120	74%	1,11,65,99,120	74%
Damodar Valley Corporation	39,23,18,609	26%	39,23,18,609	26%

(iii) Shares held by promoters

	As at 31st March, 2024		As at 31st March, 2023		
	No. of shares	% of total shares	No. of shares	% of total shares	% change during the year
The Tata Power Company Limited (TPCL) (the holding company)	1,11,65,99,114	74%	1,11,65,99,114	74%	-
Others jointly held with with TPCL	6	0%	6	0%	-
Damodar Valley Corporation (DVC)	39,23,18,009	26%	39,23,18,009	26%	-
Others jointly held with with DVC	600	0%	600	0%	-





	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
14. Other Equity		
(i) Debenture Redemption Reserve (DRR)		
As at the beginning of the year	129.05	129.05
Less: Amount transferred to Retained Earnings	(79.42)	-
As at the end of the year	**49.63**	**129.05**
(ii) Retained Earnings		
As at the beginning of the year	551.30	842.92
Add: Profit for the year (as reported previously)	448.70	345.32
Transfer from Debenture Redemption Reserve	79.42	-
	528.12	345.32
Less: Impact of incremental depreciation(Refer Note 33)	-	6.12
Remeasurement of Defined Benefit Obligation (Net of Tax)	1.06	0.82
Dividend Paid	250.00	630.00
	251.06	636.94
Profit for the year	277.06	(291.62)
As at the end of the year *	**828.37**	**551.30**
* restated	**878.00**	**680.35**

Note:
The Company has paid interim dividend of ₹ 250 Crore during the current year, ₹ 180 cr during the previous year and Final dividend for FY 2021-22 of ₹ 450 Crore during the previous year. The board of directors have proposed final dividend 16.57% of the face value of ₹10 per share (₹ 1.66 per equity share) after the balance sheet date which is subject to approval by the shareholders in the ensuing annual general meeting.

Nature and purpose of reserves:

Debenture Redemption Reserve
The Company was required to create a Debenture Redemption Reserve out of the profits which are available for payment of dividend for the purpose of redemption of debentures. Pursuant to Companies (Share Capital and Debentures) Amendment Rules, 2019 dated 16th August, 2019, the Company is not required to create Debenture Redemption Reserve (DRR). Accordingly, the Company has not created DRR during the year and DRR created till previous years will be transferred to retained earnings on redemption of debentures.

Retained Earnings
Retained Earnings are the profits of the Company earned till date net of adjustments/appropriation.

S R Ba... & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

15. Financial Liabilities

	As at 31st March, 2024 ₹ Crores		As at 31st March, 2023 ₹ Crores	
	Non-current	Current Maturities*	Non-current	Current Maturities*
15.1 Non-current Borrowings (at amortised cost)				
Secured				
(i) Redeemable Non-Convertible Debentures (See Note I, II & III below)	297.88	159.70	456.14	309.80
(ii) Term Loans from Banks (See Note IV, V & VI below)	811.90	60.06	742.87	60.06
* (Refer Note 19.1)	1,109.78	219.76	1,199.01	369.86

I. Redeemable Non-Convertible Debentures issued on 30th November 2015

(a) The Company had issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹10.00 lakhs each on 30 November, 2015, at par. The debentures were issued for the repayment of the outstanding term loans from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures are secured in favour of the debenture trustee by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land) of the issuer, both present and future as per trust deed. (Also refer note no 5.8)

(c) These debentures carry a floating rate which is base rate of HDFC Bank Limited plus 15 basis points. Interest is payable on the 30th of November each year.

(d) These debentures stand fully redeemed as on 31st March 2024.

II. Redeemable Non-Convertible Debentures issued on 9th February 2017

(a) The Company had issued ₹ 500.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹50.00 Lakhs on 9 February, 2017 at par respectively. The debentures were issued for the repayment of the outstanding term loans from banks and financial institution. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These debentures have been secured by a first ranking pari passu mortgage (by way of an equitable or any other mortgage) and charge over all the immovable properties including the freehold land of the plant and railway (included under property, plant and equipment as freehold land), all movable properties and assets, all the bank accounts, all current assets, all intangible assets, both present and future as per trust deed. (Also refer note no 5.8) Assignment by way of security over letter of credit, performance bonds or guarantees provided by any person, all the rights, title, interest, benefits, claims and demands, whatsoever of the Issuer in each of the Project Documents, all Insurance Contracts/proceeds under Insurance Contracts, in relation to the Project of the issuer .
The above security will at all times, rank pari-passu inter se the Existing Lenders and the Debenture holders.

(c) These debentures carry a fixed rate of interest of 8% per annum. Interest is payable on the 9th of February each year.
The Company will have to take a prior written no-objection certificate from the debenture holders in the event it intends to create a security over the above secured properties in favour of its working capital lenders over and above ₹ 1000.00 crores.

III. Redeemable Non-Convertible Debentures issued on 24th December 2020

(a) The Company has issued ₹ 199.00 crores of secured, non-cumulative and non-convertible redeemable debentures of face value ₹10.00 Lakhs each on 24th December, 2020 at par respectively. The debentures have been issued for the part-repayment of the existing term loan availed from SBI. The debentures are listed in the wholesale debts market segment of National Stock Exchange of India Limited (NSE).

(b) These Debentures have been secured by Security as mentioned in above para II-(b).

(c) These debentures carry a fixed coupon rate of 6.25% per annum. Interest is payable on 24th December each year.

IV. Term Loan from Axis Bank & Union Bank of India

(a) The Company has entered into a Loan Agreement of ₹ 500 Crore for Railway Infra with Axis Bank on 28th January, 2020. Axis bank has down sell borrowings of ₹ 150 Crs to Union Bank of India with same terms & condition on 6th January 2021.

(b) These loan have been secured by Security as mentioned in above para II-(b).

(c) Interest rate term loan is Axis bank 12 Month MCLR plus 25 basis points, ranging from 9.05% to 9.50%.

V. Term Loans from Axis Bank (Refinancing)

(a) The Company has entered into a Loan Agreement of ₹ 225 Crore with Axis Bank on 29th December, 2020 for the part-refinancing of the outstanding term loan from SBI.

(b) These loan have been secured by Security as mentioned in above para II-(b).

(c) Interest rate term loan is Axis Bank 12 month MCLR plus 5 basis points, ranging from 8.80% to 9.30%.

VI. Term Loans from State Bank of India

(a) The Company has entered into a Loan Agreement of ₹ 537 Crore with SBI on 9th July, 2021 for FGD Project.

(b) These loan have been secured by Security as mentioned in above para II-(b).

(c) Interest rate term loan is SBI 6 month MCLR plus 50 basis points, ranging from 8.80% to 9.30%.

VII Non Current borrowings secured against current assets

The quarterly returns or statements of current assets filed by the Company with banks or financial institutions are in agreement with the books of accounts and there are no discrepancies.

MAITHON POWER LTD. MAITHON

S R Batliboi & Co. LLP Kolkata

Terms of Repayment As at 31st March, 2024

₹ crore

Particulars		Amount Outstanding	Repayments						
			FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30 to FY 33-34	FY 34-35 & onwards
(i)	Non-Convertible Debentures issued on 09th Feb , 2017	300.00	100.00	100.00	100.00	-	-	-	-
(ii)	Non-Convertible Debentures issued on 24th Dec , 2020	159.20	59.70	99.50	-	-	-	-	-
(iii)	Term Loan - Axis Bank	241.48	28.41	28.41	28.41	28.41	28.41	99.43	-
(iv)	Term Loan - Union Bank of India	106.25	12.50	12.50	12.50	12.50	12.50	43.75	-
(v)	Term Loan - Axis Bank (Refinancing)	162.77	19.15	19.15	19.15	19.15	19.15	67.02	-
(vi)	Term Loan - State Bank of India	364.68	-	30.16	40.11	40.11	40.11	196.45	17.72
Less: Impact of recognition of borrowings at amortised cost using EIR (refer note 3.4)		4.83							
Total		**1,329.54**							

Terms of Repayment As at 31st March, 2023

₹ crore

Particulars		Amount Outstanding	Repayments						
			FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29 to FY 32-33	FY 33-34 & onwards
(i)	Non-Convertible Debentures issued on 30th Nov , 2015	170.00	170.00	-	-	-	-	-	-
(ii)	Non-Convertible Debentures issued on 09th Feb , 2017	400.00	100.00	100.00	100.00	100.00	-	-	-
(iii)	Non-Convertible Debentures issued on 24th Dec , 2020	199.00	39.80	59.70	99.50	-	-	-	-
(iv)	Term Loan - Axis Bank	269.89	28.41	28.41	28.41	28.41	28.41	127.84	-
(v)	Term Loan - Union Bank of India	118.75	12.50	12.50	12.50	12.50	12.50	56.25	-
(vi)	Term Loan - Axis Bank (Refinancing)	181.91	19.15	19.15	19.15	19.15	19.15	86.17	-
(vii)	Term Loan - State Bank of India	235.57	-	3.25	16.23	25.91	25.91	129.57	34.70
Less: Impact of recognition of borrowings at amortised cost using EIR (refer note 3.4)		6.26							
Total		**1,568.87**							

S R Baki & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
15.3 Other Financial Liabilities		
Non-current		
(a) Security Deposits from Customers	-	0.23
(b) Payables towards capital supplies and services	47.31	73.17
	47.31	**73.40**
Current		
(a) Interest accrued but not due on Borrowings	8.85	14.30
(b) Payables towards capital supplies and services	31.48	47.56
(c) Security Deposits from Others	1.32	1.42
(d) Other Financial Liabilities	0.10	-
	41.75	**63.28**

16. Provisions

Accounting Policy

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of time value of money is material).

Present obligations arising under onerous contracts are recognised and measured as provisions with charge to statement of profit and loss. An onerous contract is considered to exist where the Company has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Defined contribution plans

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

Defined benefits plans

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liabilities and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the balance sheet with a corresponding debit or credit to retained earnings through other comprehensive income in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognised in the statement of profit and loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Company recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liabilities or asset. The Company recognises the following changes in the net defined benefit obligation as an expense in the statement of profit and loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non routine settlements; and
- Net interest expense or income.

A liability for a termination benefit is recognised at the earlier of when the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs.

The cost of the defined benefit gratuity plan and other post-employment medical benefits and the present value of the gratuity obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases and mortality rates. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

The parameter most subject to change is the discount rate. In determining the appropriate discount rate for plans operated in India, the management considers the interest rates of government bonds. The mortality rate is based on publicly available mortality tables. Those mortality tables tend to change only at interval in response to demographic changes. Future salary increases and gratuity increases are based on expected future inflation rates.

Current and other non-current employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of current employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other non-current employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
16. Provisions (Continue)		
Non-Current		
Compensated Absences	5.04	5.06
Gratuity (Net)	3.18	0.34
Post-Employment Medical Benefits	1.16	0.94
Other Defined Benefit Plans	1.38	1.22
Other Employee Benefits	1.38	1.10
	12.14	**8.66**
Current		
Compensated Absences	1.02	0.20
Other Defined Benefit Plans	0.16	0.14
Other Employee Benefits	0.02	0.03
	1.20	**0.37**

Employee Benefit Plans

16.1 Defined Contribution plan

Provident fund

The Company makes Provident Fund and Superannuation Fund contributions to defined contribution retirement benefit plans for eligible employees. The provident fund plan is operated by the Regional Provident Fund Commissioner. The Superannuation fund is managed by LIC of India. Under the schemes, the Company is required to contribute a specified percentage of the payroll costs to fund the benefits. The only obligation of the Company with respect to the retirement benefit scheme is to make the specified contributions.

The Company has recognized ₹ 1.44 crores (31st March, 2023 ₹ 1.35 crores) for provident fund contributions and ₹ 0.48 crores (31st March, 2023 ₹ 0.42 crores) for superannuation contributions in the Statement of Profit and Loss. The contributions payable to these plans by the Company are at rates specified in the rules of the schemes.

16.2 Defined benefit plans

(i) Unfunded

Post-Employment Medical Benefits

The Company provides certain post-employment health care benefits to superannuated employees at some of its locations. In terms of the plan, the retired employees can avail free medical check-up and medicines at Company's facilities.

Pension

The Company operates a defined benefit pension plan for employees who have completed 15 years of continuous service. The plan provides benefits to members in the form of a pre-determined lumpsum payment on retirement. Executive Director, on retirement, is entitled to pension payable for life including HRA benefit. The level of benefit is approved by the Board of Directors of the Company from time to time.

Ex-Gratia Death Benefit

The Company has a defined benefit plan granting ex-gratia in case of death during service. The benefit consists of a pre-determined lumpsum amount along with a sum determined based on the last drawn basic salary per month and the length of service.

Retirement Gift

The Company has a defined benefit plan granting a pre-determined sum as retirement gift on superannuation of an employee.

(ii) Funded

Gratuity Plan

The Company has a defined benefit gratuity plan. The gratuity plan is primarily governed by the Payment of Gratuity Act, 1972. Employees who are in continuous service for a period of five years are eligible for gratuity. The level of benefits provided depends on the member's length of service and salary at the retirement, withdrawal, resignation or death of an employee. The gratuity plan is funded plan. The gratuity fund is managed by Aditya Birla Sun Life Insurance Company Limited. The fund has the form of a trust and is governed by Trustees appointed by the Company. The Trustees are responsible for the administration of the plan assets and for the definition of the investment strategy in accordance with the regulations. The funds are deployed in recognized insurer managed funds in India. The Company does not fully fund the liability and maintains a target level of funding to be maintained over a period of time based on estimates of expected gratuity payments.

S.R. Batliboi & Co. LLP Kolkata

MAITHON POWER LTD.

(iii) **Risks associated with Plan Provisions**

Risks associated with the plan provisions are actuarial risks. These risks are: - (i) investment risk, (ii) interest risk (discount rate risk), (iii) mortality risk and (iv) salary risk.

Investment risk	The present value of the defined benefit plan liability is calculated using a discount rate determined by reference to Government Bonds Yield. If plan liability is funded and return on plan assets is below this rate, it will create a plan deficit.
Interest rate risk (discount rate risk)	A decrease in the bond interest rate (discount rate) will increase the plan liability; however , this will be partially offset by an increase in the return on the plan debt investments.
Mortality risk	The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after the employment. Indian Assured Lives Mortality (2006-08) ultimate table has been used in respect of the above. An increase in the life expectancy of the plan participants such as, an increase in the salary of the plan participants will increase the plan's liability.
Salary escalation risk	The present value of the defined benefit plan liability is calculated with the assumption of salary increase rate of plan participants in future. Deviation in the rate of increase of salary in future for plan participants from the rate of increase in salary used to determine the present value of obligation will have a bearing on the plan's liability.
Demographic risk	This is the risk of variability of results due to unsystematic nature of decrements that include mortality, withdrawal, disability and retirement. The effect of these decrements on the defined benefit obligations is not straight forward and depends upon the combination of salary increase, discount rate and vesting criterion.
Medical Inflation rate risk	Higher than expected increase in salary and medical cost will increase the defined benefit obligation.
Change in Leave Balances	This is the risk of variability of results due to a significant variation from expected accumulation of leave balances. All other aspects remaining same, higher than expected increase in the leave balances will increase the defined benefit obligation.

(iv) The principal assumptions used for the purposes of the actuarial valuations were as follows:

S. No.	Particulars	Refer note below	As at 31st March, 2024	As at 31st March, 2023
i.	Discount rate (p.a)	1	7.00%	7.30%
ii.	Salary escalation rate (p.a)	2		
	Management		7.00%	7.00%
	Non-Management		6.00%	6.00%
iii.	Retirement Age		60 years	60 years
iv.	Mortality Table		Indian Assured Lives Mortality (2006-08) Ult	Indian Assured Lives Mortality (2006-08) Ult
v.	Withdrawal Rate			
	Management: 21-44 years		6.00%	6.00%
	45 years and above		2.00%	2.00%
	Non-Management		0.50%	0.50%
vi.	Rate of Gold Inflation		8.00%	8.00%
vii.	Rate of Medical inflation (p.a)		8.00%	8.00%

Note:

1. The discount rate is based on the prevailing market yields of Indian Government securities as at the balance sheet date for the estimated term of obligations
2. The gratuity plan is funded
3. The estimates of future salary increases considered take into account the inflation, seniority, promotion and other relevant factors.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD.

16.3 The amounts recognized in the financial statements and the movements in the net defined benefit obligations (DBO) over the year are as follows:

i. Amounts recognized in the Statement of Profit and Loss in respect of the funded defined benefits plans are as follows:

Particulars	For Year ended 31st March, 2024 ₹ crores	For Year ended 31st March, 2023 ₹ crores
Current service cost	1.01	0.97
Net interest on net defined liability / (asset)	0.02	(0.13)
Components of defined benefit costs recognized in profit or loss	**1.02**	**0.84**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March, 2024 ₹ crores	For Year ended 31st March, 2023 ₹ crores
Actuarial (gain)/Loss due to DBO Experience	0.53	1.43
Actuarial (gain)/Loss due to assumption changes	0.42	(0.62)
Actuarial (gain)/loss arising during period	0.95	0.80
Return on plan assets (greater)/less than discounting rate	0.29	0.51
Component of defined benefit costs recognized in Other Comprehensive Income	**1.24**	**1.31**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. The amount included in the Balance Sheet arising from the entity's obligation in respect of its defined benefits plans as follows:

Particulars	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Present value of funded defined benefit obligation	(17.24)	(13.70)
Fair value of plan assets	14.05	13.37
Funded status surplus/(deficit)	**(3.18)**	**(0.34)**

iv. Movement in the fair value of the defined benefit obligation:

Particulars	For Year ended 31st March, 2024 ₹ crores	For Year ended 31st March, 2023 ₹ crores
Opening defined benefit obligation	13.70	12.59
Current service cost	1.01	0.97
Interest cost on defined benefit obligation	0.99	0.79
Acquisitions (credit) / cost	0.80	0.37
Actuarial (gains) / loss arising from changes in experience	0.53	1.43
Actuarial (gains) / loss arising from changes in financial assumption	0.42	(0.62)
Benefits paid directly by the company	(0.22)	(1.82)
Closing defined benefit obligations	**17.23**	**13.70**

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

v. Movement in the fair value of the plan assets are as follows:

Particulars	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Opening fair value of plan assets	13.37	14.17
Interest income on plan assets	0.98	0.92
Return on plan assets (greater)/less than discounting rate	(0.29)	(0.51)
Benefits paid	-	(1.21)
Closing fair value of plan assets	**14.05**	**13.37**

Note:

1) The plan assets are managed by Birla Sun Life Insurance (BSLI) Company Limited. The details of investments relating to these assets are not shown by BSLI. Hence, the composition of each major category of plan assets, the percentage or amount that each major category constitutes to the fair value of the total plan assets has not been disclosed.

2) The Company expects to make a contribution of ₹ Nil (as at 31 March, 2024: ₹ Nil) to defined benefit plan during the next financial year.

vi. Sensitivity analysis

Significant actuarial assumptions for the determination of the defined benefit obligation are discount rate, expected salary increase and mortality. The sensitivity analysis below have been determined based on reasonably possible changes of the assumptions occurring at the end of the reporting period, while holding all other assumptions constant.

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

Particulars	31st March, 2024 ₹ Crores		31st March, 2023 ₹ Crores	
	Increase	Decrease	Increase	Decrease
Discount Rate (-/+0.5%)	0.75	(0.70)	0.62	(0.58)
Salary Growth Rate (+/-0.5%)	(0.70)	0.75	(0.58)	0.62
Withdrawal Rate (-/+ 5%)	-	(0.60)	-	(0.48)

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit liability recognized in the Balance sheet.

There was no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

vii. The expected maturity analysis of defined benefit obligation is as follows:

Time Period	31st March, 2024 ₹ Crores	31st March, 2023 ₹ Crores
Within 1 year	0.60	0.52
Between 1-2 years	2.10	0.55
Between 2-3 years	2.30	1.95
Between 3-4 years	1.21	2.05
Between 4-5 years	1.57	1.12
Beyond 5 years	11.23	9.99

Particulars	31st March, 2024	31st March, 2023
The weighted average duration of the defined benefit plan obligation represents average duration for active members	7.5 years	7.4 years

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

16.4 Other Defined benefit plans

The amounts recognized in the financial statements and the movements in the net defined benefit obligations over the year are as follows:

i. Amounts recognized in the Statement of Profit and Loss in respect of these defined benefits plans are as follows:

Particulars	For Year ended 31st March, 2024 ₹ crores	For Year ended 31st March, 2023 ₹ crores
Current service cost	0.62	0.64
Past Service Cost	0.01	0.01
Net interest expenses	0.62	0.57
Actuarial (Gain)/ Loss	0.73	0.22
Components of defined benefit costs recognized in profit or loss	**1.98**	**1.44**

ii. Remeasurement on the net defined benefit liability:

Particulars	For Year ended 31st March, 2024 ₹ crores	For Year ended 31st March, 2023 ₹ crores
Actuarial (gain)/Loss due to Defined Benefit Obligation Experience	0.45	0.12
Actuarial (gain)/Loss due to assumption Changes	0.31	(0.52)
	0.77	(0.40)
Return on plan assets (greater)/less than discounting rate	-	0.09
Component of defined benefit costs recognized in Other Comprehensive Income	**0.77**	**(0.31)**

Note:

1) The current service cost and the net interest expense for the year are included in the 'Employee benefits expense ' in the Statement of Profit and Loss.

2) The remeasurement of the net defined benefit liability is included in the other comprehensive income.

iii. Reconciliation of Net Balance Sheet Position

Particulars	For Year ended 31st March, 2024 ₹ crores	For Year ended 31st March, 2023 ₹ crores
Opening Net defined benefit asset/ (liability)	**(8.76)**	**(8.63)**
Current service cost	(0.64)	(0.65)
Net interest on net defined benefit liability/ (asset)	(0.62)	(0.57)
Amount recognized in OCI	(0.04)	0.31
Actuarial Gains/ (Losses)	-0.73	0.09
Benefit paid directly by the Company	0.67	0.47
Acquisitions credit/ (cost)	-0.13	0.22
Closing Net defined benefit asset/ (liability)	**(10.25)**	**(8.76)**

iv. Sensitivity analysis

Particulars	31st March, 2024 ₹ crores		31st March, 2023 ₹ crores	
	Increase	Decrease	Increase	Decrease
Discount Rate (-/+0.5%)	(0.50)	0.55	(0.47)	0.52
Salary Growth Rate (+/-0.5%)	0.29	(0.28)	0.30	(0.28)
Withdrawal Rate (-/+ 5%)	(2.23)	-	(1.96)	-
Gold Inflation Rate (+/- 5%)	0.07	(0.07)	0.07	(0.07)
Medical Inflation Rate (+/- 5%)	0.16	(0.14)	0.13	(0.11)
Mortality Rate (+/- 5%)	0.05	(0.05)	0.04	(0.04)

vi. The expected maturity analysis of defined benefit obligations

Time Period	31st March, 2024 ₹ crores	31st March, 2023 ₹ crores
Within 1 year	1.24	0.38
Between 1-2 years	0.69	0.39
Between 2-3 years	0.73	0.76
Between 3-4 years	0.58	0.78
Between 4-5 years	0.65	0.64
Beyond 5 years	5.84	4.82

Particulars	31st March, 2024	31st March, 2023
The weighted average duration of the Post Retirement Medical Benefit represents average duration for active members	17 years	17 years

S R Batliboi & Co. LLP Kolkata
MAITHON POWER LTD.

17. Deferred Tax Assets / Liabilities (Net)

Accounting Policy

Deferred Tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

For operations carried out under tax holiday period (80IA benefits of Income Tax Act, 1961), deferred tax assets or liabilities, if any, have been established for the tax consequences of those temporary differences between the carrying values of assets and liabilities and their respective tax bases that reverse after the tax holiday ends.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss (either in other comprehensive income or in equity). Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the relevant entity intends to settle its current tax assets and liabilities on a net basis.

Deferred tax assets include credit for Minimum Alternative Tax (MAT) paid in accordance with the tax laws in India, which is likely to give future economic benefits in the form of availability of set off against future income tax liability. Accordingly, MAT is recognised as deferred tax asset in the balance sheet when the asset can be measured reliably and it is probable that the future economic benefit associated with the asset will be realised. The Company reviews the "MAT credit entitlement" asset at each reporting date and writes down the asset to the extent that it is no longer probable that it will pay normal tax during the specified period.

In the situations where one or more units of the Company are entitled to a tax holiday under the tax law, no deferred tax (asset or liability) is recognized in respect of temporary differences which reverse during the tax holiday period, to the extent the concerned unit's gross total income is subject to the deduction during the tax holiday period. Deferred tax in respect of temporary differences which reverse after the tax holiday period is recognized in the year in which the temporary differences originate. However, the Company restricts recognition of deferred tax assets to the extent it is probable that sufficient future taxable income will be available against which such deferred tax assets can be realized. For recognition of deferred taxes, the temporary differences which originate first are considered to reverse first.

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

Minimum alternate tax (MAT) paid in a year is charged to the statement of profit and loss as current tax for the year. The deferred tax asset is recognised for MAT credit available only to the extent that it is probable that the Company will pay normal income tax during the specified period, i.e., the period for which MAT credit is allowed to be carried forward. In the year in which the Company recognizes MAT credit as an asset, it is created by way of credit to the statement of profit and loss and shown as part of deferred tax asset. The Company reviews the "MAT credit entitlement" asset at each reporting date.

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
Deferred Tax Liabilities (Net)	443.41	443.01
Less: MAT Credit entitlement	585.07	511.51
Deferred Tax Assets (Net)	**141.66**	**68.50**

For Year ended 31st March, 2024 ₹ Crores

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive Income	Closing balance
MAT credit	**511.51**	73.56	-	**585.07**
Deferred Tax Assets in relation to:				
Payments outstanding of MSME	-	7.50	-	**7.50**
Provision for compensated absences	**1.06**	(0.01)	-	**1.05**
Interest Accrued But not due on borrowings	**4.50**	(1.41)	-	**3.09**
	5.56	**6.08**	-	**11.64**
Deferred Tax Liabilities in relation to:				
Difference in WDV of PPE between books of accounts and for tax purpose	**(446.38)**	(7.85)	-	**(454.23)**
Effective interest rate adjustment on Borrowings	**(2.19)**	1.37	-	**(0.82)**
	(448.57)	**(6.48)**	-	**(455.05)**
Net Deferred Tax Assets	**68.50**	**73.16**	-	**141.66**

For Year ended 31st March, 2023 ₹ Crores

Particulars	Opening Balance	Recognised in profit or loss	Recognised in Other Comprehensive Income	Closing balance
MAT credit	**463.23**	48.28	-	**511.51**
Deferred Tax Assets in relation to:				
Investments	**0.04**	(0.04)	-	-
Provision for compensated absences	**1.66**	(0.60)	-	**1.06**
Interest Accrued But not due on borrowings	-	4.50	-	**4.50**
	1.70	**3.86**	-	**5.56**
Deferred Tax Liabilities in relation to:				
Difference in WDV of PPE between books of accounts and for tax purpose	**(427.63)**	(18.75)	-	**(446.38)**
Effective interest rate adjustment on Borrowings	**(1.69)**	(0.50)	-	**(2.19)**
	(429.32)	**(19.25)**	-	**(448.57)**
Net Deferred Tax Assets	**35.61**	**32.89**	-	**68.50**

MAITHON POWER LTD.

Kolkata

Note:

a. Deferred tax assets and liabilities are being offset as they relate to taxes on income levied by the same governing taxation laws.

b. The Company is entitled for availing the tax benefit under section 80IA of the Income-tax Act, 1961, with effect from the financial year 2016-17 for 10 years. Deferred tax liabilities as at 31 March, 2024, reflect the quantum of tax liabilities accrued upto the period end but payable after the expiry of the tax holiday period.

c. The Company has recognised MAT credit of ₹ 585.07 crores as at March 31, 2024 (as at March 31, 2023: ₹ 511.51 crores). Basis the existing tax laws and the projections of future profitability considering definitive Power purchase agreements which are completely tied up with the plant capacity, management is confident of earning taxable profits each year and will be able to utilise the entire amount of MAT credit entitlement recognised in the financial Statement.

	As at 31st March, 2024 ₹ Crores	As at 31st March, 2023 ₹ Crores
18. Other Liabilities		
Non-current		
Payable to Beneficiaries (Net)	141.66	68.50
	141.66	**68.50**
Current		
Payable to Beneficiaries (Net)	131.17	188.09
Statutory Liabilities	6.52	5.82
Liability towards Corporate Social Responsibility	0.10	2.88
Other Liabilities	0.09	0.03
	137.88	**196.82**
19. Current Financial Liabilities		
19.1 Current Borrowings		
(at Amortised cost)		
Secured		
From Banks		
(a) Short term loan from Bank	22.55	46.31
(b) Current Maturities of Long-term Debt (Refer Note 15)	219.76	369.86
Unsecured		
From Banks		
Commercial Paper	248.35	-
	490.66	**416.17**

Note:

i. The Company has entered into 'Working Capital Facility Agreement' with State Bank of India, Axis Bank, Kotak Mahindra Bank and HDFC Bank for availing fund for managing working capital requirement.

ii Security offered to State Bank of India secured by way of first charge on movable and immovable assets of the Company present and future, ranking pari passu with first charge in favour of other lenders for term loans and working capital loans.(Also refer note no 5.8)

iii Kotak Mahindra Bank working capital facilities is secured by way of first hypothecation charge on all the existing and future current assets of the borrower ranking pari passu with first charge in favour of other lenders for term loans and working capital loans.

iv HDFC Bank working capital facilities is secured by way of first charge on current assets ranking pari passu with first charge in favour of other lenders for term loans and working capital loans.

v Axis Bank working capital facilities is secured by way of first charge on current assets ranking pari passu with first charge in favour of other lenders for term loans and working capital loans.

vi The quarterly returns or statements of current assets filed by the Company with banks or financial institutions are in agreement with the books of account and there are no discrepancies.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD.

19.2 Trade Payables

	As at 31st March, 2024 ₹ crore	As at 31st March, 2023 ₹ crore
Current		
Outstanding dues of micro enterprises and small enterprises ("MSE")	31.99	21.42
Outstanding dues of trade payables other than micro enterprises and small enterprises	294.84	222.41
Total	**326.83**	**243.83**

Trade Payables Ageing schedule as at 31st March , 2024

₹ crore

Particulars	Unbilled Dues	Outstanding for following periods from due date of payment					Total
		Not Due	Less than 1 Year	1-2 Years	2-3 years	More than 3 years	
Undisputed Trade Payables							
a) MSE	-	12.51	15.81	3.34	0.33	-	31.99
b) Others	23.20	37.25	222.98	10.25	13.89	10.47	294.84

Where due date of payment is not available date of transaction has been considered

Trade Payables Ageing schedule as at 31st March , 2023

₹ crore

Particulars	Unbilled Dues	Outstanding for following periods from due date of payment					Total
		Not Due	Less than 1 Year	1-2 Years	2-3 years	More than 3 years	
Undisputed Trade Payables							
a) MSE	-	5.37	15.64	0.35	0.06	-	21.42
b) Others	17.89	44.93	149.62	15.85	9.40	2.61	222.41

Where due date of payment is not available date of transaction has been considered

Note : There are no disputed Trade Payables as on 31st march 2024 and 31st march 2023.

	As at 31st March, 2024 ₹ crore	As at 31st March, 2023 ₹ crore
MSE Disclosure		
Micro and small enterprises under the Micro, Small and Medium Enterprises Development Act, 2006:		
The principal amount and the interest due thereon remaining unpaid to any supplier as at the end of each accounting year		
(a) Principal amount remaining unpaid	31.99	21.42
(b) Interest* due thereon	0.04	-
(c) The amount of Interest* paid along with the amounts of the payment made to the supplier beyond the appointed day	-	-
(d) The amount of Interest* due and payable for the year	-	-
(e) The amount of Interest* accrued and remaining unpaid	0.04	-
(f) The amount of further interest* due and payable even in the succeeding years, until such date when the interest* dues as above are actually paid	-	-
	32.03	**21.42**

* Amounts unpaid to Micro and Small Enterprises vendors on account of retention money have not been considered for the purpose of interest calculation, based on legal opinion obtained by the management

S R Bansal & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

20. Revenue from Operations

Accounting Policy

Revenue recognition

Revenue from contracts with customers is recognised when control of the goods or services are transferred to customers for a consideration that the Company expects to be entitled in exchange for those goods & services as per terms of relevant contracts and orders of applicable regulatory authorities.

Description of performance obligations are as follows :

Sale of Power - Generation (Thermal)

Revenue from sale of power is recognised net of cash discount over time for each unit of electricity delivered.

Contract price determined as per tariff regulations

The Company as per the prevalent tariff regulations is required to recover its Annual Revenue Requirement ('ARR') comprising of expenditure on account of fuel cost, operations and maintenance expenses, financing costs, taxes and assured return on regulator approved equity with incentive for operational efficiencies. Accordingly, rate per unit of power supplied is determined using cost of inputs for generation of power based on the Company's efforts to the satisfaction of a performance obligation to deliver power. As per tariff regulations, the Company determines ARR and any surplus/shortfall in recovery of the same is accounted as revenue.

The difference between the revenue recognised and amount invoiced has been presented as deferred revenue/unbilled revenue.

Deferred tax recoverable/payable

The Income tax cost is pass through cost and accordingly the Company recognises Deferred tax recoverable/payable against any Deferred tax expense/ income. The same is included in Revenue from Operations.

Late Payment Surcharge

Late payment surcharge leviable as per CERC Regulations are recognised on accural basis when the company considers that its realisation is probable based on customers acknowledgement or orders issued by relevant regulatory authorities.

No Late Payment Surcharge ('LPS') is charged for the initial 45 to 60 days from the date of receipt of invoice by customer. Thereafter, LPS is charged at the rate prescribed by CERC Regulations on the outstanding balance once the dues are received. Revenue in respect of late payment surcharge leviable as per the relevant contracts are recognised on actual realisation or accrued based on an assessment of certainty of realization supported by either an acknowledgement from customers or on receipt of favourable order from regulatory authorities.

Dividend and interest income

Dividend income from investments is recognized when the shareholder's right to receive payment has been established.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected or contracted life of the financial asset to that asset's net carrying amount on initial recognition.

S R Ba... & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
20. Revenue from Operations (Continue)		
(a) Revenue from Power Operations	3,431.53	3,108.70
Less: Cash Discount	(55.77)	(58.39)
	3,375.76	**3,050.31**
Less: Income to be adjusted in future tariff determination (Net)	(16.24)	(23.16)
	3,359.52	**3,027.15**
(b) Other Operating Revenue		
Rental of Buildings	0.05	0.03
Sale of Fly Ash	0.75	0.77
	0.80	**0.80**
	3,360.32	**3,027.95**

Note:-

1. Tariff to be charged under terms of Long term power supply agreements are determined by Central Electricity Regulatory Commission (CERC) in accordance with its notified tariff regulations or norms. The tariff consists of two parts namely, capacity charge (for recovery of fixed cost based on plant availability) and energy charges (for recovery of fuel costs). The Company has received true-up order for the control period 2014-19 and also the Tariff order for the control period 2019-24, issued by CERC on 8th January, 2022. Further, the tariff order for 2019-24 has considered a provisional significant cost element that has hitherto not been considered in tariff order till date and also in the true-up order for 2014-19, in respect of which the Company has filed review petition with the relevant appellate authority, and has recognised revenue as per the tariff order, on a conservative basis. Further adjustments could arise upon disposal of company's review petition.
2. Pursuant to order of the Hon'ble Central Electricity Regulatory Commission (CERC), the Company had entered into a Memorandum of Understanding on May 26, 2023 (MoU) with a customer for resolution of disputes towards supply of electricity in earlier years. As per the terms of the MoU, the Company has received an amount of ₹48.22 Cr towards full and final settlement of such disputes. The Hon'ble CERC had approved the said MOU. Accordingly, the amount of ₹48.22 Cr has been recognized as revenue from operations during the year.
3. Pursuant to order of the Hon'ble CERC in respect of petition filed by the Company seeking clarification on the compensation methodology as notified in the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016, the Eastern Regional Power Committee (ERPC) on May 10, 2023 issued Beneficiary-wise Compensation statements on account of degradation of heat rate and auxiliary consumption due to part load operation for the period April 2019 to March 2022. Accordingly, the amount of ₹53.65 Cr has been received and recognized as revenue from operations during the year.

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
21. Other Income		
(a) Interest Income		
On Financial Assets held at amortised cost		
Interest on Banks Deposits	12.09	4.01
Interest on loan to related party (Refer Note 31)	3.35	11.06
Other Interest	0.01	0.01
	15.45	**15.08**
(b) Gain on Investments		
Gain on sale/fair valuation of Current Investments measured at FVTPL	2.16	3.56
	2.16	**3.56**
(c) Other Non Operating Income		
Gain/(Loss) on Disposal of Property, Plant and Equipment (Net)	(7.12)	(3.95)
Miscellaneous Income (Refer note below)	4.64	34.98
	(2.48)	**31.03**
	15.13	**49.67**

Note:- Pursuant to order of the Hon'ble Central Electricity Regulatory Authority, New Delhi, the Company has entered into a Memorandum of Understanding on March 31, 2023 (MoU) with a former customer for resolution of disputes towards supply of electricity. As per the terms of the MoU, the Company had received an amount of ₹13.72 Cr towards full and final settlement of such disputes. Accordingly, provision of ₹14.32 Cr towards claims received from the said party and provision for doubtful receivable of ₹13.72 Cr recognised in prior years have been reversed and recognised as miscellaneous income during the previous year.

MAITHON POWER LTD. MAITHON

S R Batliboi & Co. Kolkata

22. Employee Benefits Expenses

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Salaries and Wages	41.37	41.40
Contribution to Provident Fund	1.44	1.35
Contribution to Superannuation Fund	0.48	0.42
Retiring Gratuities	1.02	0.84
Employees Stock Option Expenses	0.10	-
Leave Encashment Scheme	1.29	0.71
Pension Scheme	0.84	0.75
Staff Welfare Expenses	8.74	7.14
	55.28	**52.61**
Less: Employee Cost Capitalised	3.41	4.16
	51.87	**48.45**

Accounting Policy

Share Based Payments

The Tata Power Company Limited ("Holding Company") has granted employee stock options to eligible employees of the Company. As per the Scheme, on fulfilling of the vesting condition the Holding Company will issue its equity shares to the eligible employees of the Company.

The cost of equity-settled transactions is determined by the fair value of holding company's share at the date of grant. That cost is recognised on straight line basis over ther period during which vesting conditions are met by concerned employee and the Company. The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the companies best estimate of the number of equity instruments that will ultimately vest. The expense or credit in the statement of profit and loss for a period represents the movement in cumulative expense recognised as at the beginning and end of that period and is recognised in employee benefits expense.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the companies best estimate of the number of equity instruments that will ultimately vest. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

No expense is recognised for awards that do not ultimately vest because non-market performance and/or service conditions have not been met. Where awards include a market or non-vesting condition, the transactions are treated as vested irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

When the terms of an equity-settled award are modified, the minimum expense recognised is the grant date fair value of the unmodified award, provided the original vesting terms of the award are met. An additional expense, measured as at the date of modification, is recognised for any modification that increases the total fair value of the share-based payment transaction, or is otherwise beneficial to the employee. Where an award is cancelled by the entity or by the counterparty, any remaining element of the fair value of the award is expensed immediately through profit or loss.

Equity-settled share option plan

The Tata Power Company Limited – Employee Stock Option Plan 2023

During the year, the shareholders of the Holding Company approved 'The Tata Power Company Limited – Employee Stock Option Plan 2023' ('ESOP 2023'/ 'Plan'). During this year, the Holding Company has granted employee stock options to the eligible employees of the Holding and its subsidiaries, including employees of the Company at an exercise price of ₹ 249.80 (Rupees Two Hundred Forty Nine and Eighty Paise) per option exercisable into equivalent equity shares of ₹ 1 each subject to fulfilment of vesting conditions.

The expense recognised for employee services received during the year is shown in the following table:

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Expense arising from equity-settled share-based payment transactions	*0.10*	*Nil*
Total expense arising from share-based payment transactions		
Movements during the year		
Option exercisable at the beginning of the year	*Nil*	*Nil*
Granted during the year	*71630.00*	*Nil*
Forfeited/Expired during the year	*Nil*	*Nil*
Exercised during the year	*Nil*	*Nil*
Expired during the year	*Nil*	*Nil*
Option exercisable at the end of the year	*71,630.00*	*Nil*
Share price for options exercised during the year	Not applicable	*Nil*
Remaining contractual life	2.58 Years	*Nil*

The holding company has estimated fair value of options using Black Scholes model. The following assumptions were used for calculation of fair value of options granted.

Assumption factor		
Dividend Yield (%)	0.70%	*Nil*
Risk free interest rate (%)	7.21%	*Nil*
Expected life of share option (Years)	3 - 5 Years	*Nil*
Expected volatility (%)	39.81%	*Nil*
Weighted Average Share price	249.80	*Nil*
Weighted Average Fair Value at the measurement date	97.75	*Nil*

The expected volatility reflects the assumption that the historical volatility over a period similar to the life of the options is indicative of future trends, which may not necessarily be the actual outcome.

MAITHON POWER LTD.

S R Batliboi & Co. LLP Kolkata

23. **Depreciation and Amortisation expenses:**

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Depreciation on Property, Plant & Equipment (Refer Note 5.7)	278.66	281.55
Depreciation on Right of use Assets (Refer Note 8)	18.44	5.12
Amortisation on Intangible Assets (Refer Note 7)	0.07	0.16
	297.30	**286.83**

24. **Finance Costs**

Accounting Policy

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

All other borrowing costs are recognized in statement of profit and loss in the period in which they are incurred. (also refer note 3.4.2)

(a) **Interest Expense:**

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Borrowings		
Interest on Debentures	54.76	75.81
Interest on Loans from banks	79.10	54.30
Interest on Commercial Paper	3.37	-
Others		
Interest on Lease Liability - At Amortised cost	0.67	0.25
	137.90	**130.36**
Less: Interest Capitalised	28.10	12.51
	109.80	**117.85**
(b) **Other Borrowing Cost:**		
Other Finance Costs	2.14	1.63
	111.94	**119.48**

MAITHON POWER LTD. MAITHON

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March, 2024

25. Other Expenses

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Consumption of Stores, Oil, etc.	10.21	14.43
Rental of Land, Buildings etc.	0.57	0.11
Repairs and Maintenance -		
(i) To Buildings and Civil Works	3.79	3.32
(ii) To Machinery and Hydraulic Works	95.70	100.43
(iii) To Furniture, Vehicles, etc.	2.12	3.78
Water Charges & Others Taxes	25.44	22.46
Insurance	9.34	9.82
Ash Disposal Expenses	59.46	43.98
Travelling and Conveyance Expenses	1.99	1.60
Auditor's Remuneration (Refer - i)	0.51	0.50
Engineering and consulting services	85.89	79.84
Security Expenses	10.40	10.57
Corporate Social Responsibility Expenses (Refer - ii)	6.55	7.04
Miscellaneous Expenses	8.99	10.36
	320.96	**308.24**

(i) Payment to the Auditors

Audit Fee & Limited Review	0.37	0.37
Tax Audit Fees	0.02	0.02
Other Services (Certification Fees)	0.07	0.04
Reimbursement of Expenses	0.05	0.07
	0.51	**0.50**

(ii) Corporate Social Responsibility Expenses

(a) Amount required to be spent as per Sec 135 of the Companies Act 2013 :	6.55	7.04
(b) Amount spent during the year:		
i. Construction/acquisition of any asset	-	-
ii. On purposes other than (i) above	6.55	7.04
	6.55	**7.04**
(c) Details related to spent / unspent obligations:		
i. Contribution to Charitable Trust	6.13	3.46
ii. Unspent amount in relation to:		
-Ongoing project		2.88
-Other than ongoing project		-
(d) Details of ongoing project and other than ongoing project	-	-

Ongoing Project as per Sec 135(6) of the Companies Act 2013:

Opening Balance	As on 31st March, 2024	As on 31st March, 2023
With Company		-
In Separate CSR Unspent A/c	2.88	2.15
Amount required to be spent during the year	-	5.55
Amount spent during the year		
From Company's bank A/c	-	2.67
In Separate CSR Unspent A/c	2.78	2.15
Closing Balance		
With Company	-	
In Separate CSR Unspent A/c	0.10	2.88

Other than ongoing Project as per Sec 135(5) of the Companies Act 2013:

Opening Balance	-	-
Amount deposited in Specified Fund of Sch. VII within 6 months	-	-
Amount required to be spent during the year	6.22	1.14
Amount spent during the year	6.22	1.14
Closing Balance	-	-

(e) Amount spent on administrative overhead	0.33	0.35

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

26. Income taxes

Accounting Policy

Current Tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date in the countries where the Company operates and generates taxable income.

Current income tax relating to items recognised outside statement of profit and loss is recognised outside statement of profit and loss (either in other comprehensive income or in equity). Current tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

(i) Income tax recognised in profit and loss

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Current tax		
For the year	79.61	64.63
In respect of earlier years	0.48	-
Current Tax (Including adjustment of tax relating to earlier year)	**80.09**	**64.63**
Deferred tax	0.40	15.39
MAT Credit Entitlements	(73.56)	(48.28)
Deferred Tax (Net)	**(73.16)**	**(32.89)**
Income tax expense reported in the Statement of Profit and Loss	**6.93**	**31.74**

(ii) Reconciliation of tax expense as per the effective rate of tax and India's statutory rate of tax

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Profit before tax	**455.63**	**370.94**
Applicable income tax rate	34.94%	34.94%
Income tax expense calculated at applicable rate	159.22	129.62
Temporary difference reversed during tax holiday period	45.68	40.18
On account of 80IA benefits	(192.02)	(146.64)
Other Adjustments	(5.95)	8.58
Total income tax expense	**6.93**	**31.74**

1. The tax rate used for the financial years 2023-24 and 2022-23 reconciliations above is the corporate tax rate of 34.94% and 34.94% respectively payable by the corporate entities in India on taxable profits under the Indian tax law.
2. The rate used for calculation of deferred tax is @34.94% for FY 2023-24 & for FY 2022-23 being statutory enacted rates at respective Balance Sheet Dates.

(iii) Income tax recognised in other comprehensive income

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Arising on income and expenses reclassified in other comprehensive income:		
Remeasurement of the defined benefit plan	(1.28)	(1.00)
Total income tax expense recognised in other comprehensive income	**(1.28)**	**(1.00)**
Bifurcation of the income tax recognised in other comprehensive income into:		
- Items that will not be reclassified to profit or loss	0.22	0.18
	0.22	0.18

27. Commitments

	As on 31st March, 2024 ₹ Crores	As on 31st March, 2023 ₹ Crores
Estimated amount of contracts remaining to be executed on capital account and not provided for	98.33	70.63

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD.

28. Contingent liabilities

(a) Claims against the Company not acknowledged as debts towards demands raised by the Office of the Zonal Jt. Director General Trade for revocation of grant of deemed export benefits which has been disputed by the Company ₹ 36.41 crores (31 March, 2023 : ₹ 36.41 crores).

(b) Demand in respect of lease rent for certain parcels of land as referred in note 5.8

(c) The Code on Social Security 2020 has been notified in the Official Gazette on 29th September, 2020. The effective date from which the changes are applicable is yet to be notified and the rules are yet to be framed. Impact if any of the change will be assessed and accounted in the period in which said Code becomes effective and the rules framed thereunder are notified.

29. Earnings per share (EPS)

Accounting Policy

Basic earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares outstanding during the period. Diluted earnings per equity share is computed by dividing the net profit attributable to the equity holders of the Company by the weighted average number of equity shares considered for deriving basic earnings per equity share and also the weighted average number of equity shares that could have been issued upon conversion of all dilutive potential equity shares. The dilutive potential equity shares are adjusted for the proceeds receivable had the equity shares been actually issued at fair value (i.e. The average market value of the outstanding equity shares). Dilutive potential equity shares are deemed converted as of the beginning of the period, unless issued at a later date. Dilutive potential equity shares are determined independently for each period presented.

The number of equity shares and potentially dilutive equity shares are adjusted retrospectively for all periods presented for any share splits and bonus shares issues including for changes effected prior to the approval of the financial statements by the Board of Directors.

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Basic and diluted earnings per share (face value of ₹ 10/- each)	2.97	2.25

The earnings and weighted average number of equity shares used in the calculation of basic and diluted earnings per share are as follows:

	For Year ended 31st March, 2024 ₹ Crores	For Year ended 31st March, 2023 ₹ Crores
Profit After Tax	448.70	339.20
The weighted average number of equity shares for Basic and Diluted EPS [nos.]	1,50,89,17,729	1,50,89,17,729

Note:
There have been no other transactions involving Equity Shares or Potential Equity Shares between the Reporting date and the date of authorisation of these financial statements.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD.

30. Related Party Transactions

a. List of related parties

i. **Controlling Entity (CE)**

The Tata Power Company Limited (TPCL) (Holding Company)

ii. **Entity exercising significant influence (SI)**

Damodar Valley Corporation (DVC)

iii. **Subsidiaries and Jointly Controlled Entities of Promoter or Ultimate promoter - Promoter Group**
(With whom the Company has entered transaction during the year or having outstanding balances at the year-end)

Tata Power Trading Company Limited (TPTCL)
Tata Power Delhi Distribuition Limited (TPDDL)
Tata Power Renewable Energy Limited (TPREL)
Tata Power Solar System Ltd (TPSSL)
TP Solapur Limited (TPSL)
Tata Steel Ltd. (TSL)
Voltas Limited (VL)
Tata Aig General Insurance Co. Ltd (TAGICL)
Tata Capital Financial Services Limited (TCFSL)
Tata Consultancy Services Ltd (TCS)

iv. **Directors & Key Managerial Personnel**

Directors
Anandakumar Prabhakaran (Non Executive Director) (Till 22nd June 2022)
Krishnava Dutt (Independent Director) (Till 19th March 2023)
P R Ravi Mohan (Independent Director) (w.e.f. 20th March 2023)
Narendra Nath Misra (Independent Director) (w.e.f. 20th March 2023)
Nita Jha (Independent Director) (w.e.f. 20th March 2023)
Ashok Sinha (Independent Director) (Till 22nd March 2023)
Rita Sinha (Independent Director) (Till 22nd March 2023)
Ramesh Narayan (Non Executive Director) (Till 22nd March 2023)
Abhijit Basu (Non Executive Director) (Till 22nd March 2023)
Vijay Namjoshi (Chairman) (Till 7th November 2023)
Ashish Khanna (Chairman) (w.e.f. 8th November 2023)
Amarjit Chopra (Independent Director)
Joydeep Mukherjee (Non Executive Director)

Key Managerial Personnel
Vijayant Ranjan (Chief Executive Officer)
Kajal Kumar Singh (Chief Financial Officer)
Mona Purandare (Company Secretary)

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

MAITHON POWER LIMITED
Notes to the Financial Statements for the year ended 31st March, 2024

30. Related Party Transactions (Continue)

₹ Crores

b. Transactions/balances outstanding with related parties

i) Transactions for the year ended 31st March, 2024

Particulars	CE	SI	Fellow Subsidiaries (FS)				Subsidiaries and Jointly Controlled Entities of Promoter or Ultimate promoter - Promoter Group					KMP & Directors	Total
	TPCL	DVC	TPTCL	TPREL	TPSL	TPSSL	TCS	TPDDL	TSL	VL	TAGICL	TCFSL	
Revenue from power supply	-	504.21	1,914.90	-	-	-	-	48.22	-	-	-	-	-	2,467.33
	-	(457.74)	(1,806.46)	-	-	-	-	-	-	-	-	-	-	(2,264.20)
Cash discount on power sales	-	-	42.25	-	-	-	-	-	-	-	-	-	-	42.25
	-	-	(38.26)	-	-	-	-	-	-	-	-	-	-	(38.26)
Reimbursement of RRAS/SCED/Others refund by the company	-	0.01	0.10	-	-	-	-	-	-	-	-	-	-	0.11
	-	(0.30)	(1.91)	-	-	-	-	-	-	-	-	-	-	(2.21)
Interest income/Other Income	3.35	-	-	-	-	-	-	-	-	-	-	-	-	3.35
	(7.76)	-	-	(2.19)	(1.11)	-	-	-	-	-	-	-	-	(11.06)
Electricity Charges	-	0.44	-	-	-	-	-	-	-	-	-	-	-	0.44
	-	(0.37)	-	-	-	-	-	-	-	-	-	-	-	(0.37)
Water charges	-	25.62	-	-	-	-	-	-	-	-	-	-	-	25.62
	-	(22.51)	-	-	-	-	-	-	-	-	-	-	-	(22.51)
Rent and hire charges	-	2.28	-	-	-	-	-	-	-	-	-	-	-	2.28
	-	(0.19)	-	-	-	-	-	-	-	-	-	-	-	(0.19)
Cost of Services Procured	78.27	-	-	-	-	-	-	-	-	-	-	-		78.43
	(73.20)	-	-	-	-	-	-	-	-	-	-	-		(73.32)
Loan Novated [From]/To	-	-		-	-	-	-	-	-	-	-	-	-	-
	(300.34)	-		(222.70)	(77.64)	-	-	-	-	-	-	-	-	(600.68)
Loan Given	150.00	-	-	-	-	-	-	-	-	-	-	-	-	150.00
	(450.00)	-	-	-	-	-	-	-	-	-	-	-	-	(450.00)
Loan Repaid	150.00	-	-	-	-	-	-	-	-	-	-	-	-	150.00
	(599.66)	-	-	(222.70)	(77.64)	-	-	-	-	-	-	-	-	(900.00)
Reimbursement of expenses to the Company	-	0.29	37.65	-	-	-	-	-	-	-	-	-	-	37.94
	-	(0.17)	(0.65)	-	-	-	-	-	-	-	-	-	-	(0.82)
Reimbursement of expenses by the Company	2.98	-	-	-	-	-	-	-	-	-	-	-	-	2.98
	(3.16)	-	-	-	-	-	-	-	-	-	-	-	-	(3.16)
Service received related to CWIP	3.68	-	-	-	-	-	-	-	-	-	-	-	-	3.68
	(5.38)	-	-	-	-	-	-	-	-	-	-	-	-	(5.38)
KMP Remuneration - Short term employee benefits														
Mr Vijayant Ranjan	-	-	-	-	-	-	-	-	-	-	-	-	1.97	1.97
	-	-	-	-	-	-	-	-	-	-	-	-	(1.74)	(1.74)
Mr Kajal Kumar Singh	-	-	-	-	-	-	-	-	-	-	-	-	0.48	0.48
	-	-	-	-	-	-	-	-	-	-	-	-	(0.42)	(0.42)
Ms Mona Himanshu Purandare	-	-	-	-	-	-	-	-	-	-	-	-	0.37	0.37
	-	-	-	-	-	-	-	-	-	-	-	-	(0.33)	(0.33)
Director's sitting fees	-	-	-	-	-	-	-	-	-	-	-	-	0.33	0.33
	-	-	-	-	-	-	-	-	-	-	-	-	(0.28)	(0.28)
O&M-Insurance Services/Material procurement & Others	-	-	-	-	-	-	-	0.33	1.26	-	-	-	-	1.59
	-	-	-	-	-	-	(20.16)	(0.75)	(2.01)	(0.75)	-	-	-	(23.67)
Lease services	-	-	-	-	-	-	-	-	-		-	0.30	-	0.30
	-	-	-	-	-	-	-	-	-		-	(0.23)	-	(0.23)
Dividend Paid	185.00	65.00	-	-	-	-	-	-	-	-	-	-	-	250.00
	(466.20)	(163.80)	-	-	-	-	-	-	-	-	-	-	-	(630.00)
ESOP expense reimbursement by the Company	0.10	-	-	-	-	-	-	-	-	-	-	-	-	0.10
	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figures in brackets stated pertain to the year ended 31st March, 2023.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD.

30. Related Party Transactions (Continue)

₹ Crores

ii) Balances outstanding as at 31st March, 2024

Particulars	CE	SI	Fellow Subsidiaries (FS)				Subsidiaries and Jointly Controlled Entities of Promoter or Ultimate promoter - Promoter Group						KMP & Directors	Total
	TPCL	DVC	TPTCL	TPREL	TPSL	TPSSL	TCS	TPDDL	TSL	VL	TAGICL	TCFSL		
Trade receivables														
As at 31st March, 2024	-	**42.48**	**152.33**	-			-		-	-	-	-	-	**194.81**
As at 31st March, 2023	-	(26.14)	(77.16)	-	-	-	-	-		-	-	-	-	(103.30)
									-					
									-					
Other receivables							**0.02**						-	**0.06**
As at 31st March, 2024	-	(1.70)	-	(0.03)	-	-	(0.02)	-	-	-	-	(0.00)	-	(1.76)
As at 31st March, 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unbilled revenue		**43.52**	**9.93**	-	-	-			-				-	**53.45**
As at 31st March, 2024	-	(40.53)	(3.44)	-	-	-		-					-	(43.97)
As at 31st March, 2023									-					
Security deposits		**0.59**	-	-	-	-	-	-	-	-	-	-	-	**0.59**
As at 31st March, 2024	-	(0.28)	-	-	-	-	-	-	-	-	-	-	-	**(0.28)**
As at 31st March, 2023														
									-					
Trade payables	**8.82**	**0.38**	-	-	-	-	-	-	-	-	-	-	-	**9.22**
As at 31st March, 2024	(8.47)	(2.30)	-	-	-	-	-	-	-	-	-	-	-	**(10.77)**
As at 31st March, 2023														
Other payables	-	-	-	-	-	-		-	-	**0.01**	**0.02**	-	-	**0.16**
As at 31st March, 2024	-	-	-	-	-	(0.22)	-	-	-	(0.01)	(0.01)	-	-	**(0.37)**
As at 31st March, 2023														
Letter of credit (LC)	-	**39.61**	**154.72**	-	-	-		-	-	-	-	-	-	**194.33**
As at 31st March, 2024	-	(37.07)	(148.78)	-	-	-		-	-	-	-	-	-	**(185.85)**
As at 31st March, 2023														

Notes:
(i) Figures in brackets stated pertain to the year ended 31st March,2023.
(i) Trade Receivable & Unbilled Revenue are secured to the extent of outstanding LC amount and remaining balance are unsecured.
(ii) All transactions with the related parties have been done at arms length.
(iv) Key Managerial Personnel are entitled to post-employment benefits and other long term employee benefits recognised as per Ind AS 19 - 'Employee Benefits' in the financial statements. As these employee benefits are lump sum amounts provided on the basis of actuarial valuation, the same is included above on payment basis.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD.

31. Financial Ratios

Sl No	Ratios	Numerator	Denominator	As at 31st March, 2024	As at 31st March, 2023	% of Variance	Reason for Variance in excess of 25 %
a)	Current Ratio	Current Assets	Current Liabilities	1.02	0.82	25.00	Due to increase in trade receivables and investment under current assests
b)	Debt-equity ratio	Total Debt	Shareholders Equity	0.68	0.78	-12.66	
c)	Debt service coverage ratio	Earnings for debt service= Net Profit After Tax + Non-cash operating expenses	Debt Service = Interest & Lease Payments + Principal Repayments	1.69	1.63	3.54	
d)	Return on equity ratio	Net Profits after taxes - Interest on Perpetual securities	Average Shareholder's Equity	19.61	14.53	35.00	Due to increase in Net profit after tax
e)	Inventory turnover ratio	Cost of goods sold	Average Inventories	9.72	10.88	-10.63	
f)	Trade receivables turnover ratio	Net credit sales = Gross credit sales - sales return	Average Trade Receivables	9.59	21.40	-55.20	Due to increase in Trade receivables
g)	Trade payables turnover ratio	Net credit purchase = Gross credit purchase - purchase return	Average Trade Payables	8.59	11.63	-26.12	Due to Increase in Trade payables
h)	Net capital turnover ratio	Net sales = Total sales - sales return	Working capital = Current assets - Current liabilities	150.20	-17.99	-934.76	Due to increase in Working Capital
i)	Net profit ratio	Net Profit	Net sales = Total sales - sales return	13.32	11.18	19.21	
j)	Return on capital employed	Earnings before interest and taxes	Capital Employed = Tangible Net worth + Total Debt + Deferred Tax Liability	13.81	12.00	15.15	
k)	Return on investment	Interest income + Dividend income + Gain on fair value of current investment at FVTPL	Average (Investment + Fixed deposit+ Loans Given)	0.12	0.05	117.40	Due to maturity of investments

32. Financial Instruments

This section gives an overview of the significance of financial instruments for the Company and provides additional information on balance sheet items that contain financial instruments. The details of material accounting policies, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised in respect of each class of financial asset, financial liability and equity instrument are disclosed in the financial statements.

32.1 Financial assets and liabilities

The carrying value and fair value of financial instruments by categories as of 31st March, 2024 is as follows:

₹ Crores

Particulars	Fair Value through P&L	Fair Value through OCI	Amortised Cost	Total Carrying value	Total Fair Value
Assets					
Cash and Cash Equivalents	-	-	21.15	21.15	21.15
Trade Receivables	-	-	451.96	451.96	451.96
Investments	105.82	-	-	105.82	105.82
Unbilled Revenues	-	-	70.76	70.76	70.76
Loans	-	-	0.13	0.13	0.13
Other financial Assets	-	-	10.75	10.75	10.75
Total	**105.82**	**-**	**554.75**	**660.57**	**660.57**
Liabilities:					
Trade Payables	-	-	326.83	326.83	326.83
Fixed Rate Borrowings (Includes Current Maturities)	-	-	459.20	459.20	459.20
Floating Rate Borrowings (Includes Current Maturities)	-	-	870.34	870.34	870.34
Short term borrowings- Letter of credit	-	-	22.55	22.55	22.55
Lease Liability	-	-	51.36	51.36	51.36
Other Financial Liabilities	-	-	89.06	89.06	89.06
Total	**-**	**-**	**1,819.34**	**1,819.34**	**1,819.34**

The carrying value and fair value of financial instruments by categories as of 31st March, 2023 is as follows:

Particulars	Fair Value through P&L	Fair Value through OCI	Amortised Cost	Total Carrying value	Total Fair Value
Assets					
Cash and Cash Equivalents	-	-	180.61	180.61	180.61
Trade Receivables	-	-	134.50	134.50	134.50
Investments	4.00	-	-	4.00	4.00
Unbilled Revenues	-	-	47.07	47.07	47.07
Loans	-	-	0.15	0.15	0.15
Other Financial Assets	-	-	19.35	19.35	19.35
Total	**4.00**	**-**	**381.68**	**385.68**	**385.68**
Liabilities:					
Trade Payables	-	-	243.83	243.83	243.83
Fixed Rate Borrowings (Includes Current Maturities)	-	-	599.00	599.00	599.00
Floating Rate Borrowings (Includes Current Maturities)	-	-	969.87	969.87	969.87
Short term borrowings- Letter of credit	-	-	46.31	46.31	46.31
Lease Liability	-	-	3.49	3.49	3.49
Other Financial Liabilities	-	-	136.68	136.68	136.68
Total	**-**	**-**	**1,999.18**	**1,999.18**	**1,999.18**

S R Batliboi & Co. Kolkata
MAITHON POWER LIMITED

The management assessed that the fair value of cash and cash equivalents, other balances with bank, trade receivables, loans, unbilled revenues, trade payables, other financial assets and liabilities approximate their carrying amounts largely due to the short term maturities of these instruments.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties. The following methods and assumptions were used to estimate the fair values.

Fair value hierarchy

The fair value hierarchy is based on inputs to valuation techniques that are used to measure fair value that are either observable or unobservable and consists of the following three levels.

Level 1 : Quoted prices in an active market : Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities and net assets value of mutual funds declared by the issuer.

Level 2 : Valuation techniques with observable inputs : Inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3 : Valuation techniques with significant unobservable inputs : Inputs are not based on observable market data (unobservable inputs). Fair values are determined in whole or in part using a valuation model based on assumptions that are neither supported by prices from observable current market transactions in the same instrument nor are they based on available market data.

The following table provides the fair value measurement hierarchy of the Company's assets and liabilities.

		Fair value hierarchy as at 31st March, 2024			
	Date of valuation	Level 1	Level 2	Level 3	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
Carried at fair value through profit and loss (FVTPL)	31st March, 2024	-	-	**105.82**	105.82
Unquoted Mutual Funds		-	-	**105.82**	**105.82**
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March, 2024	-	459.20	-	459.20
Floating rate borrowings	31st March, 2024	-	870.34	-	870.34
Total		-	**1,329.54**	-	**1,329.54**

		Fair value hierarchy as at 31st March, 2023			
	Date of valuation	Level 1	Level 2	Level 3	Total
		₹ crore	₹ crore	₹ crore	₹ crore
Asset measured at fair value					
Carried at fair value through profit and loss (FVTPL)	31st March, 2023	-	-	**4.00**	4.00
Unquoted Mutual Funds		-	-	**4.00**	**4.00**
Liabilities for which fair values are disclosed					
Fixed rate borrowings	31st March, 2023	-	599.00	-	599.00
Floating rate borrowings	31st March, 2023	-	969.87	-	969.87
Total		-	**1,568.87**	-	**1,568.87**

There has been no transfer between level 1 and level 2 during the year.

32.2 Capital Management & Gearing Ratio

For the purpose of the Company's capital management, capital includes issued equity capital and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's capital management is to maximize the value for shareholders.

The Company manages its capital structure and makes adjustments in light of changes in economic conditions and the requirements of the financial covenants. From time to time, the Company reviews its policy related to dividend payment to shareholders, return capital to shareholders or fresh issue of shares. The Company monitors capital using gearing ratio, which is net debt divided by total capital plus net debt. The Company's policy is to keep the gearing ratio around 50%. The Company includes within net debt, interest bearing loans and borrowings, less cash and bank balances, excluding discontinued operations as detailed in the notes below.

The Company's capital management is intended to create value for shareholders by facilitating the meeting of its long-term and short-term goals. Its Capital structure consists of net debt (borrowings as detailed in notes below) and total equity.

Gearing ratio

The gearing ratio at the end of the reporting year was as follows:

		₹ crore
	As at 31st March, 2024	As at 31st March, 2023
Debt (i)	1,600.44	1,615.18
Less: Cash and Bank balances	21.15	180.61
Net debt	**1,579.29**	**1,434.57**
Total Capital (ii)	2,386.92	2,189.27
Capital and net debt	**3,966.21**	**3,623.84**
Gearing ratio (%)	39.82	39.59

(i) Debt is defined as Non-current borrowings (including current maturities) and Current borrowings and interest accrued on Non-current and Current borrowings.

(ii) Equity is defined as Equity share capital and other equity including reserves and surplus.

In order to achieve this overall objective, the Company's capital management, amongst other things, aims to ensure that it meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the bank to immediately call loans and borrowings. There have been no significant breaches in the financial covenants of any interest-bearing loans and borrowing in the current year.

No changes were made in the objectives, policies or processes for managing capital during the years ended 31st March, 2024 and 31st March, 2023.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

32. Financial Instruments

32.3 Financial risk management objectives and policies

The Company's principal financial liabilities, comprise borrowings, trade and other payables and other financial liabilities. The main purpose of these financial liabilities is to finance the Company's operations and to provide guarantees to support its operations. The Company's principal financial assets include investments, loans, trade and other receivables, cash and cash equivalents, other bank balances, unbilled receivables and other financial assets that derive directly from its operations.

The Company is exposed to market risk, credit risk and liquidity risk. The Company's senior management oversees the management of these risks. The Company's senior management is supported by a risk committee that reviews the financial risks and the appropriate financial risk governance framework for the Company. The Company's financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with the Company's policies and risk objectives. The risk management polices is approved by the board of directors, which is summarized below.

32.3.1 Market risk management

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risk: currency risk, interest rate risk and equity price risk. The impact of equity price risk and currency risk is not material. Financial instruments affected by market risk are loans and borrowings.

The following sensitivity analysis relates to borrowings as at 31st March, 2024 and 31st March, 2023.

a) Interest rate risk management

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to the risk of changes in market interest rates relates primarily to the company's long-term debt obligations with floating interest rates.

The Company manages its interest rate risk by having a balanced portfolio of fixed and variable rate loans and borrowings. The exposure of the Company's borrowings to interest rate changes at the end of the reporting period are as follows :

Particulars	31st March, 2024		31st March, 2023	
	Balance	Percentage	Balance	Percentage
Fixed Rate Borrowings (Includes Current Maturities)	459.20	35%	599.00	38%
Floating Rate Borrowings (Includes Current Maturities)	870.34	65%	969.87	62%
Total	**1,329.54**		**1,568.87**	

Interest rate sensitivity:

The sensitivity analysis below have been determined based on exposure to interest rates for term loans and debentures at the end of the reporting period and the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period in case of term loans and debentures that have floating rates.

If the interest rates had been 50 basis points higher or lower and all the other variables were held constant, the effect on Interest expense for the respective financial years and consequent effect on Company's profit in that financial year would have been as below:

Particulars	31st March, 2024		31st March,2023	
	50 bps increase	50 bps decrease	50 bps increase	50 bps decrease
Interest expense on loan	(+) ₹ 2.30	(-) ₹ 2.30	(+) ₹ 3.00	(-) ₹ 3.00
Effect on profit before tax	(-) ₹ 2.30	(+) ₹ 2.30	(-) ₹ 3.00	(+) ₹ 3.00

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

32.3.2 Credit risk management

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (i.e. Primarily trade receivables and unbilled revenue) and from its financing activities including loans, foreign exchange transactions and other financial instruments.

Collateral held as security

The Company holds collateral i.e. letter of credit and bank guarantee to partly secure its outstanding trade receivables. Credit risk associated with receivables is mitigated because the receivables are partly secured.

₹ crore

	31st March, 2024	31st March, 2023
Trade Receivables	451.96	134.50
Loans	0.13	0.15
Other Financial Assets	10.75	19.35
Unbilled Revenue	70.76	47.07
Total	**533.60**	**201.07**

Refer Note 9.2 for credit risk and other information in respect of trade receivables. Other receivables as stated above are due from the parties under normal course of the business and as such the Company believes exposure to credit risk to be minimal.

32.3.3 Liquidity risk management

Liquidity risk is the risk that the company will encounter difficulty in meeting obligation, associated with financial liabilities that are settled by delivering cash or another financial asset.

The Company manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities. The Company has access to a sufficient variety of sources of funding. Having regards to the nature of the business wherein the Company is able to generate fixed cash flows over a period of time and to optimize the cost of funding, the Company, from time to time, funds its long -term investment from short-term sources. The short-term borrowings can be rollforward or, if required, can be refinanced from long term borrowings.

	Up to 1 year	1 to 5 years	5+ years	Total	Carrying Amount
31st March, 2024					
Non-Derivatives					
Borrowings #	219.76	771.56	343.05	**1,334.37**	**1,338.39**
Trade Payables	288.55	38.28	-	**326.83**	**326.83**
Lease Liability	0.33	1.65	49.38	**51.36**	**51.36**
Other Financial Liabilities	32.90	47.31	-	**80.21**	**80.21**
Total Non-Derivative Liabilities	**541.54**	**858.80**	**392.43**	**1,792.77**	**1,796.79**
31st March, 2023					
Borrowings #	369.86	850.71	354.56	**1,575.13**	**1,583.17**
Trade Payables	215.56	28.26	-	**243.82**	**243.82**
Lease Liability	0.31	1.55	4.68	**6.54**	**3.43**
Other Financial Liabilities	48.98	73.40	-	**122.38**	**122.38**
Total Non-Derivative Liabilities	**634.71**	**953.92**	**359.24**	**1,947.87**	**1,952.80**

The table has been drawn up based on the undiscounted contractual maturities of the financial liabilities including interest that will be paid on those liabilities upto the maturity of the instruments.

32.4 Commodity price risk

The operating activity of the company involves generation of power and therefore requires continuous supply of coal. The Company has entered into fuel supply agreements with Central Coalfields Limited and Bharat Coking Coal Limited and any price fluctuation is passed on to the customers.

S.R. Bathiba... Kol... LLP

MAITHON POWER LTD. MAITHON

33. In terms of the Master Circular on 'Gati Shakti Multi-modal Cargo Terminal (GCT) Policy notified on December 15, 2021, the ownership of all cargo terminals that were under approval or being construction then by eligible terminal operators at their cost shall belong to the Railways. Accordingly, the Company had given an undertaking in February 2022 to abide by all provisions of the aforesaid Master Circular. The Company's railway infrastructure related assets were under approval on the date of the Master Circular and was capitalised on being ready to be put to use during prior years. The Company has been charging depreciation on these assets based on rates and methodology specified in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 as required by Schedule II of the Companies Act, 2013. The CERC on its order dated 20th January 2024 has allowed the company to sign an agreement with the Indian Railways and transfer ownership rights of its infrastructure, including the track, signalling equipment and OHE to Indian Railways. As the Company will continue to obtain future economic benefits from cost of such transferred assets aggregating ₹626.88 crores, their carrying values have now been allocated to other major items of Property, plant and equipment as enabling asset w.e.f. April 2022 (i.e. after the above undertaking given by the Company) in accordance with Indian Accounting Standard (Ind AS) 16 "Property, Plant and Equipment". This has led to the restatement of Balance Sheet as on March 31, 2023. Consequently, the Statement of Profit and Loss for the year ended March 31, 2023 had to be restated due to additional depreciation charge arising from aforesaid allocation to other major items of Property, plant and equipment. Basic and diluted earnings per share for the prior period has also been restated. The amount of the correction for both basic and diluted earnings per share was a decrease ₹0.04 per share for the year ended March 31, 2023. The correction of the error had no impact on previously reported cash flows from operating, investing and financing activities.
The error has been corrected by restating each of the affected financial statements line items for the prior period as follows:

₹ Crores

Balance sheet	Deferred Tax Assets (Net)	Current Tax Liabilities (Net)	Property, Plant and Equipment	Other Equity	Other Non Current Liabilities
Year Ended 31st March, 2023					
Previously reported	67.36	5.28	3,104.19	686.47	67.36
Increase/(decrease) due to incremental depreciation	1.14	(1.54)	(7.66)	(6.12)	1.14
Restated	68.50	3.74	3,096.53	680.35	68.50

₹ Crores

Statement of profit and loss	Depreciation and Amortisation Expense	Current Tax	Deferred Tax	Revenue from Operations	Total Income	Total Expenses	Profit before tax
Year Ended 31st March, 2023							
Previously reported	279.17	66.17	(31.75)	3,029.09	3,078.76	2,699.02	379.74
Increase/(decrease) due to incremental depreciation	7.66	(1.54)	1.14	(1.14)	(1.14)	7.66	(8.80)
Restated	286.83	64.63	(32.89)	3,027.95	3,077.62	2,706.68	370.94

34. **Recent Pronouncement**
Ministry of Corporate Affairs ("MCA") notifies new standard or amendments to the existing standards under Companies (Indian Accounting Standards) Rules as issued from time to time. On 31st March, 2023, MCA amended the Companies(Indian Accounting Standards) Amendment Rules, 2023, applicable from April 1, 2023, as below:

Ind AS 1 – Disclosure of accounting policies:
The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' ccountlng policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures.

Ind AS 8 – Definition of accounting estimates:
The amendments clarify the distinction between changes In ccountmg estimates, changes in accounting policies and the correction of errors. It has also been clarified how entities use measurement techniques and inputs to develop accounting estimates.

Ind AS 12 – Income Taxes
The amendments narrow the scope of the initial recognition exception under Ind AS 12, so that it no longer applies to transactions hat give rise to equal taxable and deductible temporary differences such as leases.

S R Batliboi & Co. LLP Kolkata

MAITHON POWER LTD. MAITHON

35. Segment Reporting

The Company is mainly engaged in the business of generation and selling of power in India. Based on the information reported to the chief operating decision maker (CODM) for the purpose of resource allocation and assessment of performance, there are no other reportable segments in accordance with the requirements of Indian Accounting Standard 108-'Operating Segments', notified under the Companies (Indian Accounting Standards) Rules, 2015. Revenue from four discom on sale of electricity with which Company has entered into a Power Purchase Agreement, accounts for more than 10% of Revenue.

36. Significant Events after the Reporting Period

There were no significant adjusting event that occurred subsequent to the reporting period.

37. Other Statutory Information

(i) The Company does not have any Benami property, where any proceeding has been initiated or pending against the Company for holding any Benami property.
(ii) The Company does not have any transactions with companies struck off.
(iii) The Company does not have any charges or satisfaction which is yet to be registered with ROC beyond the statutory period.
(iv) The Company has not traded or invested in Crypto currency or Virtual Currency during the financial year.
(v) The Company has not advanced or loaned or invested funds to any other person(s) or entity(ies), including foreign entities (Intermediaries) with the understanding that the Intermediary shall:
(a) directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the company (Ultimate Beneficiaries) or
(b) provide any guarantee, security or the like to or on behalf of the Ultimate Beneficiaries.
(vi) The Company have not received any fund from any person(s) or entity(ies), including foreign entities (Funding Party) with the understanding (whether recorded in writing or otherwise) that the Company shall:
(a) directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party (Ultimate Beneficiaries) or
(b) provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries.

(vii) The Company have not any such transaction which is not recorded in the books of accounts that has been surrendered or disclosed as income during the year in the tax assessments under the Income Tax Act, 1961 (such as, search or survey or any other relevant provisions of the Income Tax Act, 1961.
(viii) The Company has not been declared as wilful defaulter by any bank or financial institution or other lender.

38.

The Company has used accounting software for maintaining its books of account which has a feature of recording audit trail (edit log) facility and the same has operated throughout the year for all relevant transactions recorded in the software, except that audit trail feature was not enabled for direct changes to data for users with certain privileged access rights to the SAP ECC and BW application and/or the underlying HANA database. However stringent control procedures were implemented to effectively restrict direct changes to data throughout the financial year. These procedures included thorough reviews of logs and reconciliation of datasets and during the financial year no direct changes were made that impacted financial records. Further no instance of audit trail feature being tampered with, was noted in respect of other software.

As per our report of even date

For S. R. Batliboi & Co LLP
Chartered Accountants
ICAI Firm registration number: 301003E/E300005

Bhaswar Sarkar
per Bhaswar Sarkar
Partner
Membership No: 055596
Place: Kolkata
Date: 16th April, 2024

For and on behalf of the Board,
CIN : U74899MH2000PLC267297

MAITHON POWER LTD. MAITHON

Ashish Khanna
Chairman
DIN: 06699527
Place: Mumbai
Date: 16th April, 2024

Joydeep Mukherjee
Director
DIN: 08605394
Place: Kolkata
Date: 16th April, 2024

Vijayant Ranjan
Chief Executive Officer
Place: Dhanbad
Date: 16th April, 2024

Kajal Kumar Singh
Chief Financial Officer
Place: Dhanbad
Date: 16th April, 2024

Mona Purandare
Company Secretary
Place: Mumbai
Date: 16th April, 2024

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

Independent Auditor's Report on Statement of annual and quarterly package wise addition to Property Plant and Equipment (PPE) & Right of Use Assets (ROU) for financial years ended 2019-20 to 2023-24, in support to the requirements of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019

To
The Board of Directors
Maithon Power Limited
Corporate Center
34, Sant Tukaram Road,
Carnac Bunder, Mumbai- 400009

1. This Report is issued in accordance with the terms of our service scope letter dated November 18, 2024 and Master Engagement Agreement dated October 13, 2022, as amended with Maithon Power Limited (hereinafter the "Company")

2. At the request of the management, we have examined the accompanying Statement of annual and quarterly package wise addition to Property Plant and Equipment (PPE) & Right of Use Assets (ROU) for financial years ended 2019-20 to 2023-24 (hereinafter referred to as the "Statement"), which we have initialled for identification purposes only.

3. The Company intends to submit the accompanying Statement for consideration of and evaluation by the Central Electricity Regulatory Commission in connection with true up petitions filed by the Company as required by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the control period 2019-2020 to 2023-24.

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

5. The Management is responsible for ensuring that the Company complies with the requirements of the CERC Regulations and for providing all relevant information to the CERC.

Auditor's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a limited assurance based on our examination whether details in the Statement for yearly balances are in agreement with books of account and records which were examined by us as considered necessary for the purpose of our audit underlying the audited financial statements for each of the years ended March 31, 2020 to March 31, 2024 and for the quarterly balances, books of account and records underlying the Board approved unaudited interim condensed statements for the quarters ended after April 1, 2019 to March 31, 2024.

   The above paragraph constitutes the "Reporting Criteria".

7. The financial statements of the Company referred to in paragraph 6 above, were audited by us, on which we had issued an unmodified audit opinions vide our reports dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023, April 16, 2024. Our audit of these financial statements was conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test check basis, evidence supporting the amounts and

disclosures in the financial statements. Our audits were not planned and performed in connection with any transactions to identify matters that may be of potential interest to third parties.

8. We conducted our examination of the Statement in accordance with the requirements of the Guidance Note on Reports or Certificates for Special Purposes issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

10. Our scope of work did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of the amounts reported in the Statement. We have not performed an audit, the objective of which would be the expression of an opinion on the financial results, specified elements, accounts or items thereof, for the Company taken as a whole. Accordingly, we do not express such audit opinion.

11. A limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 6 above. The procedures performed vary in nature and timing from and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

12. We have performed the following procedures in relation to the Statement:

    a. Obtained the audited financial statements of the Company for each of the years ended March 31, 2020, March 31, 2021, March 31, 2022 , March 31, 2023 and March 31, 2024 audited by us on which we had issued unmodified audit opinions vide their report dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023, April 16, 2024 respectively and the Board approved unaudited interim condensed statements for each of the quarters ended after April 1, 2019 to March 31, 2024.

    b. Traced the annual aggregate addition to assets as set out in the Statement to respective audited financial statements.

    c. Traced the quarterly aggregate addition to assets as set out in the Statement to unaudited interim condensed statements of respective quarters.

    d. We have solely relied on management representation for appropriateness of classification for package wise additions and have not performed any procedure on it.

    e. Performed necessary enquires with the management and obtained necessary representations. The Company has provided all relevant information for the respective period as stated above. We have relied on the same and have not performed any independent procedures.

    The above-mentioned procedures include examining evidence supporting the particulars in this Statement. Further, our scope of work did not involve us performing audit test for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.

Conclusion

13. Based on procedures performed by us, and on observations as set out in paragraph 12 above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes thereon, are in agreement with books of account and records underlying audited financial statements of the Company for the years ended March 31, 2020 to March 31, 2024 and unaudited interim condensed statements for the quarters ended after April 1, 2019 to March 31, 2024.



S.R. BATLIBOI & CO. LLP
Chartered Accountants

Restriction on Use

14. This report has been issued at the request of the Company, solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar.Sarkar
Digitally signed by Bhaswar.Sarkar
DN: cn=Bhaswar.Sarkar, email=Bhaswar.Sarkar@srb.in
Date: 2024.12.12 20:10:41 +05'30'

per Bhaswar Sarkar
Partner
UDIN: 24055596BKFOCS1578
Membership Number: 055596
Place of Signature: Kolkata
Date: December 12, 2024

MAITHON POWER LIMITED

Statement of annual and quarterly package wise addition to Property Plant and Equipment (PPE) & Right of Use Assets (ROU) for financial years ended 2019-20 to 2023-24

Amount in Lakhs

		Year ended 31st March				
Sl. No.	Packages	2020	2021	2022	2023	2024
A.	**Railway Infrastructure Asset**					
1	Railway Capex (Other than IDC)	2,524.68	51,947.42	-	52.79	-
2	Interest during construction (IDC)	-	8,935.76	-	-	-
	Total (A)	**2,524.68**	**60,883.18**	**-**	**52.79**	**-**
B.	**Other capex packages**					
1	Ash Weighbridge (100 MT)	-	-	-	-	64.03
2	Ash Wharf	-	-	-	11.81	190.01
3	Augmentation of Ash Handling Plant	633.04	285.93	543.64	305.30	125.66
4	Augmentation of Fire detection System	-0.43	-	16.58	7.57	-
5	Automatic Generation Control	-	49.91	-	-	30.00
6	Boundary wall underpass	-	-	13.66	104.51	-
7	Ceramic Lining of Coal Mill	-	-	-	70.24	249.72
8	Coal pit run-off mechanized drainage system	10.92	-	-	-	-
9	DG Set	-	-	-	-	38.71
10	Distributed Control System (DCS)	-	-	-	-	160.03
11	DM Plant & Raw water PLC Upgradation	-	-	-	68.48	7.66
12	Dust Suppression System	38.02	-1.36	0.46	3.80	-
13	Economiser platform	-	530.01	490.99	159.29	280.98
14	Employee vechical purchase	-	-	-	73.34	77.98
15	End of Life (Decentralised AC System)	3.04	6.72	-	0.46	70.94
16	eSecurity	35.64	51.19	318.35	132.44	90.92
17	ESP Internals	-	-	293.42	342.33	170.61
18	ESP Wear Resist Pipes	-	-	108.93	38.41	2.52
19	Fabric Expansion Bellows	46.92	40.04	-	-	-
20	Field Hostel	1.02	89.71	-	-	-
21	Fire door for MCC Room	-	-	-	-	19.84
22	Fire Hydrant System	-	-	87.75	115.44	99.34
23	Fire Tender	-	-	-	-	101.36
24	Flow Meter Instalation	-	-	-	64.45	5.32
25	General Civil Work	163.27	83.47	-	-	-
26	Infrastructure - Admin	26.95	13.64	8.19	45.59	52.94
27	Infrastructure - IT	37.88	39.76	5.22	63.48	42.89
28	Interconnection of Chutes from BCN 4A/B	-	-	-	49.98	-
29	Laboratory Instruments	2.30	-	-	31.60	121.93
30	Cost of Land & Site	-	126.77	-	-	-
31	Main Turbine & TDBFP TSS	-	-	-	98.76	141.20
32	Max DCS Version Upgradation (XP) Unit2	440.31	-	-	-	-
33	Mini Fire Tender	-	-	-	24.97	-
34	MVWS System	-	-	-	-	97.28
35	Network Equipment	-	-	18.36	4.21	51.87
36	Peripheral Road	51.30	27.66	-	98.62	344.49
37	RCC structure	-	-	-	2.36	48.43
38	Refurbishment of Economiser coil	98.93	-	0.94	-	-
39	Reheater upgradation	201.30	986.99	486.57	500.37	505.47
40	Reliability (Structural strengthening-BTG,CHP)	-	-	-	-	443.92
41	Replacement of battery	-	-	243.95	696.43	412.44
42	Safety (Platform in Coal Mill Area)	115.40	37.60	84.76	17.62	5.86
43	SCADA Upgradation	20.50	-	-	-	-
44	Soak Pit	-	-	-	-	15.00
45	Solar Panel	-	-	-	-	38.40
46	Spare GT	-7.74	-	-	-	-
47	Extension of Stores	215.25	25.31	9.78	-	90.72
48	SWAS Silica Analyzer Upgradation	-	-	-	28.39	21.59
49	Testing Instruments	20.15	-	-	-	-
50	Track Hopper End Wall	-	-	-	-	98.93

MAITHON POWER LIMITED

Sl. No.	Packages	2020	2021	2022	2023	2024
51	Track Hopper Ventilation System	-	-	-	-	204.39
52	Unified PI System	-	47.97	8.47	4.74	-
53	Up-gradation of AHP PLC	-	-	59.00	2.37	-
54	Up-gradation of CHP PLC	-	-	116.09	7.49	-
55	Up-gradation of Fire PLC	-	-	-	-	59.47
56	Upgradation of protection System	-	0.05	-	-	-
57	Water Supply Township	-	-	-	-	66.41
58	Yard Sprinkling	-2.96	-	-	-	-
	Total (B)	**2,151.03**	**2,441.37**	**2,915.13**	**3,174.87**	**4,649.26**

		Year ended 31st March				
Sl. No.	**Packages**	**2020**	**2021**	**2022**	**2023**	**2024**
C.	**Capital Spares**					
1	400KV Circuit Breaker	-	-	61.65	-	-
2	Breaker & Relays	26.72	-	73.14	99.34	40.29
3	Capital Spares Replenishment	-	-	110.29	1,753.36	646.53
4	Coal Mill Gearbox	-	-	-	399.48	-
5	Coal Mill Journal Assembly	-	-	26.49	340.09	-
6	Control Valves	-	-	-	-	3.30
7	Cooling Tower Internals	-	-	88.25	209.67	202.05
8	Crusher Rotor Assembly	-	-	-	83.09	66.59
9	Economiser Coil	-	495.26	699.87	-	-
10	DM plant Equipment	45.56	45.91	22.08	2.40	-
11	Pulversier internals	98.96	0.34	0.34	-	-
12	Suspended Magnet & Track Hopper	69.70	-	-	-	-
13	TDBFP Recirculation Valve	55.37	54.80	57.75	1.24	0.45
14	Turbine Bearing Set	-	-	-	-	51.58
15	Vacuum Pump	127.68	85.58	262.80	53.43	-
	Total (C)	**423.99**	**681.89**	**1,402.66**	**2,942.10**	**1,010.81**
	Total (A + B + C)	**5,099.71**	**64,006.45**	**4,317.79**	**6,169.76**	**5,660.07**
D.	**Right of Use assets**					
	Right of Use assets	-	-	325.25	-	4,869.00
	Total (D)	**-**	**-**	**325.25**	**-**	**4,869.00**
	Total addition to PPE & ROU (A + B + C + D)	**5,099.71**	**64,006.45**	**4,643.04**	**6,169.76**	**10,529.07**

		Year ended 31st March 2020			
Sl. No.	**Particulars**	**Quarter ended June'19**	**Quarter ended September'19**	**Quarter ended December'19**	**Quarter ended March'20**
A.	**Railway Infrastructure Asset**				
	Railway Capex (Other than IDC)	-	-	-	2,524.68
	Interest during construction (IDC)	-	-	-	-
	Total (A)	**-**	**-**	**-**	**2,524.68**
B.	**Other capex packages**	6.98	1,494.72	125.00	524.33
C.	**Capital Spares**	-0.01	80.18	275.91	67.93
	Total (A + B + C)	**6.97**	**1,574.90**	**400.91**	**3,116.94**

		Year ended 31st March 2021			
Sl. No.	**Particulars**	**Quarter ended June'20**	**Quarter ended September'20**	**Quarter ended December'20**	**Quarter ended March'21**
A.	**Railway Infrastructure Asset**				
	Railway Capex (Other than IDC)	326.86	-	-	51,620.55
	Interest during construction (IDC)	-	-	-	8,935.76
	Total (A)	**326.86**	**-**	**-**	**60,556.32**
B.	**Other capex packages**	308.17	78.69	130.28	1,924.24
C.	**Capital Spares**	0.39	-	-	681.50
	Total (A + B + C)	**635.42**	**78.69**	**130.28**	**63,162.06**

MAITHON POWER LIMITED

Sl. No.	Particulars	Year ended 31st March 2022			
		Quarter ended June'21	Quarter ended September'21	Quarter ended December'21	Quarter ended March'22
A.	**Railway Infrastructure Asset**				
	Railway Capex (Other than IDC)	-	-	-	-
	Interest during construction (IDC)	-	-	-	-
	Total (A)	**-**	**-**	**-**	**-**
B.	**Other capex packages**	254.34	562.19	253.82	1,844.78
C.	**Capital Spares**	15.27	3.23	98.18	1,285.98
	Total (A + B + C)	**269.62**	**565.41**	**352.00**	**3,130.76**

Sl. No.	Particulars	Year ended 31st March 2023			
		Quarter ended June'22	Quarter ended September'22	Quarter ended December'22	Quarter ended March'23
A.	**Railway Infrastructure Asset**				
	Railway Capex (Other than IDC)	-	-	-	52.79
	Interest during construction (IDC)	-	-	-	-
	Total (A)	**-**	**-**	**-**	**52.79**
B.	**Other capex packages**	158.87	573.24	547.93	1,894.83
C.	**Capital Spares**	107.59	89.13	52.41	2,692.97
	Total (A + B + C)	**266.46**	**662.36**	**600.34**	**4,640.59**

Sl. No.	Particulars	Year ended 31st March 2024			
		Quarter ended June'23	Quarter ended September'23	Quarter ended December'23	Quarter ended March'24
A.	**Railway Infrastructure Asset**				
	Railway Capex (Other than IDC)	-	-	-	-
	Interest during construction (IDC)	-	-	-	-
	Total (A)	**-**	**-**	**-**	**-**
B.	**Other capex packages**	52.10	315.81	498.44	3,782.91
C.	**Capital Spares**	66.59	17.88	40.76	885.58
	Total (A + B + C)	**118.69**	**333.69**	**539.20**	**4,668.50**

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting pur
2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 18:27:16 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

Status of Land Acquisitions: Progress and reasons for the delay with respect to each parcel of land

1. The Hon'ble Commission, in its order dated January 8, 2022, for Petition No. 408/GT/2020, approved an expenditure of Rs. 3881.64 lakh in 2019-20 towards the cost of 'Land & Site'. The projected expenditure was envisaged for the payment of the revised demand for 114.95 acres GM land as per the then available 2018 circle rate at Rs.3357.71 lakh (i.e. net of revised demand of 3527.71 lakh and already paid amount of Rs 170 lakh). Balance Rs. 523.93 Crore included the remaining 20% of payment demand (of Rs. 59.71 lakh) for Krishi farmland admeasuring 4.81 acres, balance 20% of payment demands (of Rs. 125.17 lakh plus 128.56 lakh) for GM Lands admeasuring 6.96 acre for stage 1 and 6.01 acre for stage 2 respectively which were meant for Railway Corridor and contingency amount of about Rs. 210.49 lakh. The relevant extracts of the order dated 08.01.2022 are extracted as below for the periods 2014-19 and 2019-24 for ready reference-

> *"44……In respect of (i) Payment of demand for GM land acquired for Railway Corridor and payment of license fee for Railway land acquired for Railway Corridor (for Rs.647 lakh in 2018-19) and (ii) Payment of fresh demand of GM Land (114.95 acre) for the project in 2019-24, it is noticed that additional payments were required to be made due to change in the policy of State Government (GoJ) for leasing the land. The sequence of events in regard to the leasing of land is enumerated below:*
>
> *(i) On 5.1.2010: The Government of Jharkhand accorded in-principal approval to DVC for sub-leasing 114.95 acres (already leased to DVC) of land to MPL. Reference placed at annexure P/5-C of the petition.*
>
> *(ii) On 22.1.2011: The Government of Jharkhand amended the leasing policy of land and held that on leased out land, third party right cannot be created and thereby sub-leasing already accorded to MPL vide letter dated 5.1.2010 became ineffective. Reference placed at annexure P/5-E of the petition.*

(iii) On 30.9.2014: The Government of Jharkhand directed DVC to surrender 114.95 acres (already leased to DVC) of land stating that the DVC share being less than 51% in MPL, it does not fall under the category of government company as per Company Act. Thus, sub-leasing to MPL by DVC was withdrawn. Reference placed at annexure P/5-H of the petition.

(iv) On 4.1.2017: The Government of Jharkhand revised the rates for leasing of the land and thereby creating additional liability to MPL for the sameland which was sub-leased to the Petitioner by DVC. Reference placed at annexure P/5-K of the petition.

(v) On 20.10.2017: DVC intimated to Govt. of Jharkhand that DVC Board had approved the surrender of 114.95 acres of land for subsequent grant of the same land to the Petitioner. Reference placed at annexure P/5-L of the petition.

(vi) On 08.11.2017: Petitioner requested the Govt. of Jharkhand that to initiate the leasing process directly in favour of the Petitioner and the same land is already in use for power plant. Reference placed at annexure P/5- of the petition….

45. On perusal of the sequence of events and documents furnished by the Petitioner, it is observed that the delay in payment towards land and site was due to change in policy of the State Government of Jharkhand. Scrutiny of the documents furnished indicates that 'land issues' had prolonged till 24.11.2018, i.e. even after the cut-off date. Though the said work form part of the original scope of work of the project, the Petitioner had to continue the execution of these works even after the cut-off date on account of the delay in the availability of land and site…

46. As already observed, the delay in the availability of land & site was due to changes in the policy of the Govt. of Jharkhand, cancellation of wrongful disbursement of land compensation award and clearance for the development of Railway Corridor after payment of compensation. Also, the delay due to non-availability of land had caused the delay in execution of the General Civil Works by the Petitioner and the same cannot be attributable to

the Petitioner. From the documents enclosed by the Petitioner, it is noticed that the Petitioner has been coordinating with the local administration for speedy resolution of the land issues and has been taking steps to mitigate the delay. Accordingly, actual additional capitalisation of Rs.69.98 lakh in 2015-16, Rs 0.40 lakh in 2016-17 and Rs.2112.86 lakh in 2018-19 towards Land & Site is allowed under Regulation 14(3(i) of the 2014 Tariff Regulations. Consequently, as the General Civil Works were also delayed due to delay in the possession of land, for which reasons and justifications have been furnished in previous paragraphs, the actual additional capitalisation of Rs.791.99 lakh in 2015-16, Rs.184.39 lakh in 2016-17, Rs.154.47 lakh in 2017-18 and Rs.147.49 lakh in 2018-19 towards General Civil Works is also allowed under Regulation 14(3(i) of the 2014 Tariff Regulations."

185. .....We have, in paragraph 38 to paragraph 46 of this order, examined the submissions of the Petitioner with regard to the delay in the availability of land & site and the delay in execution of the General Civil Works, consequent upon the non-availability of land, attributed to the change in policy of State Government and Order of the Hon'ble High Court, and allowed the additional capitalisation of the expenditure claimed by the Petitioner for the period 2015-19 under Regulation 14(3)(i) of the 2014 Tariff Regulations, for compliance with the orders of the Hon'ble Court. Considering the fact that these are balance works which have spilled over from 2018-19 and keeping in view that the Railway Infrastructure Package, being an interdependent activity, contingent upon the clearance of land acquisition issues, we hold, that the delay is on account of events which are not attributable to the Petitioner. In our considered view, the delay due to non-availability of land & site, which has caused the delay in the execution of the General Civil Works for the period 2015-19, holds good for the delay in the completion of Railway Infrastructure Package for the period 2019-21 also. For these reasons, the projected additional capitalization of Rs.68506.24 lakh for 'Railway Infrastructure Package' in 2020-21 and ***the projected additional capitalization of Rs.4041.64 lakh (Rs.3881.64 lakh for cost of Land and Site and Rs.160.00 lakh for General Civil Works) in 2019-20 is allowed***

under Regulation 25(1)(a) of the 2019 Tariff Regulations*. However, the total cost including cost disallowed for the year 2015-16 on Railway Package shall be considered and dealt on merits, after prudence check, at the time of truing-up.*

2. As evident from the above, the Petitioner had projected an expenditure of Rs. 3881.64 lakh in the FY 2019-20 anticipating balance demand in 2019-20 considering receipt of similar demand in 2018-19 for Un-notified forest land for which payment was also made and claimed in 2018-19. Further, discussions on these parcels of land were also in advance stages. **However, despite exercising sufficient caution and follow up with Government Authorities, the Petitioner is yet to receive the revised and/or balance demand from the Land and Revenue Department of the Government of Jharkhand (GoJ). The detailed reasons/progress made so far, for each parcel of land, is enumerated in the following paragraphs for kind perusal of the Hon'ble Commission.**

I. Re Gair Majarua ("GM") Land 114.95 Acres for Main Plant

3. In compliance with directives of GoJ dated September 24, 2016, DVC through its letter dated October 20, 2017 surrendered 114.95 acres of GM land to the GoJ. Subsequently, the Petitioner on 8.11.2017 submitted request to the GoJ to initiate the transfer/lease of 114.95 acres of GM land in favor of the Petitioner and give revised demand in accordance with GR dated 03.01.20217. Pursuant to above and following internal deliberations with Government Authorities, Circle Officer (CO), Nirsa through his letter dated 10.01.2018 sought detailed application along with copies of Map. In response of the same, the Petitioner submitted the required details on 11.06.2018. Thereafter, the Petitioner through various discussions and in review meetings taken by DC, Dhanbad raised the issue of balance demand and further requested for issuance of revised/ or balance of payment demand for remaining parcels of land. It is also evident from the correspondences dated 01.09.2018, 19.08.2019, 16.01.2020, 23.01.2020, 26.02.2020, 21.10.2021, 7.08.2023, 05.08.2024 that the Petitioner has been constantly following up with and providing requisite information to authorities for issuance of revised/ balance

payment demand. All the communications referred above are enclosed as **Annexure P/6(A)-1.**

4. However, in the aforesaid follow up, the Petitioner came to know that certain discrepancies have crept in during recent Haal Survey Khatiyan and out of the 114.95 acres, some land parcels were wrongly and illegally recorded as private land. This is evident from letter dated 21.10.2021 from Additional Collector to Circle (CO), Nirsa which also mentions that. In order to resolve these discrepancies, the Government has filed an Original Suit No. 2091 of 2020 before the Dhanbad Civil Court for the correction in respect to the land title and has sought present status of the case from CO Nirsa. The suit filed by CO, Nirsa in June 2020 against 74 defendants mention as follows.

".....4. That, in the recent revisional survey operation the lands described in the schedule hereunder has been wrongly and illegally prepared and finally published in the names of the Defendants in the Revisional Survey Khatian.

5. That, the Defendants have got no manner of right, title, interest and possession over the lands described in the Schedule hereunder, but they illegally managed to get their names entered in the Revisional Survey Khatian and on the basis of such illegal and wrong entry made in the Revisional Survey Khatian now they are recently trying to grab the same.

....

12. That, the Plaintiff, therefore, prays for the following reliefs;

a) For a decree for declaration, declaring Plaintiff's right, title & interest on confirmation of possession over the land described in the Schedule hereunder in favour of the Plaintiff and agqinst the Defendants.

b) For a decree for declaration declaring that the entry made in the Revisional Survey Khatian in respect of the land described in the Schedule below is illegal, wrong and erroneous.

c) For a decree for permanent injunction restraining the Defendants, their men, agents, representatives from interfering with Plaintiff's possession over the lands described in the Schedule herein below and/or encroaching

upon any portion of the land described in the Schedule herein below and/or doing any acts which is prejudicial to the interest of the Plaintiff.

……."

Aforesaid letters, copy of the Suit No. 2091 of 2020 and updated status of this suit are enclosed as **Annexure P/6(A)-2(Colly)**.

5. In order to expedite the matter, the Petitioner once again through a letter dated August 7, 2023 requested DC, Dhanbad to provide payment demands and expedite the process for transferring the 114.95 acres of GM land. Alternatively, the Petitioner has also requested the GoJ through a letter dated August 5, 2024, to at least initiate the transfer process for the undisputed GM land with clear records and remaining land may be leased or transferred once the necessary record corrections are made, depending on the outcome of Original Suit No. 2091 of 2020 to which response is awaited. Thus, in spite of repeated requests, the Petitioner has still not received the demand by GoJ. In view of the matter being sub-judice, the Petitioner understands that it will receive the demand for this parcel of land and only after the Original Suit No. 2091 of 2020 is decided. Aforesaid communications are already enclosed as part of Annexure P/6(A)-1/2.

II. Re 4.81 Acres krishi farmland (GM) for Railway Project

6. The Petitioner had deposited 80% of the payment demand dated 15.09.2009 and informed the authorities via a letter dated July 7, 2010. In lieu of krishi land, identified GM land of 25 acres in Nirsa was supposed to be transferred in the name of Agriculture Department by the Revenue Department and the Petitioner was directed to pay an amount of Rs. 1 Crore for the development of said land as Agricultural land. Accordingly, in response to the demand note dated November 6, 2017, MPL made a payment of Rs. 1 Crore for the development of agricultural land via treasury challan dated May 9, 2018. This payment was further communicated to the GoJ through a letter dated May 10, 2018. However, MPL is yet to receive the demand note for the remaining 20%. Acting as a prudent entity,

MPL raised the issue in various meetings and also requested the demand note for the remaining balance of 20% from CO Nirsa via letters dated June 17, 2019 and January 23, 2020. Currently, the issue of transfer of GM land to agricultural land is pending with Agriculture Department, GoJ owing to inter-department transfer of land and involves no fault on part of the Petitioner. Same is also evident from the point no.3 of MoM dated 14.09.2020 attached with letter dated September 15, 2020 from Additional Collector to CO, Nirsa who was directed to dispose of the matter without any delay. In order to further expedite, the Petitioner through its letter dated August 7, 2023, to DC Dhanbad requested to raise payment demand for balance 20% and expedite the resolution of land matters. However, the demand is still awaited. Aforesaid communications are enclosed herewith as **Annexure P/6(A)-3(Colly).**

III. Re GM Land 6.96 Acres and 6.47 Acres for Railway Project

7. Similar to above parcels of land, MPL in its various meetings with DC, Dhanbad raised the issue of balance 20% of payment demand and also through communications dated 17.06.2019, 23.01.2020 has requested for issuance of the balance 20% of the payment demand which is awaited. MPL once again through its letter dated August 7, 2023 to DC Dhanbad has requested to expedite the land transfer process and for issuance of payment demand for balance 20% of the amount.
8. In view of the aforementioned reasons, it is evident that primarily the delay in the issuance of the revised and/or balance payment demand by the GoJ for the transfer of land in the name of the Petitioner is getting delayed due to pending disposal of the Suit No 2091 of 2020 before district court of dhanbad, pending inter department transfer of agricultural land and pending computations of balance 20% by appropriate authority. As elaborated in the foregoing paragraphs, it is evident that the said delay is due to reasons beyond the control of the Petitioner.
9. From the foregoing's, it is evident that land transfer has faced numerous critical issues despite the Petitioner exercising sufficient caution. Therefore, in Petitioner's respectful submission, delay in getting the revised demand payment is beyond MPL's control. Accordingly, the Petitioner for the purpose of True-up for

2019-24 has claimed nil cash capitalisation against the said approval. Further, pending disposal of the Suit No 2091 of 2020 before district court, future revision in land rates and noting the complexities involved in Land transfer, the Petitioner is unable to ascertain the fresh timelines or any incremental cost to earlier projections. In light of the uncontrollable/ Force Majeure conditions discussed above, the Petitioner humbly requests this Hon'ble Commission to grant liberty to the Petitioner to update/claim the actual cost towards revised and/or balance payment demand for these parcels of land during the True-up of 2024-29.

IV. Re Actual Additional Capitalization of Rs. 126.77 Lakh in FY 2020-21 towards purchase of Rayati (Private) Land for MPL Railway Project (Rs. 83.40 Lakh included under approved Railway Project Cost) and additional purchase of about 0.64 Acre of land for Rs. 43.37 lakh)

10. It is humbly submitted that the Petitioner earnestly started the work for the completion of the Railway Project immediately after obtaining approval from its Board and securing financing in 2008. However, the completion of the Railway Project was delayed due to reasons beyond the control of the Petitioner. In its previous petition (Petition No. 408/GT/2020), the Petitioner provided detailed reasons for the delay in the Railway Project. These reasons are not being repeated here for the sake of brevity, as the Hon'ble Commission, in its order dated January 8, 2022, acknowledged that the delay was attributable to the land disputes beyond the control of the Petitioner and arising from the wrongful disbursement of land compensation among the beneficiaries by Government authorities. The relevant portion of the order dated January 8, 2022, is extracted as follows:

> *"45. On perusal of the sequence of events and documents furnished by the Petitioner, it is observed that the delay in payment towards land and site was due to change in policy of the State Government of Jharkhand. Scrutiny of the documents furnished indicates that 'land issues' had prolonged till 24.11.2018, i.e. even after the cut-off date. Though the said work form part of the original scope of work of the project, the Petitioner had to continue the execution of these works even after the cut-off date on account of the delay in the availability of land and site. Similarly, the delay in the development of Railway Corridor was cleared when Hon'ble High Court of Jharkhand vide its*

judgment dated 22.2.2018 had directed the State Government of Jharkhand to cancel the earlier awards passed in favour of wrongful awardees and to prepare fresh awards in favour of genuine persons and to proceed in accordance with law. The Petitioner had made all payments mandated due to change in policy of the State Government of Jharkhand and as a consequence of cancellation of wrongful disbursement of land compensation award.

....."

11. The disputes led to the filing of Writ Petition No. 5084 of 2016 by the Petitioner before the Hon'ble High Court of Jharkhand. The High Court issued directions on September 6, 2016, to the Deputy Commissioner, Dhanbad, to expedite the resolution of land issues. As the matter remained unresolved, the Petitioner again filed Writ Petition No. 5242 of 2017 before the Hon'ble High Court of Jharkhand. In its judgment dated February 22, 2018, the Hon'ble High Court directed the State Government (GoJ) to cancel the earlier awards granted to wrongful persons/awardees and to prepare fresh awards for genuine persons within four months. Since the railway infrastructure package is a linear project, it requires possession of all land parcels to perform complete physical measurements for accurate and complete design, thereby enabling the commissioning of the Railway Project. The survey of the entire land and accurate cost estimation could not be conducted due to the lack of access to the land for carrying out the survey. Therefore, the Petitioner made all efforts to expedite the acquisition of all land parcels and to complete construction on those patches of land as and when possession was obtained. This sometimes required changes in design and scope due to actual site measurements differing from the initial design estimates when access to those parcels became available.
12. Due to the deviation between the actual site conditions and the design estimations, it was observed that owing to the uneven terrain retaining walls were required to be constructed between bridge no BR 11- BR 12 of the original route for which access was possible only after the filing of the Tariff Petition No. 408/GT/2020 in January 2020 and, hence, said cost could not be factored/projected at that time.
13. It was observed that the cost for construction of the retaining wall would be Rs. 275.37 Lakh. Owing to the already delayed commissioning and associated

increase in cost, the Petitioner being a prudent utility analysed alternative methods for resolution and it was observed that with slight change in the original route, requiring buying of additional land parcels and then filling the same with Sand/Soil/Compaction/civil construction for required elevations, would result in cost savings to the tune of Rs. 232.00 Lakh compared to the cost of retaining wall in the original route. The detailed Cost-Benefit Analysis and underlying calculations are attached as Annexure P/6 B.

14. Accordingly, the Petitioner in order to resolve the issue, reduce the scope of work and duly considering the cost benefit analysis procured the additional parcels of land which costed about Rs. 43.37 lakh in FY 2020-21 and this increase was beyond the control of the Petitioner as it could not assess the exact requirement in absence of access of disputed parcels of land. The details of the land parcel procured additionally compared to initial projection before filing of the Tariff Petition No. 408/GT/2020 in January 2020 for the aforesaid purpose are summarized in the Table below:

Serial No.	**Sale Deed No**	**Date of execution**	**Area (Acre)**	**Amount (Rs. Lakh)**
1	Pandra- 3053	21.08.2020	0.08	43.37
2	Pandra- 3078	28.08.2020	0.05	
3	Pandra- 4044	22.10.2020	0.37	
4	Paktodhiya- 4005	21.10.2020	0.14	
	Total		**0.64**	**43.37**

15. The rationale for acquiring the Deeds at Sl.No 1 to 3 was to minimize the scope of retaining wall and, consequently, reduce the additional cost of civil construction upon actual site survey. Furthermore, the Deed at Sl.No 4 was executed because although the said land parcel was present in the original route, was inadvertently missed by the Petitioner owing to the inability to do actual site survey due to ongoing disputes. Thus, with no fault of its own, the Petitioner could get the complete access to the land only in the year 2020 and, thereupon, it conducted the detailed survey for balance requirements that was identified in Paktodhiya village.

16. As is discernible from the above, the acquisition of the land for Pandra Deeds was undertaken solely to save costs in the interest of all stakeholders, with no wrongful gain to the Petitioner. Similarly, the acquisition of land for the Paktodhiya Deed was necessary to rectify an inadvertent omission, which did not arise from any default on the part of the Petitioner but was due to inaccessibility to the land for a detailed survey. Therefore, the Petitioner humbly requests the Hon'ble Commission to allow capitalization towards the land cost of Rs. 126.77 Lakh during the year 2020-21 which includes cost of about Rs. 83.40 lakh as per original plan and the additional land cost of about 43.37 lakh incurred for reasons stated above. Since these land parcels were to be utilized for Railway Project, earlier the cost of Rs. 83.40 lakh was claimed and approved under Railway Project hard Cost of Rs. 55938.42 lakh as approved by the Hon'ble Commission in FY 2020-21.

दामोदर घाटी निगम/ DAMODAR VALLEY CORPORATION
डीवीसी टावर्स/ DVC Towers : वीआईपी रोड/ VIP Road
कोलकाता/ Kolkata - 54

No. Sectt/LA/W/MPL/Land/07 (Vol II)/2593 Date: 20.10.2017

To
The Deputy Commissioner
Dhanbad
Govt. of Jharkhand
Jharkhand – 826 001

Sub: Surrender of 114.95 acre GM land of Maithon Right Bank Thermal Power Project to the Govt. of Jharkhand- reg
Ref: Your letter Nos. 2134/Ra, Dhanbad dtd. 30.09.2014, 716/Ra dtd. 26.02.2015 & 3630/Ra dtd. 24.09.2016

Dear Sir,

With reference to the above, this is to convey that DVC Board has approved surrender of 114.96 acre of GM land of Maithon Right Bank Thermal Power Project to the Govt. of Jharkhand for subsequent grant of lease of the same in favour of Maithon Power Ltd. (MPL), a Joint Venture Company of Tata Power Co. Ltd. & Damodar Valley Corporation.

You are, therefore, requested to kindly take further action on this issue.

Yours faithfully,

(D. Pattanayak)
Additional Secretary

Copy to:

The Secretary, Revenue, Registration & Land Reforms Department, Project Building, Dhurwa, Ranchi-834004

Copy to (NIO):

1. The Chief Executive Officer, Maithon Power Ltd., MA-5, Gogna Colony, Maithon
2. The Dy. Chief Engineer (M), Chairman's Office, DVC, Kolkata
3. The Dy. Chief Engineer (M) & Tech P.A. to Member Secretary, DVC, Kolkata

MAITHON POWER LIMITED

1027

Ref. No. MPL/FY 18/ 1711 006

Date: 08th Nov. 2017

To
The Secretary,
Department of Revenue Registration and Land Reforms,
Government of Jharkhand,
Project Bhavan, Dhurwa,
Ranchi, Jharkhand.

Sub : Transfer of 114.95 Acres GM Land surrendered by DVC

Dear Sir,

This is with reference to DVC letter no. Secc/LA/W/MPL/Land/07 (Vol II)/2593 dated 20.10.2017 (copy enclosed) surrendering the 114.95 Acres land with a request to initiate the leasing process directly in favor of Maithon Power Limited.

You may be kindly aware that the land in question is used for generation of power since 2011 and MPL is keen to take this parcel of land either on permanent transfer or long-term lease basis.

We kindly request you to initiate transfer/lease 114.95 GM land process and submit us the payment demand to enable us to remit the payment to GoJ at the earliest.

To initiate the leasing/Transfer process of GM land, kindly let us know what the formalities MPL are is required to fulfill.

We look forward for an early and favorable action in the matter.

Thanking you

Yours sincerely,

For MAITHON POWER LIMITED

(Purushottam Thakur)
Chief Executive Officer

दामोदर घाटी निगम/ DAMODAR VALLEY CORPORATION
डीवीसी टावरी/ DVC Towers : बीआईपी रोड/ VIP Road
कोलकाता/ Kolkata - 54

No. Sectt/LA/W/MPL/Land/07 (Vol II)/ [illegible]

Date: 20.10.2017

To
The Deputy Commissioner
Dhanbad
Govt. of Jharkhand
Jharkhand – 826 001

Sub: Surrender of 114.95 acre GM land of Maithon Right Bank Thermal Power Project to the Govt. of Jharkhand - reg
Ref: Your letter Nos. 2134/Ra, Dhanbad dtd. 30.09.2014, 716/Ra dtd. 26.02.2015 & 3630/Ra dtd. 24.09.2016

Dear Sir,

With reference to the above, this is to convey that DVC Board has approved surrender of 114.96 acre of GM land of Maithon Right Bank Thermal Power Project to the Govt. of Jharkhand for subsequent grant of lease of the same in favour of Maithon Power Ltd. (MPL), a Joint Venture Company of Tata Power Co. Ltd. & Damodar Valley Corporation.

You are, therefore, requested to kindly take further action on this issue.

Yours faithfully,

(D. Pattanayak)
Additional Secretary

Copy to:

The Secretary, Revenue, Registration & Land Reforms Department, Project Building, Dhurwa, Ranchi-834004

Copy to (NIO):

1. The Chief Executive Officer, Maithon Power Ltd., MA-5, Gogna Colony, Maithon
2. The Dy. Chief Engineer (M), Chairman's Office, DVC, Kolkata
3. The Dy. Chief Engineer (M) & Tech P.A. to Member Secretary, DVC, Kolkata

/13

धनबाद समाहरणालय, धनबाद
(जिला राजस्व शाखा)
पत्रांक ..... /रा0,

प्रेषक,

उपायुक्त
धनबाद ।

सेवा में,

सचिव,
दामोदर घाटी निगम,
डी0वी0सी0, टावर्स वी0आई0पी0, रोड,
कोलकाता–700054

धनबाद, दिनांक..... 2016

विषय :– धनबाद जिलान्तर्गत निरसा अंचल के थाना नं0–98 के विभिन्न मौजों के भिन्न–भिन्न प्लॉटों क कुल रकवा–114.95 एकड़ का विभिन्न राज्यादेशों से मैथन राईट बैंक थर्मल पॉवर लि0 के लि डी0भी0सी0 को हस्तांतरित भूमि की वापसी (Surrender) कराने के संबंध में।

प्रसंग :– सरकार के उप सचिव, राजस्व एवं भूमि सुधार विभाग, झारखण्ड, राँची का पत्रांक–228 दिनांक–09.06.14, इस कार्यालय का पत्रांक–2134/रा0, दिनांक–30.09.2014 ए पत्रांक–716/रा0, दिनांक–26.02.15

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के संदर्भ में धनबाद जिलान्तर्गत निरसा अंचल के विभिन्न थान के विभिन्न मौजों के भिन्न–भिन्न प्लॉटों का कुल रकवा–114.95 एकड़ का विभिन्न राज्यादेशों से मैथन राईट बैं थर्मल पावर लि0 के लिए डी0वी0सी0 को हस्तांतरित भूमि को आपके द्वारा सबलीज करने का अनुरोध किया गा था, परन्तु संयुक्त उपक्रम में डी0वी0सी0 की भागीदारी 51 % से कम है। अतः Company Act के अनुसार स सरकारी कम्पनी की परिभाषा के अन्तर्गत नहीं आने एवं शर्तों का अनुपालन नहीं होने के स्थिति में हस्तांतरि भूमि को वापसी (Surrender) करने का राज्य सरकार से निदेश प्राप्त है, जिसके अनुपालन में इस कार्यालय प पत्रांक–2134/रा0, दिनांक–30.09.2014 एवं पत्रांक–716/रा0, दिनांक–26.02.15 के द्वारा भूमि को वाप (Surrender) करने हेतु आपसे अनुरोध किया गया है, जो अबतक उक्त भूमि की वापसी (Surrender) न किया गया है।

पुनः अनुरोध है कि उपर्युक्त प्रासंगिक भूमि को अविलम्ब वापसी (Surrender) करने की व की जाय, ताकि राजस्व, निबंधन एवं भूमि सुधार विभाग, झारखण्ड, राँची को अग्रेत्तर कार्रवाई हेतु सूचित किया सके।

विश्वासभाजन,

उपायुक्त, धनबाद।

ज्ञापांक 3130/रा0, धनबाद, दिनांक 24.08.2016

प्रतिलिपि :–अंचल अधिकारी, निरसा को इस कार्यालय का पत्रांक–2134/रा0, दिनांक–30.09.2014 एवं पत्रांक 716/रा0, दिनांक–26.02.15 के संदर्भ में सूचनार्थ प्रेषित। पुनः निवेश किया जाता है कि प्रासं भूमि की वापसी (S urrender) की दिशा में अग्रेत्तर कार्रवाई करना सुनिश्चित करेंगे, ताकि उपर भूमि की वापसी (Surrender) संबंधी प्रतिवेदन सरकार को भेजा जा सके।

प्रतिलिपि :– मुख्य कार्यपालक पदाधिकारी, एम0पी0एल0, मैथन को सूचनार्थ प्रेषित।

प्रतिलिपि :– सचिव, राजस्व, निबंधन एवं भूमि सुधार विभाग, झारखण्ड, राँची को सादर सूचनार्थ प्रेषित।

उपायुक्त, धनबाद

अंचल अधिकारी का कार्यालय निरसा।

पत्रांक ...[illegible]... /

प्रेषक,

अंचल अधिकारी
निरसा।

सेवा में,

मुख्य कार्यपालक पदाधिकारी,
मैथन राईट बैंक,थर्मल पावर लिमिटेड,
मैथन,धनबाद।

निरसा, दिनांक 10-1-18

विषयः-- धनबाद जिला अन्तर्गत निरसा अंचल के विभिन्न खाता एंव प्लाटो में अन्तर्निहित कुल रकवा–114.95 ए0 भूमि मैथन राईट बैंक,थर्मल पावर लिमिटेड के लिए डी0भी0सी0 को हस्तान्तरित भूमि की वापसी के संबंध में।

प्रसंगः– सरकार के संयुक्त सचिव, राजस्व, निबंधन एंव भूमि सुधार विभाग,झारखण्ड, रांची का पत्रांक–6124(4)/रा0, दिनांक–20.12.17 एंव उपायुक्त,धनबाद का पत्रांक–34/रा0, दिनांक–02.01.18

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र सरकार के संयुक्त सचिव, राजस्व, निबंधन एंव भूमि सुधार विभाग,झारखण्ड, रांची का पत्रांक–6124(4)/रा0, दिनांक–20.12.17 एंव उपायुक्त,धनबाद का पत्रांक–34/रा0, दिनांक–02.01.18 के आलोक में निरसा अंचल अर्न्तगत् डी0भी0सी0, मैथन को कुल 114.95 ए0 हस्तान्तरित की गई भूमि प्रत्यर्पित (Surrender) कर दिये जाने संबंधी सूचना प्राप्त है। जिसके आलोक में डी0भी0सी0, मैथन द्वारा प्रत्यर्पित (Surrender) की गई कुल 114.95 ए0 भूमि मैथन राईट बैंक,थर्मल पावर लिमिटेड, मैथन को हस्तान्तरित करनें का अनुरोध किया गया है। इस संबध में कहना है कि डी0भी0सी0, मैथन द्वारा प्रत्यर्पित (Surrender) की गई कुल 114.95 ए0 भूमि**(मौजा,खाता,प्लाट,रकवा)** से संबंधित विस्तृत प्रतिवेदन नक्शा सहित अधोहस्ताक्षरी को यथाशीघ्र उपलब्ध कराने की कृपा की जाय ताकि विभागीय हस्तान्तरण हेतु नियमानुसार अग्रेतर कार्रवाई की जा सके।

सादर सूचनार्थ एंव आवश्यक कार्रवाई हेतु समर्पित।

विश्वासभाजन

अंचल अधिकारी
निरसा धनबाद

MPL/FY 19/1805 039

June 11, 2018

Circle Officer,
Nirsa Block
District Dhanbad
Jharkhand

Sub : Transfer/Leasing of 114.95 Acres GM land to Maithon Power Limited

Ref : 1) Our letter no. MPL/FY 18/1711/006 dated 08.11.2017
2) Your letter no. 30 dated 10.1.2018

Dear Sir,

With reference to the above, as required by you, kindly find enclosed 3 copies Maps on cloth and one copy on Tracing Paper of each Mouza (Total 9).

Earlier land was acquired against 25 applications the details of which is as follows :

S.No.	Mouza Name	Thana No.	Ac. Area – Acre	No. of Mouza
1	BELDANGA	109	9.5	1
2	BELDANGA	109	0.02	
3	BELDANGA	109	5.18	
4	BELDANGA	109	2.41	
5	DOMBHUI	37	2.43	2
6	DOMBHUI	37	1.33	
7	DOMBHUI	37	0.05	
8	KAMARDIH	99	0.27	3
9	KANSHITAR	110	14.6	4
10	KANSHITAR	110	2.36	
11	KANSHITAR	110	2.2	
12	MADANDIH	36	5.26	5
13	MADANDIH-1	36	0.5	
14	MADANDIH-2	36	6.41	
15	MADANDIH-I	36	2.65	
16	MADANDIH-I	36	1.16	
17	MADANDIH-II	36	0.46	
18	PALARPUR	98	7.97	6
19	PALUDIH	33	5.91	7
20	PALUDIH	33	22.93	
21	PALUDIH	33	1.26	
22	RATANPUR	111	3.28	8
23	SANA	101	3.59	9
24	SANA	101	0.66	
25	SANA	101	12.56	
			114.95	

MAITHON POWER LIMITED
(A Joint Venture Company of Tata Power & DVC)
Corporate Office: MA-3, Village & P.O. Maithon Dam, Kalyanpur, Dist. Dhanbad, Jharkhand
Tel: +91 (0326) 2301000, Fax: +91 (0326) 2301001, Email:
Registered Office: Bidhan Bhawan, DVC Block, Maithon Dam, Dist. Dhanbad, Jharkhand
CIN: U40101JH2007PLC013041

Kindly note that the plant has been constructed on entire GM land and on other category of land.

Alongwith this letter we are submitting total 75 Maps on Cloth and 25 Map on Tracing paper of all Mouza for initiating the transfer/leasing of land in the name of M/s. Maithon Power Limited.

Apart from the above, if you require any other document or information, kindly let us know; we shall provide the same at the earliest.

We kindly request you to urgently provide us the payment demand to enable us to deposit the money, as per your instructions, without any delay.

Thanking you,

Yours sincerely
For MAITHON POWER LIMITED

(Purushottam Thakur)
Chief Executive Officer

Encl : 75 Maps on Cloth
25 Maps on Tracing Paper

Cc : Addl. Collector, Dhanbad .. for your information & necessary action.

MPL

MPL/FY 19/1806 / 031

September 01, 2018

To,

Additional Collector
Govt. of Jharkhand
Dhanbad
Jharkhand

Sub : Pending files and reports

Dear Sir,

This is with reference to our discussion on 30.08.2018 on the subject, please find below a detailed list of files pending for action :

Type of Land	Area in (Acres)	File to be moved by	Current status of File	Remarks - Reference No.
GM	10.26	CO Nirsa	Ready for Signature	AC' letter no. 2627 dated 07.10.2010, 4564 dated 04.10.2017
"	114.95	CO Nirsa	Calculation of Payment demand is to be prepared by CO and forward it to DCLR/SDO/AC for approval	1) MPL Letter no. MPL/FY 18/1707 042 dated 21.07.2017, 2) MPL Letter no. MPL/FY 18/1711 006 dated 08.11.2017, 3) CO Letter no 30 dated 10.1.2018, 4) Our letter no. MPL/FY/ 19/1805 039 dated 11.06.2018
"	6.96	AC, Dhanbad	Payment Demand for balance 20% Awaited	
Krishi Farm Land	4.81	AC, Dhanbad	Payment Demand for balance 20% Awaited	
GM-Jungle Jhar	191.67	CO Nirsa	Ready for Signature	MPL Letter no. MPL/FY 19/1803 013 dated 10.04.2018

Miscellaneous

Genealogy Required by DLAO	11 Nos.	CO Nirsa	Block office to initiate action	1) DLAO's Letter no. 805 dated 09.09.2017, 2) Letter No. 631 dated 01.08.2017
Survey and Demarcation of land	8 plots of Mahtadih	CO Nirsa	Block office to initiate action	DLAO Reminder sent on 11.08.2018 ref. no. 769. Matter was discussed at CO, Office in May'18
Enquiry and Submission of Report on	Plot no. 318 & 320	CO Nirsa	Block office to initiate action	DLAO's letter no 864 dated 06.10.2017

Your intervention is requested to clear the files.

Thanking you,

Yours sincerely
For MAITHON POWER LIMITED

C.B. SINGH
Project Head – Special Projects

MPL
MAITHON POWER LIMITED

MPL/FY-20/2008-030 August 19, 2019

Additional Collector
Land & Revenue
Ranchi
Jharkhand

21/8/19

Sub: 1) Leasing of 114.95 Acres GM land in the name of Maithon Power Limited
2) Leasing of 0.07 Acres (Pakhtoriya), 1.82 Acres (Pandra) & 8.62 Acres (Shyampur & Mugma) land

Reference :

GoJ to DVC

1) Letter No.2010/228 dated 09.06.2014 Dy. Secretary to DC, Dhanbad
2) Letter No.2134 dated 30.09.2014from DC, Dhanbad to DVC for surrender of GM Land
3) Letter No.716 dated 26.07.2015 from DC, Dhanbad to DVC for surrender of GM Land
4) Letter No.3630 dated 13.10.2016 from DC, Dhanbad to DVC for surrender of GM Land

DVC to GoJ

1) Letter No.Sectt/LA/W/MPL/Land/07 (Vol II)/2573 dated 20.10.2017 from DVC to DC Dhanbad for surrendering the GM land with a request to lease the land to their JV partner MPL

MPL to GoJ

1) Our requisition letter No. MPL/FY 18/1711 006 dated 08.11.2017 to DC, Dhanbad no.
2) Our letter no. MPL/FY 19/1805 039 dated 11.6.2018 to CO, Nirsa submitting the necessary Maps and Land schedule with reference to CO, Letter No. 30 dated 10.01.2018

GoJ to MPL

1) Letter No. 30 dated 10.01.2018 from CO, Nirsa to MPL providing MAPs and land Schedule

(A copy of all letters as stated above are attached alongwith this letter for your ready reference and perusal.)

Dear Sir,

Apropos to subject matter & letter under reference and further to the Review meeting taken DC, Dhanbad on 23.06.2019, we request you to kindly send us the payment demand for leasing of 114.95 Acres GM land.

Thanking you,

Your truly,
For Maithon Power Limited

6.96 Revised
4.81 [illegible]
191.. Reminder

(CB Singh)
Project Head – Special Projects

Cc: DC, Dhanbad

उपायुक्त का कार्यालय, धनबाद
(जिला राजस्व शाखा)

पत्रांक 243 /रा0,

प्रेषक,

अपर समाहर्त्ता,
धनबाद।

सेवा में,

मुख्य कार्यपालक पदाधिकारी,
मैथन पावर लिमिटेड (MPL)
मैथन, धनबाद।

धनबाद, दिनांक 16.01.2020

विषय :– धनबाद जिलान्तर्गत निरसा अंचल के विभिन्न मौजों के विभिन्न खाता एवं प्लॉटों में अन्तर्निहित कुल रकवा–114.95 एकड़ मैथन राईट बैंक थर्मल पावर लिमिटेड के लिए डी0भी0सी0 को हस्तांतरित भूमि वर्त्तमान में वापसी (Surrender) भूमि के संबंध में।

प्रसंग :– 1.सरकार के संयुक्त सचिव, राजस्व, निबंधन एवं भूमि सुधार विभाग, झारखण्ड, रॉची का पत्रांक–3757(4)/रा0, दिनांक–03.10.2019

2.इस कार्यालय का पत्रांक–3966/रा0, दिनांक–21.10.2019

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र का कृपया संदर्भित करें। उक्त पत्र के द्वारा धनबाद जिलान्तर्गत निरसा अंचल के विभिन्न मौजों के विभिन्न खाता, प्लॉटों में अन्तर्निहित कुल रकवा–114.95 एकड़ मैथन राईट बैंक थर्मल पावर लिमिटेड के लिए डी0भी0सी0 को हस्तांतरित भूमि वर्त्तमान में वापसी (Surrender) भूमि से संबंधित कुल–03 (तीन) बिन्दुओं में पृच्छा के आलोक में जवाब मांग गया है। जिसमें 114.95 एकड़ भूमि में से 105.80 एकड़ भूमि हाल सर्वे खतियान के अनुसार गैर आबाद खाते की भूमि है तथा शेष रकवा–9.15 एकड़ भूमि हाल सर्वे खतियान के अनुसार रैयती घोषित है, जबकि विभिन्न राज्यादेश द्वारा कुल–114.95 एकड़ गैर मजरूआ भूमि मैथन राईट बैंक थर्मल पावर लिमिटेड के लिए डी0भी0सी0 को हस्तांतरित की गई है। प्रासंगिक पत्र के के आलोक में वांछित प्रतिवेदन (कंडिका–1 एवं 2) अंचल अधिकारी, निरसा का पत्रांक–**1161**, दिनांक–**10.10.2019** के द्वारा समर्पित किया गया है, परन्तु आपत्ति कंडिका सं0–03 एम0पी0एल0/डी0भी0सी0 से संबंधित है, जिसके आलोक में इस कार्यालय का पत्रांक–3966/रा0, दिनांक–21.10.2019 के द्वारा आपसे वांछित प्रतिवेदन मांगा गया है, जो निम्नवत् है :–

कंडिका–3 क्या पूर्व में DVC को भूमि हस्तांतरण (लीज) के पूर्व राज्य सरकार द्वारा निर्धारित राशि शासकीय कोष में जमा की गई थी अथवा नहीं ?

स्मारित करते हुए पुनः अनुरोध है कि DVC को पूर्व में हस्तांतरित भूमि वर्त्तमान में वापसी (Surrender) भूमि का यदि पूर्व में राशि जमा की गई है, तो साक्ष्य सहित चालान की प्रति के साथ इस कार्यालय को अविलम्ब उपलब्ध कराने की कृपा की जाय, ताकि विभाग को शीघ्र भेजा जा सके।

इसे अत्यावश्यक समझा जाय।

विश्वासभाजन,

16/1/20

अपर समाहर्त्ता,
धनबाद।

MPL
MAITHON POWER LIMITED

MPL/FY-20/2003/80

January 23, 2020

Additional Collector
Dhanbad
Jharkhand

Sub : Various Land issues i.e. Payment demand and leasing of land

Dear Sir,

We would like to draw your kind attention on the following land matters

Type of Land	Issue	Payment Status
6.96 Acres GM land *Railway Corridor*	20% balance payment demand	80% payment has already done by us long time back
4.81 Acre *Railway Corridor*	20% Balance land payment demand	80% payment has already done by us long time back
191.67 Acres Jungle Jhar land *Main Plant Area*	Non execution of Lease Agreement with GoJ	MPL has made 100% payment as per payment Demand on 29.03.2019 and 30.3.2019. vide 7 various challans (attached)
114.95 Acres GM Land *Main Plant Area*	Payment Demand	Payment demand is awaited. ***MPL requested GoJ vide letter no. MPL/FY 18/1711 006 dated 08.11.2017*** for submission payment demand to initiate the leasing process
8.62 Acre GM Land *Railway Corridor*	Non execution of Lease Agreement with GoJ	**MPL has made 100%** payment as per Goj payment Demand
0.07 Acre GM Land *Railway Corridor*	Non execution of Lease Agreement with GoJ	**MPL has made 100%** payment as per GoJ payment Demand
6.47 Acres GM Land *Railway Corridor*	20% balance payment demand	80% payment has already done by us long time back

We kindly request you to help us in the above matter and take appropriate action.

Thanking you,

Yours truly
For Maithon Power Limited

Ramesh Jha
Chief Executive Officer

cc: DC, Dhanbad

MPL/FY-20/2013 02

February 26, 2020

Additional Collector
Dhanbad
Jharkhand

Sub : Surrender of 114.95 Acres GM land by DVC with a request to transfer the same land in the name of Maithon Power Limited

---

Dear Sir,

We are in receipt of your letter no. 243 dated 16.01.2010 on the subject matter, further we would like to bring following facts to your kind notice :

1) DVC had applied for transfer of GM land for MRBTPP an area admeasuring 125.14 Acres in different phases but acquired only 114.95 acres only
2) DVC also made a total payment of Rs. 16998598.00 against various payment demands either through Challans or Cheque/DDs..A statement of payment is attached for your ready reference.
3) GoJ has also acknowledge receipt of Rs. 16998598.00 vide letter no. 476 dated 24.10.09 (a copy attached)
4) Subsequent to the payment made by DVC to GoJ, DVC has requested for refund of amount through two letters no. i.e.
    a. 264 dated 25.11.2013 for refund of excess payment i.e. 1166413.00 for Mouza Madandih .. Letter enclosed
    b. 265 dated 25.11.2013 for refund of excess payment i.e. 1,93050.00 for Mouza Madandih .. Letter enclosed
5) After deducting the excess area i.e. 10.19 Acres from 125.14, a total area i.e 114.95 Acres GM was transferred and leased to DVC on various dates
6) For the total transferred GM land i.e. 114.95 Acres an amount of Rs. 15638075.00 has already been paid by DVC

We hope that you find the above facts & figures and the attached documents in order.

Now, we kindly request your good office to provide us the payment demand after adjusting the already paid amount i.e. Rs.16998598.00.

Thanking you,

Yours truly
For Maithon Power Limited

Ramesh Jha
Chief Executive Officer

Encl : As above

MAITHON POWER LIMITED
(A Joint Venture Company of Tata Power & DVC, An ISO 9001:2008, ISO 14001:2004 & ISO 18001:2007 Certified Company)
MA-5, Gogna Colony, P.O. Maithon Dam, Dist.-Dhanbad, Jharkhand-828207, INDIA, Tel. : +91 6540 278001/27, Fax : +91 6540 278040/ +91 8
Corporate Office : Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400009, INDIA, Tel.: +91 22-67171000
Registered Office : Jeevan Bharti, 10th Floor Tower-I, 124 Connaught Circus, New Delhi-110001, INDIA
Corporate Identity Number (CIN) : U74899DL2000PLC106999 Website addresses : www.tatapower.com/mpl

कमल किशोर सोन
भा.प्र.से.
सचिव

Kamal Kishore Soan
I.A.S.
SECRETARY

राजस्व, निबन्धन एवं भूमि सुधार विभाग
प्रोजेक्ट भवन, (भूतल) धुर्वा, राँची-834004
Revenue, Registration and Land Reforms Department
Project Building, (Ground Floor) Dhurwa, Ranchi-834004
Tel : 0651-2400767 (O)
Fax : 0651-2400768 (O)
Mob : 91-94317-08883
e-mail : revenue_prinsec@yahoo.co.in

अ.स.प.सं.–4/स.भू. (डी.वी.सी.) लीज–124/2017 1306 (4)/रा. राँची, दि–27·5·2020

प्रिय अमित,

विषयः– धनबाद जिलान्तर्गत निरसा अंचल के विभिन्न मौजों के विभिन्न खाता एवं प्लॉटों में अन्तर्निहित कुल रकबा–114.95 एकड़ मैथन राईट बैंक, थर्मल पावर लिमिटेड के लिए डी.वी.सी. को हस्तांतरित भूमि की वापसी (Surrender) के संबंध में।

प्रसंगः– विभागीय पत्रांक–3757, दिनांक–03.10.2019 एवं स्मार पत्रांक–1067, दिनांक–18.03.2019

उपर्युक्त विषयक आपका ध्यान आकृष्ट करते हुए कहना है कि प्रासंगिक पत्रों द्वारा डी.वी.सी. द्वारा प्रत्यर्पित (Surrender) भूमि का कुल रकबा–114.95 एकड़ भूमि के संबंध में निम्नांकित बिन्दुओं पर प्रतिवेदन की माँग की गई थी, जो अब तक अप्राप्त है :–

(i) पूर्व में डी.वी.सी. को हस्तांतरित कुल–114.95 एकड़ सरकारी भूमि थी, तो हाल सर्वे में उसमें से 9.15 एकड़ भूमि रैयती कैसे हो गई?

(ii) प्रतिवेदन में इस तथ्य को स्पष्ट नहीं किया गया है कि डी.वी.सी. को हस्तांतरित भूमि को किसी रैयत के साथ बंदोबस्त कैसे किया गया?

(iii) क्या पूर्व में DVC को भूमि हस्तांतरण (लीज) के पूर्व राज्य सरकार द्वारा निर्धारित राशि शासकीय कोष में जमा की गई थी अथवा नहीं?

आशा है कि आप व्यक्तिगत अभिरूचि लेते हुए वांछित प्रतिवेदन यथाशीघ्र उपलब्ध कराने हेतु आवश्यक कार्रवाई करेंगे।

सस्नेह।

(कमल किशोर सोन) 27/5/2020
सचिव।

सेवा में,

श्री अमित कुमार,
उपायुक्त, धनबाद।

झारखण्ड सरकार

उपायुक्त–सह–जिलादण्डाधिकारी का कार्यालय, धनबाद।

(जिला राजस्व शाखा)

दूरभाष सं0–09471191603, E-mail : ac-dhanbad@jharkhandmail.gov.in

दिनांक 21.10.2021

पत्रांक 6218 /रा0,

प्रेषक,

श्याम नारायण राम, (झा0प्र0से0)
अपर समाहर्त्ता,
धनबाद।

सेवामें,

अंचल अधिकारी,
निरसा।

विषय :– धनबाद जिला के निरसा अंचल अन्तर्गत विभिन्न मौजा के विभिन्न खाता, प्लॉटों में अन्तर्निहित कुल रकवा–114.95 एकड़ गैर आबाद खाते की भूमि मैथन राईट बैंक थर्मल पॉवर लिमिटेड के लिए डी0भी0सी0 को हस्तांतरण वर्त्तमान में वापसी (Surrender) के संबंध में।

प्रसंग :– इस कार्यालय का पत्रांक–1717 /रा0, दिनांक–17.03.2021 एवं पत्रांक–5469 /रा0, दिनांक–02.09.2021

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के द्वारा सरकार के सचिव, राजस्व, निबंधन एवं भूमि सुधार विभाग, झारखण्ड, राँची के अर्द्धसरकारी पत्र सं0–1306 /रा0, दिनांक–27.05.2020 के आलोक में धनबाद जिला के निरसा अंचल अन्तर्गत विभिन्न मौजा के विभिन्न खाता, प्लॉटों में अन्तर्निहित कुल रकवा–114.95 एकड़ गैर आबाद खाते की भूमि मैथन राईट बैंक थर्मल पॉवर लिमिटेड के लिए डी0भी0सी0 को हस्तांतरण वर्त्तमान में वापसी (Surrender) भूमि से संबंधित प्रतिवेदन समर्पित किया गया था, जिसके आलोक में इस कार्यालय का पत्रांक–3005 /रा0, दिनांक–13.07.2020 के द्वारा कुल–03 (तीन) कंडिका में प्रतिवेदन विभाग को भेजा गया है। आपके द्वारा उपलब्ध कराये गये प्रतिवेदन कंडिका–1 एवं 2 में प्रतिवेदित किया गया है कि डी0भी0सी0 को हस्तांतरित कुल रकवा–114.95 एकड़ सरकारी भूमि में से शेष रकवा गहन जाँचोपरान्त 7.76 एकड़ भूमि बन्दोवस्त कार्यालय, धनबाद द्वारा किये गये हाल सर्वे के अनुसार रैयती घोषित की गई है। उक्त भूमि रकवा–7.76 एकड़ रैयती घोषित भूमि की वापसी हेतु सरकार की ओर से **Civil Judge Jr. Div.** के न्यायालय में **Original Suit Case No. 2091/2020** के द्वारा दायर किया गया है। उल्लेखनीय है कि कई बार स्मारित करने के बावजूद आपके द्वारा उक्त मामलें में अद्यतन स्थिति से संबंधित प्रतिवेदन उपलब्ध नहीं कराया जा रहा है जो राजस्व संबंधी कार्यों के प्रति उदासीनता का द्योतक है।

उपरोक्त परिप्रेक्ष्य में पुनः निदेश दिया जाता है कि प्राथमिकतर के आधार पर स्वयं रूचि लेते हुए उक्त भूमि से संबंधित दायर वाद में माननीय न्यायालय से समन्वय स्थापित कर कृत कार्रवाई /अद्यतन स्थिति से संबंधित प्रतिवेदन अद्योहस्ताक्षरी को तीन दिनों के अन्दर उपलब्ध कराना सुनिश्चित करेंगे।

इसे अति आवश्यक समझा जाय।

विश्वासभाजन,

(श्याम नारायण राम)
अपर समाहर्त्ता,धनबाद।

Scanned with CamScanner

सेवा में,

श्रीमान अंचल अधिकारी, निरसा.

द्वारा- अंचल निरीक्षक,

विषय- धनबाद जिला के निरसा अंचल अन्तर्गत विभिन्न मौजा के विभिन्न खाता, प्लॉट में अन्तर्निहित कुल रकबा 114.95 एकड़ गैरआबाद खाते की भूमि मैथन राईट बैंक थर्मल पॉवर लिमिटेड के लिए डी॰भी॰सी॰ को हस्तांतरण वर्तमान में वापसी के संबंध में।

प्रसंग- अपर समाहर्ता, धनबाद कार्यालय पत्रांक 5469/रा॰ दिनांक 02/09/2021.

महाशय,

उपर्युक्त विषयक एवं प्रासंगिक पत्र के आलोक में मैथन राईट बैंक थर्मल पावर लि॰ के लिए डी॰भी॰सी॰ को हस्तांतरण वर्तमान में विभिन्न मौजा विभिन्न खाता, प्लॉट में 114.95 एकड़ भूमि से संबंधित प्रतिवेदन भेजा गया था। पुनः वापसी में हाल सर्वे से मिलान करने पर उक्त भूमि में 7.76 एकड़ भूमि बन्दोबस्त कार्यालय, धनबाद के द्वारा रैयती घोषित की गई है। 7.76 एकड़ भूमि रैयती होने के फलस्वरूप सरकार की ओर से शिविल सूट दर्ज किया गया है जिसका Original Suit Case No 2091/2020 है। सरकारी अधिवक्ता से सम्पर्क किया गया करोना काल एवं कोर्ट फी के वजह से वर्तमान में मामला न्यायालय में लम्बित है।

प्रतिवेदन समर्पित।

विश्वासभाजन

[signature]

निरसा अंचल

अग्रसारित

Md. A. [signature]

प्र. C.I

निरसा अंचल

Scanned with CamScanner

MPL
MAITHON POWER LIMITED

MPL/FY24/23-07/005

Date: 7th August 2023

To,
Deputy Commissioner,
Dhanbad

Sub: Request for raising Payment Demands and expedite resolution of MPL land matters.

Dear Sir,

8/8/23

We would like to draw your kind attention MPL's land matters and solicit your support and intervention to expedite the mutation and leasing process of following parcels of land.

Sl. No	Type Of Land	Area (Acres)	Remarks
A. Main Plant			
1	**Rayati (Private) Land**	**564.67**	• Mutation of 471.20 Acres is completed, 93.47 Acres of Land is balance.
2	**GM (Government) Land**	**114.95**	• Demand note is awaited
3	**Jangle Jhad (Un-notified Forest) Land (30 Years)**	**191.67**	• 100 % payment is made, and Forest Clearance has been Provided, Lease Agreement awaited
4	**Forest (Notified Forest) Land**	**238.39**	• Mutation of 16.98 in Favour of Forest Department is in process at Govindpur Block
• B. Railway			
1	**Rayati (Private) Land**	**59.18**	• Mutation of 37.775 Acres is completed, 21.405 Acres of Land is balance.
2	**GM (Government) Land**	**28.33**	
	6 Village	6.96	• 80 % Payment made; final calculation is awaited
	Mugma & Shyampur (File 1)	6.00	• 80 % Payment made; final calculation is awaited
	Mugma & Shaympur (File 2)	8.67	• 100 % Payment made; Lease Agreement awaited
	Krishi Farm (Poddardih & Kunthal)	4.81	• 80 % Payment made; final calculation is awaited
	Pandra	1.82	• 100 % Payment made; Lease Agreement awaited
	Paktoria	0.07	• 100 % Payment made; Lease Agreement awaited

Thanking you

Yours truly,
For Maithon Power Limited

(Vijayant Ranjan)
CEO - MPL & Chief - ER Generation

MPL
MAITHON POWER LIMITED

Letter Number: MPL/FY25/24-08/002 Date: 05-08-2024

To,
The Secretary,
Department of Revenue and Land Reforms,
Government of Jharkhand,
Project Bhavan, Dhurwa,
Ranchi, Jharkhand.

Ref: Letter Number MPL/FY18/1711/006 dated 08.11.2017

Subject: Transfer of 114.95 Acres of GM Land Surrendered by DVC

Dear Sir,

We would like to bring to your esteemed attention the matter regarding the 114.95 acres of GM land surrendered by DVC, as referenced in their letter number Secc/LA/W/MPL/Land/07 (Vol II)/2593 dated 20.10.2017, wherein leasing process of the said land directly in favor of Maithon Power Limited is requested.

In the revisional survey, it has been noticed that 105.80 acres is recorded as GM Land, while 9.15 acres is recorded as Rayati Land. To address this discrepancy, CO, Nirsa has filed Original Suit No. 2091 of 2020 in the Dhanbad Civil Court, seeking correction of records on the Jharbhumi online portal.

Given that the aforementioned land has been in our possession and actively utilized for power generation since 2011, we kindly request the immediate initiation of the leasing/transfer process for the 105.80 acres of GM Land with clear records. The remaining 9.15 acres can be leased once the necessary record corrections have been completed.

We look forward for an early and favorable response.

Thank you.

Yours sincerely,
For Maithon Power Limited

(Vijayant Ranjan)
CEO - MPL & Chief - ER Generation

झारखण्ड सरकार

उपायुक्त–सह–जिलादण्डाधिकारी का कार्यालय, धनबाद।

(जिला राजस्व शाखा)

दूरभाष सं0–09471191603, E-mail : ac-dhanbad@jharkhandmail.gov.in

दिनांक 21.10.2021

पत्रांक 6218 /रा0,

प्रेषक,

श्याम नारायण राम, (झा0प्र0से0)
अपर समाहर्त्ता,
धनबाद।

सेवामें,

अंचल अधिकारी,
निरसा।

विषय :– धनबाद जिला के निरसा अंचल अन्तर्गत विभिन्न मौजा के विभिन्न खाता, प्लॉटों में अन्तर्निहित कुल रकवा–114.95 एकड़ गैर आबाद खाते की भूमि मैथन राईट बैंक थर्मल पॉवर लिमिटेड के लिए डी0भी0सी0 को हस्तांतरण वर्त्तमान में वापसी (Surrender) के संबंध में।

प्रसंग :– इस कार्यालय का पत्रांक–1717 /रा0, दिनांक–17.03.2021 एवं पत्रांक–5469 /रा0, दिनांक–02.09.2021

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के द्वारा सरकार के सचिव, राजस्व, निबंधन एवं भूमि सुधार विभाग, झारखण्ड, राँची के अर्द्धसरकारी पत्र सं0–1306 /रा0, दिनांक–27.05.2020 के आलोक में धनबाद जिला के निरसा अंचल अन्तर्गत विभिन्न मौजा के विभिन्न खाता, प्लॉटों में अन्तर्निहित कुल रकवा–114.95 एकड़ गैर आबाद खाते की भूमि मैथन राईट बैंक थर्मल पॉवर लिमिटेड के लिए डी0भी0सी0 को हस्तांतरण वर्त्तमान में वापसी (Surrender) भूमि से संबंधित प्रतिवेदन समर्पित किया गया था, जिसके आलोक में इस कार्यालय का पत्रांक–3005 /रा0, दिनांक–13.07.2020 के द्वारा कुल–03 (तीन) कंडिका में प्रतिवेदन विभाग को भेजा गया है। आपके द्वारा उपलब्ध कराये गये प्रतिवेदन कंडिका–1 एवं 2 में प्रतिवेदित किया गया है कि डी0भी0सी0 को हस्तांतरित कुल रकवा–114.95 एकड़ सरकारी भूमि में से शेष रकवा गहन जाँचोपरान्त 7.76 एकड़ भूमि बन्दोवस्त कार्यालय, धनबाद द्वारा किये गये हाल सर्वे के अनुसार रैयती घोषित की गई है। उक्त भूमि रकवा–7.76 एकड़ रैयती घोषित भूमि की वापसी हेतु सरकार की ओर से **Civil Judge Jr. Div.** के न्यायालय में **Original Suit Case No. 2091/2020** के द्वारा दायर किया गया है। उल्लेखनीय है कि कई बार स्मारित करने के बावजूद आपके द्वारा उक्त मामलें में अद्यतन स्थिति से संबंधित प्रतिवेदन उपलब्ध नहीं कराया जा रहा है जो राजस्व संबंधी कार्यों के प्रति उदासीनता का द्योतक है।

उपरोक्त परिप्रेक्ष्य में पुनः निदेश दिया जाता है कि प्राथमिकतर के आधार पर स्वयं रूचि लेते हुए उक्त भूमि से संबंधित दायर वाद में माननीय न्यायालय से समन्वय स्थापित कर कृत कार्रवाई /अद्यतन स्थिति से संबंधित प्रतिवेदन अद्योहस्ताक्षरी को तीन दिनों के अन्दर उपलब्ध कराना सुनिश्चित करेंगे।

इसे अति आवश्यक समझा जाय।

विश्वासभाजन,

(श्याम नारायण राम)
अपर समाहर्त्ता,धनबाद।

Scanned with CamScanner

सेवा में,

श्रीमान अंचल अधिकारी, निरसा.

द्वारा- अंचल निरीक्षक,

विषय- धनबाद जिला के निरसा अंचल अन्तर्गत विभिन्न मौजा के विभिन्न खाता, प्लॉट में अन्तर्निहित कुल रकबा 114.95 एकड़ गैरआबाद खाते की भूमि मैथन राईट बैंक थर्मल पॉवर लिमिटेड के लिए डी॰भी॰सी॰ को हस्तांतरण वर्तमान में वापसी के संबंध में।

प्रसंग- अपर समाहर्ता, धनबाद कार्यालय पत्रांक 5469/रा॰ दिनांक 02/09/2021.

महाशय,

उपर्युक्त विषयक एवं प्रासंगिक पत्र के आलोक में मैथन राईट बैंक थर्मल पावर लि॰ के लिए डी॰भी॰सी॰ को हस्तांतरण वर्तमान में विभिन्न मौजा विभिन्न खाता, प्लॉट में 114.95 एकड़ भूमि से संबंधित प्रतिवेदन भेजा गया था। पुनः वापसी में हाल सर्वे से मिलान करने पर उक्त भूमि में 7.76 एकड़ भूमि बन्दोबस्त कार्यालय, धनबाद के द्वारा रैयती घोषित की गई है। 7.76 एकड़ भूमि रैयती होने के फलस्वरूप सरकार की ओर से शिविल सूट दर्ज किया गया है जिसका Original Suit Case No 2091/2020 है। सरकारी अधिवक्ता से सम्पर्क किया गया करोना काल एवं कोर्ट फी के वजह से वर्तमान में मामला न्यायालय में लम्बित है।

प्रतिवेदन समर्पित।

विश्वासभाजन

[signature]

निरसा अंचल

अग्रसारित

Md. A. [signature]

प्र. C.I

निरसा अंचल

Scanned with CamScanner

In the Court of Civil Judge (Junior Division) 2nd at Dhanbad.

Original Suit No. 209 of 2020.

The State of Jharkhand,

Represented by the Circle Officer, Nirsa Anchal Nirsa, Resident of Nirsa, P.O. & P.S. Nirsa, District Dhanbad .... **Plaintiff.**

Versus

1. Bhupati Nath Mahato & Ors. .... **Defendants.**

Statement of address of the Plaintiff;

The State of Jharkhand,

Represent by Circle Officer, Nirsa Anchal, Resident of Nirsa, P.O., P.S. Nirsa, District Dhanbad.

Aadhaar No. 2718 1298 6081

Mobile No. 62049 38300.

R. T. RATHOD
STAMP VENDOR
No. -06/75-76
Dhanbad Court
Dhanbad

In the Court of Civil Judge (Junior Division)2nd at Dhanbad.

Original Suit No 209 of 2020.

The State of Jharkhand,

Represented by the Circle Officer, Nirsa Anchal Nirsa, Resident of Nirsa, P.O. & P.S. Nirsa, District Dhanbad.

Plaintiff.

Versus

1. **Bhupati Nath Mahato** Son of Mahan Mahato,
2. **Shibu Mahato,**
3. **Bishwanath Mahato,** both sons of Late Tribhang Mahato,
   all by faith Hindu, by occupation Cultivation etc., Residents of village Palarpur, P.O. Poddardih, P.S. Nirsa, District Dhanbad.
4. **Khudiram Roy,**
5. **Madhav Chandra** both sons of Kashinath Roy,
6. **Madan Roy** son of Prayag Roy,
7. **Jamini Bala Dasi** Wife of Prayag Roy,
8. **Hem Pada Roy** Wife of Baijnath,
   all by faith Hindu, by occupation Cultivation, House hold duties etc., Residents of village Palarpur, P.O. Poddardih, P.S. Nirsa, District Dhanbad.
9. **Balram Lohar** Son of Bhuvan Lohar, by faith Hindu, by occupation Cultivation, Resident of village Sana, P.O. Poddardih, P.S. Nirsa, District Dhanbad.
10. **Prabodh Kumar Tewary,**
11. **Amar Kumar Tewary,** both sons of Sri Ramchandra Tewary,
12. **Sudhir Kumar Tewary,**
13. **Bishwanath Tewary,**

14. **Shyamapada Tewary,**
15. **Mihir Kumar Tewary,** all sons of Bholanath Tewary, Residents of Beldang, P.O. Barbendia, P.S. Nirsa, District Dhanbad.
16. **Smt. Shweta** Daughter of Shyam Pandey,
17. **Umapada Tewary,**
18. **Ramapada Tewary,**
19. **Fatik Chandra Tewary,** all sons of Govind Prasad Tewary,
20. **Most. Mahapati Bala Devya** Wife of Govind Prasad Tewary, all by faith Hindu, Resident of Beldang, P.O. Barbendia, P.S. Nirsa, District Dhanbad.
21. **Mohd. Mozib Dukh Sahmi** Son of Mohd. Rozai, by faith Muslim, by occupation Cultivation, Resident of Beldang, P.O. Barbendia, P.S. Nirsa, District Dhanbad.
22. **Nilkantha Tewary,**
23. **Satish Chandra Tewary,**
24. **Ajit Kumar Tewary** all sons of Shivlal Tewary,
25. **Shankar Narayan Tewary,**
26. **Sachidanand Tewary,**
27. **Kartik Chandra Tewary** all sons of Jyotindra Mohan Tewary,
28. **Samir Kumar Tewary,**
29. **Panchanan Tewary** sons of Jyotindra Mohan Tewary,
30. **Most. Bilakh Tewary** Wife of Jyotindra Mohan Tewary,
31. **Kutani Devi,**
32. **Lakhi Devi** both daughters of Jyotindra Mohan Tewary,
33. **Nab Kishore Tewary,**
34. **Bavatosh Tewary,**
35. **Parmaand Tewary,** all sons of Jogeshwar Tewary,

36. **Ranjit Kumar Tewary,**
37. **Vikram Jeet Tewary,**
38. **Jawaharlal Tewary,**
39. **Moharlal Tewary** all sons of Jogeshwar Tewary,
40. **Most. Uma Rani Debya** Wife of Jogeshwar Tewary, all by faith Hindu, by occupation Cultivation, House hold duties etc., Residents of village Beldang, P.O. Barbendia, P.S. Nirsa, District Dhanbad.
41. **Sri Sri Ekso Aath Laxmi Narayan,** through it's Sebait, Ram Ratan Tewary Son of Khudiram Tewary,
42. **Veena Devi,**
43. **Prafulla Bala Devi** both daughters of Raghunath Tewary,
44. **Most. Radha Ramani Debya** Wife of Raghunath Tewary,
45. **Satya Narayan Tewary,**
46. **Rampada Tewary,**
47. **Prahlad Chandra Tewary** all sons of Kalipada Tewary,
48. **Taralal Tewary,**
49. **Ravi Shankar Tewary,** sons of Kalipada Tewary,
50. **Most. Sonamani** Wife of Kalipada Tewary,
51. **Patit Pawan Tewary,**
52. **Tripur Chandra Tewary,**
53. **Deepak Kumar Tewary,**
54. **Subal Chandra Tewary,** all sons of Shambhu Nath Tewary,
55. **Most. Kamala Debya** Wife of Shambhu Nath Tewary, all by faith Hindu, by occupation Cultivation, House hold duties etc., Residents of village Beldang, P.O. Barbendia, P.S. Nirsa, District Dhanbad.

56. Ram **Nath Tewary,**
57. **Hari Pada Tewary** both sons of Narayan Chandra Tewary,
58. **Chandra Mohan Ojha,**
59. **Robin Chandra Ojha** both sons of Kirtibas Ojha,
60. **Kamala Devi** Daughter of Kirtibas Ojha, all by faith Hindu, by occupation Cultivation, House hold duties etc., Residents of village Kashitand, P.O. Barbendia, P.S. Nirsa, District Dhanbad.
61. **Devilal Hembram** Son of Kathu Hembram, by faith Santhal, by occupation Cultivation, Resident of Kashitand, P.O., P.S. Nirsa, District Dhanbad.
62. **Kashinath Bauri** Son of Govind Bouri,
63. **Kartik Bauri** Son of Madan Bauri,
64. **Ladu Bari** Son of Bhadu Bauri, all by faith Hindu, by occupation Cultivation, Residents of Kashitand, P.O. Barbendia, P.S. Nirsa, District Dhanbad.
65. **Subal Chandra Rahidas** Son of Narayan Chandra Rahidas, by faith Hindu, by occupation Cultivation, Resident of Kashitand, P.O., P.S. Nirsa, District Dhanbad.
66. **Bishnu Priya Devi** Wife of Banshidhar Tewary, by faith Hindu, by occupation House hold duties, Resident of Kashitand, P.O. Barbendia, P.S. Nirsa, District Dhanbad.
67. **Manki Mejhian** Wife of Ravilal Soren,
68. **Saheb Lal Soren,** Son of Ravilal Soren,
69. **Ravilal Soren,**
70. **Lukhu Soren** both sons of Dogru Soren, by faith Santhal, by occupation House hold duties, Cultivation etc., Residents of Kashitand, P.O. Barbendia, P.S. Nirsa, District Dhanbad.

71. **Bisheswar Tewary,**

72. **Rishikesh Tewary** both sons of Brindaban Tewary,

73. **Murulidhar Tewary,** Son of Jogeshwar Tewary, by faith Hindu, by occupation Cultivation etc., Residents of Kashitand, P.O. Barbendia, P.S. Nirsa District Dhanbad.

74. Hasadhan Mondal s/o. Choto Mondal, by Religion Hindu, by occupation Cultivation, P.O. Kamardih, P.O. Paddardih, P.S. Nirsa, District - Dhanbad. **Defendants.**

(Aadhaar Number & Mobile Nos. are not available with the Plaintiffs)

Suit for declaration and injunction.

Suit is valued at Rs. 3,21,001/- (Rupees Three Lac, twenty one thousand and one) only.

Suit is filed under section 26 of the Code of Civil Procedure, 1908.

The Plaintiffs, above named, begs to submit and state as follows:-

1. That, the lands situated within P.S. Nirsa, Anchal Nirsa in different mouzas e.z. Sana, Palarpur, Beldang, Kashitand more fully and in detail described in the Schedule herein below recorded as Gair Abad Malik in the Cadastral Survey Settlement Record of Rights.

2. That, after abolition of Zamindari interest the lands described in the Schedule here under has been vested with the State of

Bihar, presently Jharkhand by operation of Bihar Land Reforms Act, 1950 and accordingly came in peaceful possession of the Plaintiff.

3. That, the lands described in the Schedule hereunder are non-cultivable (Patit) land and is lying vacant in possession of the State Govt.

4. That, in the recent revisional survey operation the lands described in the schedule hereunder has been wrongly and illegally prepared and finally published in the names of the Defendants in the Revisional Survey Khatian.

5. That, the Defendants have got no manner of right, title, interest and possession over the lands described in the Schedule hereunder, but they illegally managed to get their names entered in the Revisional Survey Khatian and on the basis of such illegal and wrong entry made in the Revisional Survey Khatian now they are recently trying to grab the same.

6. That, the Defendants have neither got any document of title nor they paid rent ever to the State Govt. in respect of the land described in the Schedule hereunder.

7. That, the Plaintiff recently in the month of June 2020 came to learn regarding the wrong entry made in the Revisional Survey Khatian in the names of the Defendants when the Defendants tried to grab the same by erecting some substantial construction over the same.

8. That, recently the Plaintiff has got on line Revisional Survey Khatian in respect of the suit land and accordingly has been advised to file the present suit for the reliefs noted below.

9. That, the Suit land is the Govt. land and for the benefit of the public in large it should be remained with the State Govt.

10. That, the cause of action for the present suit has arisen in the month of June 2020 when the Defendants tried to grab the same on the basis of wrong entry made in the Revisional Survey Khatian and when the Plaintiff got the online copy of the Revisional Survey Khatian within the jurisdiction of this learned Court.

11. That, for the purpose of court fees and jurisdiction the suit is valued at Rs. 3,21,001/- (Rupees Three Lac, twenty one thousand and one) only, Rs. 3,20,000/- for relief (a) & (b) Rs. 1001/- for relief (c) and accordingly ad valorem court fees is paid herewith.

12. That, the Plaintiff, therefore, prays for the following reliefs;

a) For a decree for declaration, declaring Plaintiff's right, title & interest on confirmation of possession over the land described in the Schedule hereunder in favour of the Plaintiff and against the Defendants.

b) For a decree for declaration declaring that the entry made in the Revisional Survey Khatian in respect of the land described in the Schedule below is illegal, wrong and erroneous.

c) For a decree for permanent injunction restraining the Defendants, their men, agents, representatives from interfering with Plaintiff's possession over the lands described in the Schedule herein below and/or encroaching upon any portion of the land described in the Schedule herein below and/or doing any acts which is prejudicial to the interest of the Plaintiff.

d) For a decree for all costs of the suit.

e) Any other decree to which the Plaintiff is found legally entitle to, may be passed in favour of the Plaintiff and against the Defendants.

S C H E D U L E

Within the District Dhanbad, Chowki Sadar Registry Office Dhanbad, Sub-registry office Govindpur, P.S. Nirsha, Anchal Nirsa;

Mouza/Number	C.S.Khata/R.S.Khata	C.S.Plot/R.S.Plot	Area
Sana/101	108/94	1663/1929	0.28 Acres
Palarpur/98	188/394	28/123	0.77 Acres
		29/124	0.55 Acres
	255/228	40/128	0.05 Acres
	257/48	39/130	0.01 Acres
Beldang/109	17/48	754/975	1.47 Acres
	53/15	713/939	0.02 Acres
		716/947	0.29 Acres

	62/12	749/967	0.52 Acres
		702/916	0.11 Acres
	108/42	514/640	0.07 Acres
		516/645	0.01 Acres
	148/77	486/607	0.01 Acres
		487/610	0.21 acres
	62/77	483/613	0.92 Acres
Kashitand/110	7/79	5/9	0.24 Acres
		7/11	0.25 Acres
		32/66	0.05 Acres
		34/70	0.04 Acres
		113/161	0.06 Acres
		249/447	0.05 Acres
	65/36	2/6	0.25 Acres
	65/13	44/83	0.22 Acres
	52/86	63/81	0.02 Acres
	2/57	288/480	0.18 Acres
	12/72	300/494	0.16 Acres
	66/59	395/470	0.60 Acres
		396/472	0.26 Acres

Verification.

M. N. Mansuri

I, **Shri Modasar Nazar Mansuri** Son of Late Jamruddin Mansuri Circle Officer, Nirsa, do hereby declare that I have gone through the contents of the Plaint and have fully understood. The statements made in Paragraphs 1 to 9 are true & correct to the best of my knowledge and belief and rest of the paragraphs are my submissions to the learned Court. I sign this verification at Dhanbad Civil Court on this the 30th day of June 2020.

M. N. Mansuri

Identified by,

30.06.2020

Govt. Pleader.

M. N. Mansuri

NOTARY Rohit Kr. Singh Choudhary Dhanbad Jharkhand Regd. No. 13530 Dated 14/11/2018 Exp. 14/11/2023 NOTARIAL OF INDIA

AFFIDAVIT.

I, **Shri Modasar Nazar Mansuri** aged about 38 years, son of Late Jamruddin Mansuri, by faith Muslim, by occupation Service, Resident of Nirsa P.O. & P.S. Nirsa, District: Dhanbad, do hereby solemnly affirm and say on oath which runs as follows :-

1. That, I am the Circle Officer, Nirsa Anchal and has been duly authorized to file the present suit.

2. That, I have been fully aware with the facts and circumstances of the case.

3. That, I have gone through the statements contained in the attached Plaint which I have fully understood and found the same true and correct to the best of my knowledge and belief.

Verification

I, do hereby, declare that the statements made above are true and correct to the best of my knowledge and belief. I sign this verification here at Dhanbad Civil Court on this the 30th day of June 2020.

Deponent: M. N. Mansuri

Identified by,

30.06.2020

Bijan Rewani,
Govt. Pleader.

NOTARY Rohit Kr. Singh Choudhary Dhanbad Jharkhand Regd. No. 13530 Dated 14/11/2018 Exp. 14/11/2023 NOTARIAL OF INDIA

Rwch 30/06/2020

NOTARY
DHANBAD

Authorised
U/S 297 (i) (c) of the Cr.P.C. 1973
Act No 11 of 1947) & u/s (8) (i)
Act No 53 of 1952)

NOTARY
Rohit Kr. Singh Choudhary
Dhanbad, Jharkhand
Regd. No. 13530
Dated 11/2018
Exp. 14, 2023.
OF INDIA

EQUALITY, LIBERTY AND JUSTICE
DHANBAD BAR ASSOCIATION

NOTARY
Rohit Kr. Singh Choudhary
Dhanbad, Jharkhand
Regd. No. 13530
Dated 11/2018
Exp. 14, 2023.
OF INDIA

RVSCh
30/01/2020
NOTARY
DHANBAD

Court of Sri Ishraque Zeya Khan
J.M.F.C., Dhanbad

Case Details

Case Type	: ORIGINAL SUIT	
Filing No.	: 2385/2020	Filing Date: 01-07-2020
Registration No.	: 2091/2020	Date of Registration: 01-07-2020
CNR	**: JHDH04-004397-2020**	

Case Status

First Hearing Date	: 09th July 2020
Next Hearing Date	: 09th July 2020
Stage of Case	: Shoristedar Report
Court No. and Judge	: 25-Civil Judge Junior Division II

Petitioner and Advocate

1) State of Jharkhand
Address - DHANBAD
Advocate- ADV

Respondent and Advocate

1) BHUPATHI NATH MAHATO
Address - NIRSA DHANBAD

Acts

Under Act(s)	Under Section(s)
CODE OF CIVIL PROCEDURE	26

COMPARED BY
COMPARING CLERK



...ar, Ranchi, Phone : 0651 - 2276012

Schedule XLII - High Court No. (J) 9 [Old (M) 164]

FORM OF ORDER SHEET

IN THE COURT OF Smt. S.V. Upadhyay, C.J.-III, Dhanbad

T.S. SUIT NO. 2091 Of 2020.

The State of Jharkhand Thr. Versus Bhupatinath Mahato & Ors.
C.O. Misc. Case

Serial No.	Date of order of proceeding	Order with the signature of the Court	Office action taken with date
1	2	3	4
	1.7.20	Received plaint in duplicate without Court fees stamp and documents from Centralized Filing Centre, Dhanbad. Registry and put upon the date fixed i.e. 9.7.20 alongwith Sheristadar's Report. (Directed) C.J.-III Dhanbad	Notice issued vide Regd. No. dtd. 9.7.20
9.7.20		Plaintiff fails to step Put upon 18.8.20 for filing Court fees stamp. (Directed) C.J.-III Dhanbad	

COMPARED BY

COMPARING CLERK

Serial No.	Date of order of proceeding	Order with the signature of the Court	Office action taken with date
1	2	3	4
I	05.07.21.	Relation without court-fee stamp filed for time. Receipt with record, for the court-fee. Sd/- C.J. (Sr. Dvn.) II	
II	26.11.21.	Plaintiff takes step. Court fee of Rs. 8,250/- filed. Kept with the record. Put up on 15.12.21, for deficit court fee of Rs. 6/- (Six) only and hearing. Sd/- C.J. (Sr. Dvn.) II	
V	15.12.21.	Plaintiff takes step. To 20.01.22 for filing deficit court fee. Sd/- C.J. (Sr. Dvn.) II	
VI	20.01.22 23.02.22	Plaintiff is in attendance. To 11.04.22 for filing deficit court fee and documents. Sd/- C.J. (Sr. Dvn.) II	

Principal District and Sessions Judge, Dhanbad

PREPARED BY

CHECKED BY

Printed by : Prisoners of L.J.N. Central Jail, Hazaribag, Phone : 06546 - 263408 / 261699 (Fax), E-mail : prisonhzb@gmail.com

C.J. (Jr. DN) Dhanbad

O.S. 2091/2020

Schedule XLII - No. (J) 9a [Old (M) 164]

Serial No.	Date of order of proceeding	Order with the signature of the Court	Office action taken with date
1	2	3	4
VI	11.04.22	Attendance filed. Pet. is on c.L. for 10.05.22 for deficit Court fee and document.	

Dt. C.J. (Jr. DN) VI

COMPARED BY

COMPARING CLERK

In the Court of Principal District and Sessions Judge
जिला एवं सत्र न्यायाधीश
धनबाद
Dhanbad

Date of application 24.6.24
Date of notification 28.6.24
Date of delivery of copy
Date of withdrawal

प्रमाणीकरण शुल्क देय 20/-
28/6/24
प्रधान सहायक लिपिक
प्रतिलिपि विभाग
जिला एवं सत्र न्यायाधीश का कार्यालय
धनबाद

Date of making over the copy to applicant 28/6/24

सत्यापित एवं प्रमाणित प्रतिलिपि
शिरेस्तेदार 28.6
जिला एवं सत्र न्यायाधीश का कार्यालय
Authorised U/S 76 Act of 1872

07.09.22	filing of Summons	No step taken to 23.11.22 for
23.11.2022		Plaintiff filed Amendment petition. Fix 20.12.2022 24.01.2023, for filing Acknowledgement

COMPARED BY

HEARING CLERK

XIV 27.1.23
3.3.23 Plaintiff filed vakalat through Lawyer. Plaintiff filed Summon for Settlement of Issue without process fee on 01.2.23. Kept with record. PW upon 12.4.23 for filing P.F. Wells fee.

C.J.(Sr.Dn.)-II

12.4.23 Plaintiff filed process fee of Rs. 25/- Kept with record. PW upon 01.6.23 for Issue notice

C.J.(Sr.Dn.)-II

Notice issued through Nazarat 15.4.23

01.06.23 plaintiff filed attendance through lawyer. put up on 31.07.23 for appearance (Duties)

C.J.(Sr.Dn.)-II

31.07.23 P.O.B on C.L. plaintiff filed attendance through lawyer put up on 03.10.23 for appearance (Duties)

C.J.(Sr.Dn.)-II/C

Date of Application 16.6.24
Date of notification 11.6.24
28/06/24
Date of making over the copy applicant 28/6/24

COMPARED BY
COMPARING CLERK

सच्ची एवं प्रमाणित प्रतिलिपि
28.6.24
लिपिकवार
जिला एवं सत्र न्यायालय का कार्यालय
Dhanbad

2.1.24	Court is vacant. Plaintiff files attendance through Ld. Lawyer. Put upon 22.3.24 for Appearance.
29.01.24	In View of office order No. 220/2022 of Principal District & Sessions Judge, Dhanbad this Case record has been transferred to the Court of Addl. C. Jr. Div.) Dhanbad

43/24

Addl. C.J (Jr. Div.) II
Dhanbad

COMPARED BY
COMPARING CLERK
29.01.24

Schedule XLII - No. (J) 9a [Old (M) 164]

Serial No.	Date of order of proceeding	Order with the signature of the Court	Office action taken with date
1	2	3	4
	22.3.24	Plaintiff is absent and fake process put up on 16.5.24 for appearance nil (Abhinav Tripathi) J.M.F.C. cum A.J.J.C. Jr. Div. Officer I.D No-JH5086	
	16.5.24	Plaintiff is present hence matter taken up. Put up on 3.8.24 for appearance and evidence. (Ishita [illegible]) J.M.F.C. [illegible] Officer I.D No-[illegible]	Plaintiff is present in the court. 02/01/24

COMPARED BY

COMPARING CLERK

Printed by : Prisoners of B.M.C. Jail, Hotwar, Ranchi, Phone : 0651 - 2276012

सच्ची एवं प्रमाणित प्रतिलिपि

28-6-24

लिपिकेदार

जिला एवं सत्र न्यायाधीश का कार्यालय

Authorised U/S 76 Act of 1872

Date of Application 28/6/24

Date of Notification 28/6/24

Date of making over the copy 28/6/24

applicant

प्रमाणीकरण शुल्क देय

28/6/24

प्रधान मुलतनी लिपिक

प्रतिलिपि विभाग

जिला एवं सत्र न्यायाधीश का कार्यालय

धनबाद

Schedule XLII - High Court No. (J) 9 [Old (M) 164]

FORM OF ORDER SHEET

COURT OF Civil Judge Jr.Div.II, Dhanbad

SUIT NO. MCA-Arb-01/2024 Of 05.2091/20

Versus

Serial No.	Date of order of proceeding	Order with the signature of the Court	Office action taken with date
1	2	3	4
I	02.01.2024	Court is vacant. Received case record of MCA from the centralized filing Centre, Dhanbad. Register it Put up on the date fixed i/e 03.01.24 for hearing. (Dictated) H/C C.J.-Jr.Div.II	
	03.01.24	Court is vacant. Applicant taken no step. Put up on 22.3.24 for hearing (Dictated) H/C C.J.-Jr.Div.II	
	22.3.24	Applicant- take no step- put up on 16.5.24 for hearing. (Abhinav Tripathi) J.M.F.C cum A.J.J. C.J. Jr. Div. Officer I.D No-JH5086	
	16.5.24	Applicant file hand written Plaint ? Attached to the record it perhaps it 21.5.24 Put up on 3.8.24 (Tanveer Ahmad Khan) J.M.F.C cum Addl. C.J. Jr. Div. Officer I.D No- JH5084	

Printed by : Prisoners of B.M.C. Jail, Hotwar, Ranchi, Phone : 0651 - 2276012

COMPARED BY

COMPARING CLERK

Date of Application 18.6.24
Date of notification 28.6.24
Date of Fil
Date of Ap 28/6/24
Date of making over the copy applicant 28/6/24

Stamp to Application 28.6.24
Sear 1.00
Fe
Exp
Other stamp fee 28/6/24

प्रमाणीकरण शुल्क देय 1.00
28/6/24
प्रधान तुलना लिपिक
प्रतिलिपि विभाग
जिला एवं सत्र न्यायालय का कार्यालय
धनबाद

सच्ची एवं प्रमाणित प्रतिलिपि
28-6-24
डिस्ट्रेटेदार
जिला एवं सत्र न्यायालय का कार्यालय
Authorised U/S 76 Act of 1872

MPL
MAITHON POWER LIMITED

MPL/FY-19/1805 036

May 10, 2018

Additional Collector
Govt. of Jharkhand
Dhanbad
Jharkhand

Sub : Deposition of Rs. 1 Crore payment for development of Agriculture land

Ref : MPL's Undertaking to GoJ dated 09.01.2015

Dear Sir,

Kindly refer to the subject matter, further we are pleased to inform you that MPL has deposited the Rs.1 Crore through Treasury Challans on 09.05.2018 in SBI Hirapur Branch, Dhanbad in account no. 002900107010101 under Head No. 0029.

The payment has been made vide your demand letter, the details of which is as follows:

Mouza No.	Thana No.	Acq. Area	Amount Rs. (in Crore)	Your Payment Demand Letter No.	Date
Poddardih	105	3.09 Acr)	Rs. 1 Crore	4926	6.11.2017
Kumthol	93	1.72 Acr)		4926	06.11.2017

We are enclosing Original Treasury Challans for your ready reference.

Received 12.05.18

Thanking you,

Yours sincerely,
For **M/S MAITHON POWER LIMITED**

(Purushottam Thakur)
Chief Executive Officer

Encl : Original Treasury Challans for your ready reference

E-CHALLAN
Government of Jharkhand
Planning Cum Finance Department

Valid UpTo :-12/05/2018 — Remitter's Copy of Dept

GRN:-1801832390 — Date:- 03/05/2018 12:02:20

Receiving Office:- DHNLDR001-ADDITIONAL COLLECTOR-COLLECTORATE (REVENUE)

District:- Dhanbad — **Deposit Treasury:- Dhanbad**

Year:- 03/05/2018 — to :- 03/05/2018

Head(0029) — **Amount** ₹

Head Details **002900107010101**

परती भूमि की बिक्री से आगमन और भू-कर — 10000000.00

D19218883

Net Payable Amount:- ₹ **10000000.00**
One Crore Rupees And Zero Paisa Only

Payee Detail

Identity Proof(Pan No.) - AACCM8705H
PAN No:- AACCM8705H
Remitter Name:- CEO MPL
Address :- MA 5 GOGNA MAITHON DAM MAITHON.DHANBAD.828207
Remarks :-

FOR USE IN RECEIVING BANK (GBSS)

CHEQUE/DD :- 65085
Bank CIN No :-
Bank Name :- State Bank of India (Any CBS Branch)

STATE BANK OF INDIA HIRAPUR BRANCH BANK TRANSFER 09 MAY 2018 Chief Manager SBI / HIRAPUR

Signature & Seal of Bank

BOOKED

Use seprate page ,Cut from here

E-CHALLAN
Government of Jharkhand
Planning Cum Finance Department

Valid UpTo :-12/05/2018 — Remitter's Copy

GRN:-1801832390 — Date:- 03/05/2018 12:02:20

Receiving Office :- DHNLDR001-ADDITIONAL COLLECTOR-COLLECTORATE (REVENUE)

District :- Dhanbad — **Deposit Treasury:- Dhanbad**

Year:-03/05/2018 — to:- 03/05/2018

Head(0029) — **Amount** ₹

Head Details **002900107010101**

परती भूमि की बिक्री से आगमन और भू-कर — 10000000.00

D19218883

Net Payable Amount:- ₹ **10000000.00**
One Crore Rupees And Zero Paisa Only

Payee Detail

Identity Proof(Pan No.) - AACCM8705H
PAN No:- AACCM8705H
Remitter Name:- CEO MPL
Address :- MA 5 GOGNA MAITHON DAM MAITHON.DHANBAD.828207
Remarks :-

FOR USE IN RECEIVING BANK (GBSS)

CHEQUE/DD :- 65085
Bank CIN No :-
Bank Name :- State Bank of India (Any CBS Branch)

STATE BANK OF INDIA HIRAPUR BRANCH BANK TRANSFER 09 MAY 2018 Chief Manager SBI / HIRAPUR

Signature & Seal of Bank

BOOKED

उपायुक्त का कार्यालय, धनबाद।

(जिला राजस्व शाखा)

पत्रांक.....5621...../रा0,

प्रेषक,

अपर समाहर्त्ता,
धनबाद।

सेवा में,

अंचल अधिकारी,
निरसा।

धनबाद, दिनांक...15.09.....2020

विषय :– निरसा अंचल अन्तर्गत एम0पी0एल0 को अर्जित भूमि का दाखिल–खारीज के संबंध में।

प्रसंग :– दिनांक–14.09.2020 को उपायुक्त महोदय, धनबाद की अध्यक्षता में सम्पन्न बैठक की कार्यवाही ज्ञापांक–5619/रा0, दिनांक–14.09.2020

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के संबंध में कहना है कि निरसा अंचल अन्तर्गत एम0पी0एल0 को भूमि हस्तांतरण एवं अर्जित भूमि का दाखिल–खारीज से संबंधित दिनांक–14.09.2020 को उपायुक्त महोदय, धनबाद की अध्यक्षता में समीक्षा बैठक आहूत की गई थी, उक्त बैठक में समीक्षा के कम में पाया गया कि एम0पी0एल0 द्वारा कुल–**564.67** एकड़ भूमि का दाखिल–खारिज हेतु आवेदन पत्र समर्पित किया गया है। जिसमें से आपके द्वारा **177.33** एकड़ भूमि का दाखिल–खारीज किया गया है। शेष **380.34** एकड़ भूमि का दाखिल–खारिज हेतु वर्त्तमान में लम्बित है। उपायुक्त द्वारा उक्त सम्पन्न बैठक में एक माह के अन्दर शेष रकवा–**380.34** एकड भूमि का दाखिल–खारीज करने हेतु समय–सीमा निर्धारित की गई है। साथ ही निदेशित किया गया कि अंचल अधिकारी, निरसा से प्रतिवेदन प्राप्त करें कि विगत् छः माह में कितनी भूमि का दाखिल–खारीज किया गया है।

अतः बैठक की कार्यवाही इस पत्र के साथ संलग्न कर भेजते हुए निदेशित दिया जाता है कि विगत् छः माह में कितनी भूमि का दाखिल–खारीज किया गया है, इस संबंध में तिथिवार रकवा सहित प्रतिवेदन अद्योहस्ताक्षरी को तीन दिनों के अन्दर उपलब्ध कराना सुनिश्चित करें।

अनुलग्नक :– यथोपरि।

विश्वासभाजन,

15/9/20

अपर समाहर्त्ता,
धनबाद।

14/9/20

दिनांक–14.09.2020 को 01.00 बजे अप0 में उपायुक्त, धनबाद की अध्यक्षता में एम0पी0एल0 को भूमि हस्तांतरण एवं दाखिल–खारिज से संबंधित समीक्षात्मक बैठक की कार्यवाही :–

उपस्थिति– पंजी के अनुसार

एम0पी0एल0 से संबंधित भूमि हस्तांतरण एवं दाखिल–खारिज से संबंधित निम्नलिखित बिन्दुओं पर समीक्षा की गई –

1. **निरसा अंचल** अंतर्गत विभिन्न मौजों में कुल सन्निहित रकवा–**191.67 एकड़** भूमि का हस्तांतरण हेतु पूर्व से प्रस्तावित है। वर्ष 2013 में विभाग से स्वीकृति प्राप्त था, परंतु निर्धारित अवधि में एम0पी0एल0 द्वारा राशि नहीं जमा करने के कारण स्वतः व्ययगत् हो चुका है। एम0पी0एल0 द्वारा पुनः नये सिरे से अधियाचना समर्पित किया गया है। उक्त प्रस्तावित भूमि जंगल–झाड़ी भूमि है। ऐसी स्थिति में यह मामला अगली बैठक में निर्णय लिया जायेगा। अपर समाहर्त्ता, धनबाद को निदेशित किया गया कि जंगल–झाड़ी भूमि से संबंधित विभागीय संकल्प/आदेश की प्रति के साथ बैठक में भाग लेंगे।

2. **निरसा अंचल** अंतर्गत अर्जित रकवा–**564.67 एकड़** भूमि का दाखिल–खारिज हेतु एम0पी0एल0 द्वारा समर्पित किया गया है। समीक्षा के दौरान पाया गया कि जिसमें से **177.33 एकड़** भूमि का दाखिल–खारिज कर दिया गया है। शेष **380.34 एकड़** भूमि दाखिल–खारिज हेतु लंबित है। उक्त भूमि का दाखिल–खारिज नहीं होने के कारण एम0पी0एल0 को लोन आदि कार्य में कठिनाई हो रही है। उपायुक्त, धनबाद द्वारा निर्देशित किया गया कि शेष बचे हुए भूमि का कितने दिनों में दाखिल–खारिज का कार्य पूर्ण किया जायेगा। साथ ही यह भी निर्देश दिया गया कि अंचल अधिकारी, निरसा से तिथिवार प्रतिवेदन प्राप्त करें कि विगत् 06 माह के अंदर कितनी भूमि का दाखिल–खारिज किया गया है। शेष लंबित भूमि का दाखिल–खारिज हेतु 01 माह का समय सीमा निर्धारित किया जाय।

(अनुपालन–अपर समाहर्त्ता, धनबाद एवं अंचल अधिकारी, निरसा)

3. **निरसा अंचल** अंतर्गत मौजा–**कुन्थल,** रकवा–**3.09 एकड़** एवं मौजा–**पोद्दारडीह,** रकवा–**1.72 एकड़** कुल सन्निहित रकवा–**4.81 एकड़** भूमि का **80 प्रतिशत राशि** की माँग संबंधी समीक्षा की गई। उक्त भूमि का प्रस्ताव वर्ष 2013 में उप सचिव, कृषि गन्ना, विकास विभाग, झारखण्ड, राँची को भेजा गया था। उक्त भूमि कृषि विभाग की भूमि है, जो एम0पी0एल0 को हस्तांतरण हेतु पूर्व से प्रस्तावित है। कृषि एवं गन्ना विकास विभाग का पत्रांक–**2739,** दिनांक–**17.09.2014** के द्वारा कुल 05 बिन्दुओं में पृच्छा की गई थी। जिसमें मुख्य रूप से उक्त कृषि भूमि के बदले कृषि फॉर्म हेतु 25.15 एकड़ उपयुक्त भूमि चिन्हित कर उपलब्ध कराने का निदेश प्राप्त है, तथा कृषि योग्य बनाने के लिए 1.00 करोड़ रू0 MPL, धनबाद द्वारा Undertaking दी जायेगी, परन्तु मौजा–**कुन्थल,** रकवा–**3.09 एकड़** एवं मौजा–**पोद्दारडीह,** रकवा–**1.72 एकड़** कुल सन्निहित रकवा–**4.81** एकड़ भूमि का प्रस्ताव अभिलेख अप्राप्त है। कृषि भूमि के बदले मौजा–उपचुड़िया में 25.00 एकड़ भूमि चिन्हित करते हुए इस कार्यालय का पत्रांक–3518/रा0, दिनांक–19.09.2016

के द्वारा स्वीकृति हेतु आयुक्त, उ0छो0प्र0, हजारीबाग के माध्यम से राजस्व, निबंधन एवं भूमि सुधार विभाग, झारखण्ड, रॉची को भेजा गया था, परन्तु राजस्व विभागीय पत्रांक–165/रा0, दिनांक–11.01.2017 के द्वारा वापस किया गया है, जिसमें निदेशित किया गया कि उक्त चिन्हित रकवा–25.00 एकड़ गैर आबाद खाते की भूमि अन्तर्विभागीय निःशुल्क हस्तांतरण जिला स्तर से ही किया जाना है, तथा MPL, द्वारा समर्पित Undertaking के अनुपालनार्थ राशि–1 करोड़ रू0 सरकारी कोषागार में जमा कर लिया जाना होगा। जिसके आलोक में MPL द्वारा राशि 1 करोड़ रू0 जमा किया गया है। कृषि विभाग को कृर्षि फार्म हेतु चिन्हित भूमि रकवा–25.00 एकड़ भूमि त्रुटि के साथ अंचल अधिकारी, निरसा को भेजा गया है। त्रुटि निराकरण के पश्चात् अग्रेत्तर कार्रवाई की जायेगी। इसके उपरान्त कृषि विभाग की भूमि मौजा–**कुन्थल,** रकवा–**3.09 एकड़** एवं मौजा–**पोद्दारडीह,** रकवा–**1.72 एकड़** कुल सन्निहित रकवा–**4.81 एकड़** भूमि का हस्तांतरण हेतु विभाग को पत्राचार किया जायेगा। अपर समाहर्त्ता, धनबाद को निदेशित किया गया कि अविलम्ब मामला का निष्पादन सुनिश्चित करें।

(अनुपालन–अपर समाहर्त्ता, धनबाद एवं अंचल अधिकारी, निरसा)

4. निरसा अंचल अन्तर्गत विभिन्न मौजा में रकवा–6.96 एकड़ भूमि का लीज बन्दोवस्ती हेतु 80 प्रतिशत राशि मांग संबंधी समीक्षा की गई। अपर समाहर्त्ता, धनबाद को निदेशित किया गया कि एक माह के अन्दर 80 प्रतिशत राशि मांग हेतु अंचल अधिकरी, निरसा से राशि गणना कराते हुए MPL को देना सुनिश्चित किया जाय।

(अनुपालन–अपर समाहर्त्ता, धनबाद एवं अंचल अधिकारी, निरसा)

अन्त में सधन्यवाद ज्ञापन के साथ बैठक की कार्यवाही समाप्त की गई।

14/9/20

उपायुक्त, धनबाद।

ज्ञापांक 5619 /रा0, धनबाद, दिनांक 14.09. 2020

प्रतिलिपि :– अंचल अधिकारी, निरसा को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।
प्रतिलिपि :– मुख्य कार्यपालक पदाधिकारी, एम0पी0एल0, मैथन को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

14/9/20

उपायुक्त, धनबाद।

उपायुक्त–सह–जिला दण्डाधिकारी का कार्यालय, धनबाद।
(जिला राजस्व शाखा)

पत्रांक 5221 /रा0,

प्रेषक,

उपायुक्त,
धनबाद।

सेवा में,

सरकार के उप सचिव,
कृषि, पशुपालन एवं सहकारिता विभाग,
कृषि प्रभाग, झारखण्ड, राँची।

धनबाद, दिनांक 23/12/2020

विषयः– मैथन राईट बैंक थर्मल पावर प्रोजेक्ट लिमिटेड (MPL) को कृषि विभाग की हस्तांतरण की जा रही 4.81 (मौजा–पोद्दारडीह/105, रकवा–1.72 एकड़ एवं मौजा–कुंथौल/93, रकवा–3.09 एकड़) एकड़ भूमि के बदले धनबाद जिलान्तर्गत अंचल–निरसा के मौजा–उपचुड़िया में कुल रकवा–25 एकड़ भूमि कृषि, पशुपालन एवं सहकारिता विभाग (कृषि एवं गन्ना विकास विभाग) को कृषि फार्म हेतु अन्तर्विभागीय हस्तांतरण के संबंध में।

प्रसंग :– आपका पत्रांक–3244, दिनांक–05.10.2017

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के संबंध में कहना है कि मैथन राईट बैंक थर्मल पावर प्रोजेक्ट लिमिटेड (MPL) को कृषि विभाग की हस्तांतरण की जा रही 4.81 (मौजा–पोद्दारडीह/105, रकवा–1.72 एकड़ एवं मौजा–कुंथौल/93, रकवा–3.09 एकड़) एकड़ भूमि के बदले धनबाद जिलान्तर्गत अंचल–निरसा के मौजा–उपचुड़िया/119, खाता नं0–340, प्लॉट नं0–2825(किस्म–पु0प0) एवं 2558(किस्म–प0पाथर) में कुल सन्निहित रकवा–25 एकड़ गैर आबाद खाते की भूमि कृषि, पशुपालन एवं सहकारिता विभाग (कृषि एवं गन्ना विकास विभाग) को कृषि फार्म हेतु अन्तर्विभागीय हस्तांतरण से संबंधित अद्यतन स्थिति निम्नवत् है :–

1. धनबाद जिलान्तर्गत मैथन राईट बैंक थर्मल पावर प्रोजेक्ट लिमिटेड (MPL) को कृषि विभाग की हस्तांतरण की जा रही 4.81 (मौजा–पोद्दारडीह/105, रकवा–1.72 एकड़ एवं मौजा–कुंथौल/93, रकवा–3.09 एकड़) एकड़ भूमि के बदले धनबाद जिलान्तर्गत अंचल–निरसा के मौजा–उपचुड़िया/119, खाता नं0–340, प्लॉट नं0–2825(किस्म–पु0प0) एवं 2558(किस्म–प0पाथर) में कुल सन्निहित रकवा–25 एकड़ गैर आबाद खाते की भूमि कृषि, पशुपालन एवं सहकारिता विभाग (कृषि एवं गन्ना विकास विभाग) को कृषि फार्म के लिए हस्तांतरण हेतु प्रस्ताव अभिलेख सं0–01/2016–17 की स्वीकृति हेतु इस कार्यालय का पत्रांक–3518/रा0, दिनांक–19.09.2016 के द्वारा आयुक्त, उत्तरी छोटानागपुर प्रमण्डल, हजारीबाग के माध्यम से राजस्व निबंधन एवं भूमि सुधार विभाग, झारखण्ड, राँची को भेजा गया था, परन्तु सरकार के संयुक्त सचिव, राजस्व निबंधन एवं भूमि सुधार विभाग, झारखण्ड, राँची के पत्रांक–165/रा0, दिनांक–11.01.2017 के द्वारा वापस किया गया है। जिसमें निदेशित किया गया है कि कृषि फॉर्म हेतु MPL द्वारा समर्पित Undertaking के अनुसार प्रस्तावित 25.00 एकड़ भूमि को कृषि योग्य बनाने हेतु 1 करोड़ रूपये MPL द्वारा जमा की जानी है। साथ ही 25.00 एकड़ प्रस्तावित भूमि का अंतर्विभागीय निःशुल्क हस्तांतरण कार्रवाई अपने स्तर से निष्पादित किया जाय। जिसके आलोक में अनुमण्डल पदाधिकारी, धनबाद के पत्रांक–1749/सा0, दिनांक–22.10.2020 के द्वारा अंतर्विभागीय निःशुल्क भूमि हस्तांतरण हेतु संशोधित प्रस्ताव एवं जिला स्तर पर लगाये गये त्रुटि का निराकरण कर अनुशंसा के साथ इस कार्यालय मे प्राप्त हुआ है। साथ ही कृषि फॉर्म हेतु MPL द्वारा समर्पित Undertaking के अनुसार प्रस्तावित 25.00 एकड़ भूमि को कृषि योग्य बनाने हेतु 1 करोड़ रूपये MPL द्वारा चालान नं0–GRN 1801832399, दिनांक–03.05.2018 के माध्यम से दिनांक–09.05.2018 को भारतीय स्टेट बैंक, हीरापुर शाखा, धनबाद में जमा की

2. MPL को कृषि विभाग की हस्तांतरण की जा रही 4.81 (मौजा—पोद्दारडीह / 105, रकवा—1.72 एकड़ एवं मौजा—कुंथौल / 93, रकवा—3.09 एकड़) एकड़ भूमि का राशि क्रमशः 10,55,736.00 एवं 16,82,505.00 कुल 27,38,241.00 **(सत्ताईस लाख अड़तीस हजार दो सौ एकतालीस) रूपये** कोषागार, धनबाद में जमा की गई है। कोषागार पदाधिकारी, धनबाद का पत्रांक—672, दिनांक—24.11.2020 द्वारा प्राप्त सत्यापन प्रतिवेदन की प्रति संलग्न है।

3. MPL को कृषि विभाग की हस्तांतरण की जा रही 4.81 एकड़ यथा मौजा—पोद्दारडीह / 105, रकवा—1.72 एकड़, प्रस्ताव अभिलेख सं0—04 / 2010—11 एवं मौजा—कुंथौल / 93, रकवा—3.09 एकड़, प्रस्ताव अभिलेख सं0—03 / 2010—11 क्रमशः आयुक्त के सचिव, उत्तरी छोटानागपुर प्रमण्डल, हजारीबाग का पत्रांक—2391 / रा0, दिनांक—15.05.2013 एवं 2392 / रा0, दिनांक—15.05.2020 के माध्यम से कृषि विभाग को भेजा गया है, जो अबतक विभाग में विचाराधीन है।

अत अनुरोध है कि MPL को कृषि विभाग की हस्तांतरण की जा रही 4.81 एकड़ यथा मौजा—पोद्दारडीह / 105, रकवा—1.72 एकड़, प्रस्ताव अभिलेख सं0—04 / 2010—11 एवं मौजा—कुंथौल / 93, रकवा—3.09 एकड़, प्रस्ताव अभिलेख सं0—03 / 2010—11 में अग्रेत्तर कार्रवाई करने की कृपा की जाय, ताकि उक्त भूमि के बदले धनबाद जिलान्तर्गत अंचल—निरसा के मौजा—उपचुड़िया / 119, खाता नं0—340, प्लॉट नं0—2825(किस्म—पु0प0) एवं 2558(किस्म—प0पाथर) में कुल सन्निहित रकवा—25 एकड़ गैर आबाद खाते की भूमि कृषि, पशुपालन एवं सहकारिता विभाग (कृषि एवं गन्ना विकास विभाग) को कृषि फार्म के लिए निःशुल्क भूमि हस्तांतरण हेतु अग्रेत्तर आवश्यक कार्रवाई की जा सके।

अनुलग्नक :— यथोपरि।

विश्वासभाजन,
24/11/20
उपायुक्त, धनबाद।

23/11/20
अपर समाहर्त्ता,
धनबाद।
23/11/20

ज्ञापांक 8221 / रा0, धनबाद, दिनांक 23/12/2020

प्रतिलिपि :— सरकार के संयुक्त सचिव, राजस्व निबंधन एवं भूमि सुधार विभाग, झारखण्ड, रॉची को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

24/11/20
उपायुक्त, धनबाद।

23/11/20
अपर समाहर्त्ता,
धनबाद।
23/11/20

MPL
MAITHON POWER LIMITED

MPL/FY24/23-07/005

Date: 7th August 2023

To,
Deputy Commissioner,
Dhanbad

Sub: Request for raising Payment Demands and expedite resolution of MPL land matters.

Dear Sir,

We would like to draw your kind attention MPL's land matters and solicit your support and intervention to expedite the mutation and leasing process of following parcels of land.

Sl. No	Type Of Land	Area (Acres)	Remarks
A. Main Plant			
1	**Rayati (Private) Land**	**564.67**	• Mutation of 471.20 Acres is completed, 93.47 Acres of Land is balance.
2	**GM (Government) Land**	**114.95**	• Demand note is awaited
3	**Jangle Jhad (Un-notified Forest) Land (30 Years)**	**191.67**	• 100 % payment is made, and Forest Clearance has been Provided, Lease Agreement awaited
4	**Forest (Notified Forest) Land**	**238.39**	• Mutation of 16.98 in Favour of Forest Department is in process at Govindpur Block
• B. Railway			
1	**Rayati (Private) Land**	**59.18**	• Mutation of 37.775 Acres is completed, 21.405 Acres of Land is balance.
2	**GM (Government) Land**	**28.33**	
	6 Village	6.96	• 80 % Payment made; final calculation is awaited
	Mugma & Shyampur (File 1)	6.00	• 80 % Payment made; final calculation is awaited
	Mugma & Shaympur (File 2)	8.67	• 100 % Payment made; Lease Agreement awaited
	Krishi Farm (Poddardih & Kunthal)	4.81	• 80 % Payment made; final calculation is awaited
	Pandra	1.82	• 100 % Payment made; Lease Agreement awaited
	Paktoria	0.07	• 100 % Payment made; Lease Agreement awaited

Thanking you

Yours truly,
For Maithon Power Limited

(Vijayant Ranjan)
CEO - MPL & Chief - ER Generation

Reduction in cost of Retaining wall Construction by Acquiring Additional land between BR 11 - BR12						
	A - Retaining Wall Details-Original				B - Cost of additional land (Rs. Lakh)	(A-B) - Savings (Rs. Lakh)
Sl.No	Length (M)	Height (M)	Concrete Qty (M3)	Original Cost* (Rs. Lakh)		
1	60	10.5	800	169.46	43.37	**232.00**
2	40	11	500	105.91		
Total				**275.37**	**43.37**	
Note	** Cost estimate is based on BOQ of civil work required for retaining wall namely Concrete at Rs 12572/CUM & MS rods at Rs 61500/MT for quantity used in retaining wall i.e.(169.46 lakh = (800 x 12572 +0.14 x 800 x 61500)/10^5) for retaining wall at Sl. No. 1 and similarly for retaining wall at Sl. No. 2.*					

EASTERN RAILWAY

No. L/Lease License/19 Asansol, dt.09.04.2019

Head Special Project,
Maithon Power Ltd.,
MA-5 Ganga Colony,
P.O.Maithon Dam,
Dist. Dhanbad,
Pin 828205

Sub: Proposal for renewal of license fees for licensing of 8.04 Hectare of land construction of siding for railway Infrastructure works of MPL of 1050 MW at Stage-1 of Phase-I of total project measuring 8.04 Hts. land licensing as per JPO No. W(6) /4/SDG/Policy Dt. 14/15.09.10

Ref: (i) This office proposal of even No. dt. 22.02.19
(ii) Sr.DFM/ER/ASN's letter No. 45/FB/Vetting/Engg/3106 Dt. 28.02.19
(iii) DRM/ASN's recommendation dt.12.03.19

*****

In reference to the above DRM/ER/Asansol has kindly approved the renewal proposal for land licensing of Railway land for siding works at Stage-1 of Phase-I of total project measuring 8.04 Hts.between Mugma and Thaparnagar.

You have to deposit following for processing the necessary agreement :-

1. License fee for (5 years) from 2019-20 to 2023-24	= Rs.1,76,79,816.00.
2.GST @ 18%	= Rs. 31,82,367.00
3. Security Deposit (1 year license fee)	= Rs. 30,74,355.00
	Total = Rs.2,39,36,538.00

Plan ,Estt.D&G & Deptt. Charges (Outstanding) :-

Land value of 14 -15 is	= Rs 5,11,38,558.00
14.5 % on Rs 5,11,38,558.00	= Rs.74,15,091.00
GST 18%	= Rs.13,34,716.00
	Total = Rs. 87,49,807.00

However, it is mentioned that as per PCE/ER/KKK's letter No. W(6)/340/0 Vol.VI dt. 16.07.12 it has been stated that" Plan, Estimate, D&G and Deptt. charges to be considered @14.5% on land Value + Project cost within Railway Boundary" . On receipt of the project cost from your end 14.5% will be charged accordingly in due course to regularize the matter.

Hence, at present you are requested to deposit a total amount of **Rs.3,26,86,345.00 (Rupees Three crore twenty six lakh eighty six thousand three hundred forty five) only**, in F/o. F.A. & C.A.O/E. Railway/Kolkata in the form of Demand Draft and execute the agreement prior to handing over of the land.

09.04.19

Sr.Divisional Engineer/Spl,
E.Railway/Asansol

Copy to : AEN/Line/Asansol for information & n/a pl.

Sr. Divisional Engineer/Spl,
E.Railway/Asansol

ANNEXURE P/7B (COLLY.)

DAMODAR VALLEY CORPORATION

COML/WS/2010-11/WC - -

AGREEMENT

EXECUTED ON....14th May 2010

BETWEEN

DAMODAR VALLEY CORPORATION

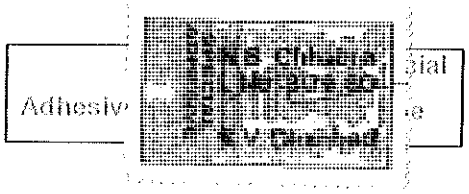
AND

MAITHON POWER LIMITED

For Supply of RAW WATER

AT
MAITHON RIGHT BANK THERMAL POWER PROJECT
FROM
MAITHON RESERVOIR
FOR
INDUSTRIAL &/OR DOMESTIC USE

THE WATER SUPPLY AGREEMENT WILL COME INTO EFFECT ON AND FROM THE DATE OF COMMENCEMENT OF THE WATER WITHDRAWAL



AGREEMENT

Supply of Raw Water
For
Industrial &/or Domestic Use

This *AGREEMENT* made this.....fourteenth..... day of .....May..... 2010.

BETWEEN

DAMODAR VALLEY CORPORATION, a Corporation constituted under the Damodar Valley Corporation Act being Act No. XIV of 1948 (hereinafter referred to as "the said Act") and having its Headquarters at DVC Towers, VIP Road, Kolkata-700 054 in the state of West Bengal (hereinafter referred to as **"the First Party"**, which term shall unless excluded by or repugnant to the subject or context include its successors-in-interest and assigns) of the ONE PART

AND

M/s. MAITHON POWER LIMITED, a Company registered under the Companies Act, 1956 and having its registered office at Jeevan Bharti, 10th Floor, Tower-1, 124 Connaught Circus, New Delhi-110 001 (herein referred to as **"the Second Party"** which term shall unless excluded by or repugnant to the subject or context include its successors-in-interest and/or permitted assigns) of OTHER PART.

Contd. on page-2

MAITHON POWER LIMITED NEW DELHI

WHEREAS one of the functions of the First Party under Section 12 (a) of the said Act is the promotion and operation of the schemes inter-alia for the supply of water in the Damodar Valley.

AND WHEREAS under the provisions of Section 15 of the said Act the First Party is vested with power to determine and levy rates for bulk supply and retail distribution of water for industrial and domestic purposes and specify the manner of recovery of such rates.

AND WHEREAS under the provisions of Section 17 of the said Act construction, operation or maintenance in the Damodar Valley of any dam or other work of any installation for the extraction of water shall not be effected by any person without the consent of the First Party.

AND WHEREAS the Second Party has requested the First Party under cover of its letter No. MTP/Intake-14/-258,Dated 21.02.2007 annexed hereto, to allow it to construct , operate and/or maintain the water supply scheme and to allow it to have a supply of water from Maithon Reservoir of DVC at Maithon Right Bank at Maithon, Dist. Dhanbad, Jharkhand in accordance with the approved plan and drawing forwarded by Chief Engineer (Civil), DVC, Maithon under cover of his letter No.CE-17/51-461, Dated March 22nd, 2007 and letter No. MD/DVRR/W-6/2001/181-183, Dated 06.12.2001 of Member Secretary, DVRRC, CWC, Maithon annexed hereto for industrial and/or domestic purpose as laid down in the relevant provisions of the said act.

AND WHEREAS the First Party has agreed to such construction, operation and /or maintenance of the water supply scheme and has further agreed to such supply of water to the Second Party on the terms and conditions as hereinafter appearing.

Contd. on page-3

MAITHON POWER LIMITED NEW DELHI

NOW THIS AGREEMENT WITNESSETH AND IT IS HEREBY DECLARED AND AGREED AS FOLLOWS:-

01. a) PERMISSION:

i) The "**First Party**" who is seized and possessed of and is otherwise well and sufficiently entitled to the plot of land measuring 52,280 sq meter (i.e. 5,62,736.69 sq. ft.) of DVC land, more particularly described in the drawing hereto annexed, hereby grants to the "**Second party**" the right to use/build at his own cost, the intake works comprising the Pump house supporting structures and approaches and also lay down pipes and other works on the above mentioned piece and parcel of land.

(ii) These structures and pumping installation shall be the property of the "**Second party**" and shall be maintained by them.

(iii) For the temporary use/occupation of the said 52,280 sq. meter (i.e. 5,62,736.69 sq.ft.) of DVC land, the second party shall pay the "**First Party**" a token rent of Rs. 5,62,736=69/- (Rupees Five Lacs Sixty Two Thousand Seven Hundred Thirty Six and paise Sixty Nine only @ Rs 1/- per Sq ft) per annum for a period of 35 (Thirty Five) years from the date of possession/occupation of land is made over to the '**Second Party**". The amount of Rs. 5, 62,736=69/- per annum for the whole 35-years is to be paid in advance from the date of occupation of the said land by the '**Second Party**". The rent is subject to change as and when revised by the 'the Corporation' during the pendency of the lease period and the '**Second Party**' is liable to pay the balance admissible amount. The aforesaid lease period may be extended as per discretion of **"the Corporation".**

(iv) The "**Second Party**" shall not be entitled to transfer or let out the said land to others without the consent of the **"First Party**".

(v) The **"First Party** shall not put up any structure of its own on the aforesaid piece of land without the written consent of the **"Second Party**" which shall not be unnecessarily withheld.

Contd. on page-4

MAITHON POWER LIMITED NEW DELHI

(vi) On the termination of the tenure of the temporary use and occupation period unless extended, the "**Second Party**" shall quit, vacate and deliver peaceful possession of the said land by removing the intake works built thereon and restoring it to its original condition at his own cost.

(vii) Neatness and cleanliness of the area occupied should be observed by the second party.

01. b) PERMISSION:

The "**First Party**" hereby grants to the "**Second Party**" the permission to construct, operate and / or maintain the said water supply scheme in accordance with the Plan and Drawing annexed hereto and to extract such quantities of water from Maithon Reservoir for their for their 1050 MW Maithon Right Bank Thermal Power Project as the "**Second Party**" may require up to 30 MGD (55 cusec) at the point in the Damodar Valley indicated in the said Plan and Drawing annexed hereto and in the manner hereinafter mentioned provided the "**Second Party**" desiring to increase or decrease the quantity of water to be extracted as permitted aforesaid the "**First Party**" may require the "**Second Party**" to give the "**First Party**" sufficient notice in writing stating the quantity of water required and the "**First Party**" after receipt of such notice within one month may or may not permit the additional drawal of water depending on the condition prevailing at that time provided further that failure on the part of the '**First Party**' will not be construed as breach of this Agreement.

02. APPROVAL OF PLAN & DRAWING INSPECTION:

The installation of the "**Second Party**" required for extraction of water at the point on the water supply canal of DVC indicated in the said Plan and Drawing shall be duly approved by the "**First Party**" **before** erection provided the "First Party" or its representatives duly authorised in that behalf shall, from time to time, and at all times be entitled to enter such installations of the "**Second Party**" for inspection.

MAITHON POWER LIMITED NEW DELHI

Contd. on page-5

03. (a) EXCESS DRAWAL:

No drawal in excess of the water, as permitted shall be made by the **'Second Party"** without obtaining the specific permission of the **'First Party"** and subject to such terms and conditions as the "First Party" may like to impose.

03. (b) LESS DRAWAL:

The less drawal of water by 30% or more of the agreement quantity for a period more than 3-years will automatically call for revision of the agreement. The revised agreement quantity will be reduced to average of last 3-yrs' actual drawal, without making any further reference to the consumer incorporating the actual average drawal.

04. MODE OF MEASUREMENT & METERS:

For the purpose of measurement of the quantity of water extracted, the **"Second Party"** shall under this Agreement, with the prior Approval of the First Party, install at such points as may be indicated by the First Party, as many meters or as equal to the different type or types of uses of water so as to register the quantity of water in such units of measurement as may be adopted by **"the First Party"** from time to time. Provided that for the purpose of checking the accuracy of the meter/meters installed by **"the Second Party"**, "the **First Party"** may install check meters or other mutually agreed upon check measures and "the Second **Party"** shall provide all facilities required by "the First Party" for such installation or such check.

MAITHON POWER LIMITED NEW DELHI

Contd. on page-6

05. SEALING OF METERS:

All meters referred to in the above mentioned **Clause-04** excepting the ones with automatic recorder on charts if any, shall be properly sealed on behalf of both the Parties hereto and shall not be interfered with by either Party except in the presence of the other Party or its representatives duly authorized in that behalf.

06. METER READING, INSPECTION & BASIS OF PAYMENT:

The Control Valve House housing the meter/meters of the Second Party shall remain in the custody of the Second Party and the First Party through its representative duly authorized in that behalf shall at all times be entitled to enter the said Control Valve House and inspect the meter/meters. The meter reading shall be entered up daily at 9.00 hours in a register by the Second Party or its representatives duly authorized in that behalf. The readings may be checked and attested by the First Party or its representative duly authorized in that behalf, at convenient intervals and only the meter readings as recorded in the Register shall form the basis of payment to the First Party, provided that where it is not possible to record the quantity of water extracted for a particular use directly owing to the absence of a meter directly recording such quantity, the quantity extracted for such use shall be determined by taking the difference between the quantity recorded in the main meter, recording the total quantity extracted for all uses under this Agreement, and the quantity recorded for the other uses for which there may be direct meter/meters, provided further that if this meter/meters installed by the second party for recording the quantity of water is/are out of order, the quantity of water extracted may be assessed by taking the average of the quantity extracted during the previous three months as per the reading of the meter/meters, provided

Contd. on page-7

MAITHON POWER LIMITED NEW DELHI

further that nothing as aforesaid shall prevent the respective parties from arriving at a mutual settlement (agreement) as regard the quantity of water to be charged for during the above period.

07. QUANTITY OF WATER CONSUMED OR EXTRACTED:

The Registers of meter reading referred to in the above mentioned Clause-06 or the assessed quantity of water mutually agreed upon by and between both the parties hereto or on the average of the quantity of water extracted during the three months as aforesaid or computed by taking the difference between the direct recording and main meter shall be the prima facie evidence of the quantity of water extracted by the Second Party.

08. PROPRIETARY RIGHT OF METERS AND UPKEEPMENT:

Meters as mentioned in the above mentioned **Clause-04** shall be the property of the Second Party and the Second Party shall be liable for the upkeep of the meter and for carrying out test once a year or more to the satisfaction of the First Party about the accuracy of such meter/meters.

09. ACCURACY OF METERS:

In the event of any dispute or difference between the First Party and the Second Party as to the sufficiency or accuracy or state of repair of condition of the said meter or as to the quantity of water extracted through such meter, such difference or dispute shall be referred to and determined by an Engineer to be appointed by both the parties hereto.

MANTHON POWER LIMITED NEW DELHI

Contd. on page-8

10. **BASIS OF ASSESMENT IN ABSENCE OF METER:**

If at any time the meters installed for measurement of water extracted shall, at any time, cease to register correctly or be removed for repair, calibration etc., then for the period until the said meters shall have been repaired, replaced or otherwise adjusted so as to register the quantity of water passing through it correctly, the First Party shall be entitled to charge and the Second Party shall be liable to pay for such quantity of water as may be assessed by taking the average of the quantity extracted during the previous three months as per readings of the meters or as otherwise agreed to mutually between the parties hereto.

11. **BILL & THE TARIFF:**

The price for supply of water extracted shall be charged to the Second Party in accordance with the First Party's Schedule of rates and other conditions in force from time to time, provided that any levy such as Sales Tax, Octroi or by whatever other name called, known or made by the State Government, or any other competent authorities on quantity of water extracted by the Second Party shall be paid by the Second Party.

12. **TIME TO SUBMIT CONSUMPTION REPORT & SURCHARGE FOR DELAY IN PAYMENT OF BILLS:**

The First Party shall after the expiry of each month/quarter of the year deliver to the Second Party an account stating quantity of water supplied to the Second Party by the First Party in accordance with the readings of the said meter/meters of the Second Party and the amount payable therefore and the Second Party shall pay the same within 30 days from the date of delivery of such account. If the 'Second Party' fails to pay the amount of any bill due under this

Contd. on page-9

WATHON POWER LIMITED NEW DELHI

Agreement within 30 days from the date of receipt of the bill referred to, it shall pay a surcharge of 1% per month from that date. The date of receipt of payment either in cash or in cheque in the First Party's office will be considered as the date of payment for the purpose of this Agreement. If the amount of such bill remains unpaid for 60 days after the date of receipt of the bill referred to above, the First Party shall give the Second Party 7 (seven) days' notice of its intention to discontinue the supply of water and at the expiry of such period if the payment has not been received, the "**First Party**" may forthwith discontinue supply of water to the "**Second Party**".

13. **MODE OF SUPPLY UNDER NORMAL CONDITION & ABNORMAL CONDITION:**

Save as provided herein 30 (Thirty) MGD which, however, need not be continuous, throughout 24 hours, shall be available to the '**Second Party**' provided that in case of draught, accident, or other unforeseen circumstances, force majeure or any other cause over which the First Party has no control, the '**First Party**' shall not be responsible for any diminution or discontinuance of supply on such occasions, but it shall restore the normal conditions of supply as soon as it reasonably can to the extent possible.

14. **RULES & REGULATION:**

The Second Party agrees to conform to and abide by all rules and regulations made by the "**First Party**" now in force and/or which may from time to time be made by the '**First Party**' consistent with this Agreement relating to the extraction of water from the First Party's sources within the statutory limit of the said Act.

Contd. on page-10

MAITHON POWER LIMITED NEW DELHI

"**The Second Party**" will ensure that the effluent water discharging out of the plant will conform to the latest regulations / prescribed water quality parameters by pollution control board of respective states.

15. **DISPUTE OR DIFFERENCE & ARBITRATION:**

In the event of any dispute or difference arising at any time between the 'First Party' and the 'Second Party' in regard to any matter arising out of or in connection with this Agreement such dispute or difference shall be referred to the Arbitration of three Arbitrators, one to be appointed by each party hereto and the Third Arbitrator to be appointed by the Arbitrators appointed by each party as presiding Arbitrator for adjudication of dispute in accordance with the Arbitration and Conciliation Act 1996 or any statutory modification thereof or for the time being in force. The cost of Arbitration so agreed to by and between the parties, shall equally be borne by both the parties. The venue of Arbitration shall be at Kolkata and the Court at Kolkata shall have Jurisdiction.

16. **TENURE OF AGREEMENT OR VALIDITY:**

This Agreement shall subject as hereinbefore provided be and remain in force for a period of 40 years initially from the date of commencement of supply under this Agreement and thereafter shall continue uninterruptedly for an indefinite period under the existing terms and conditions until determined by either party after the expiration of the fortieth or any subsequent year on giving 12 months' prior notice in writing of such intention and at the expiration of such notice this Agreement shall absolutely cease and determine but without prejudice to the rights and remedies, if any, of either party which may have accrued or arisen hereunder in the meantime and

Contd. on page-11

MAITHON POWER LIMITED NEW DELHI

provided that the Second Party shall on giving the **'First Party'** 12 (Twelve) months' prior notice in writing of such intention be at liberty at any time after the expiration of the fortieth year to terminate this Agreement by making payment of the charges equal to water charge for one year as per the rate of withdrawal of the First Party in force at that time.

IN WITNESS WHEREOF THE PARTIES TO THESE PRESENTS HAVE HERE UNTO PUT THEIR RESPECTIVE HANDS AND SEALS EACH THE DAY AND YEAR FIRST ABOVE WRITTEN.

The Agreement along with Schedule of rates would come into effect on and from the date of commencement of water supply.

For MAITHON POWER LTD.

PRAVEEN CHORGHADE
CHIEF EXECUTIVE OFFICER

Utpal Kumar Sinha
(UTPAL KUMAR SINHA)
Chief Manager, MPL
WITNESS

SIGNED, SEALED AND DELIVERED
FOR AND ON BEHALF OF
MAITHON POWER LIMITED

(A. PATRA)
अधीक्षण अभियंता
Superintending Engineer
वाणिज्यिक विभाग / Commercial Deptt.
दामोदर घाटी निगम / D. V. C.
WITNESS

SIGNED AND DELIVERED
FOR AND ON BEHALF OF
DAMODAR VALLEY CORPORATION

Contd. on page-12

ANNEXURES

ENCLOSURES FORMING THE PART OF THE AGREEMENT:-

Annexure mentioned below and annexed hereto shall form the integral part of this Agreement:-

(1) ANNEXURE-'A'	: Schedule of Rates
(2) ANNEXURE-'B'	: Details of the Consumer
(3) ANNEXURE-'C'	: Letter No. MD/DVRR/W-6/2001/181-183, Dated 06.12.2001 from Member Secretary, DVRRC, CWC, Maithon.
(4) ANNEXURE-'D'	: Letter No.CE-17/51/461 dated 22-03-07 of CE (Civil), DVC, Maithon.
(5) ANNEXURE-'E'	:Letter No.Coml/WS/Agr./MPL/3327 dated 31-12-09 of CE (Coml), DVC, Kolkata.
(6) ANNEXURE-'F'	:Letter No. MPL/ Intake/DVC/2010/3 dated 19th March 2010 of Maithon Power Ltd.
(7) ANNEXURE-'G'	: Plans and Drawings as approved by DVC

For and on behalf of
MAITHON POWER LIMITED
Maithon Dam, Dhanbad (JHAKHAND)

CHIEF ENGINEER (COML.)
for and on behalf of
DAMODAR VALLEY CORPORATION
Kolkata-700054

मुख्य अभियन्ता (वाणिज्यिक)
Chief Engineer (Comml.)
वाणिज्यिक विभाग / Comml. Dept.
दा०घा०नि०, कोल -54 / DVC, Kol-54

Contd. on page-13

MAITHON POWER LIMITED NEW DELHI

ANNEXURE - 'A'

DAMODAR VALLEY CORPORATION

DVC TOWERS, VIP ROAD,
KOLKATA-700 054

COMMERCIAL DEPARTMENT

Tel No. 91 33 2355 7931/6041; Fax No. 91 33 2355 2129

SCHEDULE OF RATES

FOR

NON-AGRICULTURAL WATER SUPPLY

PERIOD	RATE
From 1st November 2003 until Further Revision	Rs. 2.50 only per 1000 gallons
Vide Corporation's Notice No. Coml/WS/1841,Dated 25.11.2003 [Resolution No.7160(Item No.11) of 556th meeting of the Corporation held on 15/11/2003]	(Rupees two and fifty paise only per thousand gallons)

N.B. : **Revised rate will be applicable as and when notified by the Corporation**

CHIEF ENGINEER
For and on behalf of
DAMODAR VALLEY CORPORATION
Kolkata-700054

For and on behalf of
MAITHON POWER LIMITED
Maithon Dam, Dhanbad (JH)

MAITHON POWER LIMITED NEW DELHI

Contd. on page-14

Page-14

ANNEXURE - 'B'

DETAILS OF THE COMPANY

A. DETAILS OF APPLICANT:

01.Name in Capital Letters	:Mr. Praveen Chorghade /Maithon Power Ltd.
02.Designation	: Chief Executive Officer
03.Relationship with Intending Consumer	: Employee
04.Complete Postal Address	: C-43, Sector-62, NOIDA, U.P. 201 307
05.Telephone No.	: 0120 666 3012
06.FAX No.	: 0120 666 3029
07.E.Mail Address	:praveen.chorghade@tatapower.com

B. DETAILS OF THE WATER CONSUMER:

01. Details of Registered Office:

Registered Office	**Postal Address : Maithon Power Limited,** Jeevan Bharti , 10th Floor, Tower -1, 124 Connaught Circus, New Delhi-110001, India
	Telephone No. : 011 23731961
	FAX No. :
	E.Mail Address: iadavis@tatapower.com

02. Details of Contact Person:

	NAME : MR. PRAVEEN CHORGHADE
Contact Person	**Postal Address:** C-43, SECTOR-62,NOIDA, U.P. PIN-201307
	Telephone No. :0120 – 6663012
	FAX No. : 0120- 6663029
	E.Mail address:praveen.chorghade@tatapower.com

03. Complete Billing Address:

Billing Address	**Postal Address: QTR MA-5 Gogna Colony Post Maithon Dam District Dhanbad -828207**
	Telephone No. : 06540-270505 / 506
	FAX No. : 06540-270504
	E.Mail Address : sinhauk@tatapower.com

Contd. on page-15

MAITHON POWER LIMITED

C. DETAILS OF PROJECT/UNIT/PUMP LOCATION ETC.:

01.	Name of the Village/Place	: Maithon Right Bank Thermal Power Project Site, Thana Nirsa, Distt. Dhanbad
02.	Plot no.	: Raw Water Intake Pump House near to Majhiladi - 424, 427, 428, 414-419 (all part) 419-423, 508-510, 398-401, 247, 260. Dambhain - 1539 to 1546, 1580-84, 1572, 73, 77, 1491(P)
03.	Dag No.	:
04.	Mouza Name & No.	Dambhain - 37, Majhiladi - 42
05.	J.L. No.	:
06.	Police Station Name & No.	: Nirsa Police Station
07.	Name of Post Office with PIN	: P.O. Maithon Dam - 828207
08.	District	: Dhanbad
09.	Postal Address of the Plant/ Unit site	: Maithon Power Ltd; MA-5, Gogna, P.O. Maithon Dam-828207 , Dist. Dhanbad, Jharkhand.
10.	Point of Water Withdrawal/	: Maithon Reservoir
	Telephone No.	: 06540-270505 / 506
	FAX No.	: 06540-270504
	E.Mail Address	:sinhauk@tatapower.com
11.	Location of Water Treatment Plant	: Near Induced Draft Cooling Tower of Plant, approximately 3 Kms away from Maithon Reservoir.
12.	Location of Pumping Station	: In Raw Water Pump House Building, near Maithon Reservoir
13.	Number of pumps installed	: 3 nos. (2 Working + 1 Standby)
14.	Capacity of pumps	: 2850 m^3/hr
15.	Location of water meter	: To be finalized
16.	Location of Intake point	: Maithon Reservoir
17.	Quantum of water withdrawal in MGD (approved by DVRRC)	: 29.60 MGD
18.	Date of Commencement of water withdrawal from pumping station (to be filled up later)	:

D. DETAILS OF RAW WATER USAGE:

(Attach Separate sheet, if necessary, giving details):

(1) .....

(2) .....

(3) .....

For MAITHON POWER LTD.

PRAVEEN CHORGHADE

..... CHIEF EXECUTIVE OFFICER .....

Signature with full name of person signing the Agreement & Stamp Seal of Company

MAITHON POWER LIMITED Maithon

Damodar Valley Corporation

Office of the Manager Reservoir Operations
Post: Maithan, Dist. Dhanbad, State: Jharkhand
Phone: 06540-259445, Fax: 06540-274313
E-mail: samir.maji@dvc.gov.in, skm.mro.dvcindia@gmail.com

MRO/Water Tariff Cell/83 Date: 29.10.2021

REMINDER-1

To,
The Chief Executive Officer,
Maithon Power Limited,
MA 5, Gogna Colony,
P.O-Maithon Dam,
Dist-Dhanbad, Pin-828207,

Sub: Arrear Payment of land license of area 562736.69 Sqr .ft in connection with Water withdrawal from Maithon Reservoir from period 15.03.2009 to 31.01.2022.

Ref.: 1. Agreement No. Nil dated 14.05.2010 for drawal of Raw water from DVC Sources for MPL.
2. Letter No.-MRO/Water Tariff Cell/47 dated 22.07.2021

Dear Sir,

This is to inform that an agreement has been executed between DVC and MPL on 14.05.2010 for drawal of 30 MGD raw water including leasing of DVC land measuring **562736.69 Sqr .ft** for intake structure and pipe line etc for period 35 years (i.e 15.03.2009 to 14.03.2044).

With reference to above, it is to mention that-

1. From the record, it has been observed that rental charges Rs. 1,96,95,784.15/- for land license from 15.03.2009 to **14.03.2044(Total 35 years)** has been paid at old rate @ Rs 1.00/- per sqr ft (for 12 months period).

2. As per the Clause -01(a)(iii) of executed agreement dated 14.05.2010, **"The rent is subject to change as and when revised by the ' The Corporation ' during the pendency of the lease period and the 'Second Party' is liable to pay the balance admissible amount".**

3. The Corporation has revised land license rate @ Rs. 6.00/- per sq. ft. for each term of license i.e 11 (eleven) months vide DVC office memorandum No. Sectt./LA/Rent (Pt)/2011/1004 dated 03.09.2012(Copy enclosed).

4. In view of above you are requested to deposit arrear amounting to **Rs.3, 24, 065, 14.00 /-** (Rs. Three Crore Twenty four Lakh Six Thousand five hundred fourteen only) **(Including GST)** (Copy of bill enclosed) for lease period w.e.f **15.03.2009 to 31.01.2022** against enhanced land license rate.

Your early action in this regard is requested.

Yours faithfully

(S. K. Maji)
Dy. Chief Engineer(Civil),
Water Resources,
DVC, Maithon.

Copy to:-

01. The Executive Director (Civil), DVC, Maithon.
02. The G.M (Finance), DVC, DVC Tower, Kol. 54.
03. The EE(C), Water Tariff Cell, DVC, Maithon.

O/C.

Corrigendum

1100

Tel. No.- (06540) 279402 / 279683 / 279445
Fax No.- 06540-274313

DAMODAR VALLEY CORPORATION
दामोदर घाटी निगम
OFFICE OF THE CHIEF ENGINEER (CIVIL),
P. O.- MAITHON DAM, DHANBAD, JHARKHAND, PIN.- 828207

GST No.- 20AABCD0541M1Z5

Ref. No. : CE (C) / Tariff / Land-Rental MPL / 127/ Bill (lease of DVC Land)- 18	Date: 20.07.2021
BILL FOR RENTAL CHARGES DURING THE PERIOD FROM	**15-03-2009 To 31-01-2022**
BILL FOR LAND RENTAL FOR	**MAITHON POWER LIMITED**
To, The Chief Executive Officer, Maithon Power Limited, MA-5, Gogna Colony, P.O.- Maithon Dam, Dist.Dhanbad, PIN:828 207 GST No.- 20AACCM8705H1ZS	BILL NO. CE (C) / Tariff / MPL / 127 / Land Rent/ 09-22
	BILL DATE : 20.07.2021 — DUE DATE : 19.08.2021
	Sanctioned Allocation : 30 MGD As per sanction of DVRRC
	Total DVC Land for temporary use/ Occupation of : 562736.69 sq. ft.
	Agreement Executted on :14-May-2010, Tennure of Agreement : 40 Years
Billing Month : 15-March-2009 To 31-January-2022	
Source of Water Drawal	At Maithon Reservoir

DESCRIPTION REGARDING RENTAL CHARGES

Sl. No.	Bill. No. & date	Period From	Period To	Leasing of DVC land (sq ft.) (562736.69 sq.ft.)	Bill raised for the period on the basis of **Old rate**: Rate per Sq. ft (Rs.)	Month	Amount (Rs)	Payment Received	Bill raised for the period on the basis of **New rate** w.e.f. 3rd September 2012 vide O.M. No.- Sectt./LA/Rent(Pt.)/2011/1004 dt. 03.09.2012: Rate per Sq. ft	Month	Amount (Rs)	Difference (Rs.)
1	Coml/WS/Agr/MP L/2356 dated 21.10.2009	15-Mar-2009	2-Sep-2012	562736.69	@ Rs. 1 /- per sq.ft. for 12 month	41.5	1946131.05	1946131.05	@ Rs. 1 /- per sq.ft. for 12 month	41.5	1946131.05	0.00
		3-Sep-2012	2-Jul-2014	562736.69	@ Rs. 1 /- per sq.ft. for 12 month	22	1031683.93	1031683.93	@ Rs. 6 /- per sq.ft. for 11 month	22	6752840.28	5721156.35
2	Coml/WS/Agr/MP L/3327 dated 31.12.2009	3-Jul-2014	30-Jun-2017	562736.69	@ Rs. 1 /- per sq.ft. for 12 month	35.93	1684927.44	1684927.44	@ Rs. 6 /- per sq.ft. for 11 month	35.93	11028616	9343688.53
		1-Jul-2017	31-Jan-2022	562736.69	@ Rs. 1 /- per sq.ft. for 12 month	55	2579209.83	2579209.83	@ Rs. 6 /- per sq.ft. for 11 month	55	16882100.7	14302890.87
									CGST @ 9 % w.e.f. 01/07/2017 (of Rs. 16882100.70/-)		1519389.06	1519389.063
									SGST @ 9 % w.e.f. 01/07/2017 (of Rs. 16882100.70/-)		1519389.06	1519389.063
									IGST @ 18 % w.e.f. 01/07/2017		0	0
					Total	154.4	7241952	7241952		154.4	39648466	32406514
											Say (Rs.)	**3,24,06,514**

Total Charges E. & O.E	Rs. Three Crore Twenty Four Lakh Six Thousand Five Hundred Fourteen only

1. The G. M.(Finance), DVC Towers, Kolkata-54
2. The Sr. Manager(Finance), DVC, Maithon, Dhanbad, Pin- 828207- Attn. Mr. B. Chaudhury, Dy. Manager(F).

Details for Payment through RTGS
Name of the Bank : BANK OF INDIA
Branch Name : MAITHON, Dhanbad -828207
DVC's Account Number : 477721110000001
IFSC : BKID0004777 ('0' Stands for Zero)

For and on Behalf of
DAMODAR VALLEY CORPORATION
CHIEF ENGINEER (CIVIL),
MAITHON DAM, DHANBAD, JHARKHAND

Kindly acknowledge the Payment details to following email address:
dvcwater@gmail.com
samir.maji@dvc.gov.in

Note: Any discrepency observed shall be brought to the notice within 30 days from the issue of this bill which shall be modified accordingly, if required & adjusted with the forth coming bills.

Damodar Valley Corporation

Office of the Manager Reservoir Operations
Post: Maithan, Dist. Dhanbad, State: Jharkhand
Phone: 06540-259445, Fax: 06540-274313
E-mail: samir.maji@dvc.gov.in, skm.mro.dvcindia@gmail.com

MRO/Water Tariff Cell/47 Date: 22.07.2021

To
The Chief Executive Officer,
Maithon Power Limited,
MA 5,Gogna Colony,P.O-Maithon Dam,
Dist-Dhanbad, Pin-828207,

Sub: Arrear Payment of land license of area 562736.69 Sq .ft in connection with Water withdrawal from Maithon Reservoir from period 15.03.2009 to 31.01.2022.

Ref.: 1. Agreement No. Nil dated 14.05.2010 for drawal of Raw water from DVC Sources for MPL.

Dear Sir,

This is to inform that an agreement has been executed between DVC and MPL on 14.05.2010 for drawal of 30 MGD raw water including leasing of DVC land measuring **562736.69 Sq .ft** for intake structure and pipe line etc for period 35 years(i.e 15.03.2009 to 14.03.2044). With reference to above, it is to mention that-

1. From the record, it has been observed that rental charges Rs. 1,96,95,784.15/- for land license from **15.03.2009 to 14.03.2044** (Total 35 years)has been paid at old rate @ Rs 1.00/- per sq. ft (for 12 months period).
2. As per the Clause -01(a)(iii) of executed agreement dated 14.05.2010, **"The rent is subject to change as and when revised by the ' The Corporation ' during the pendency of the lease period and the 'Second Party' is liable to pay the balance admissible amount" .**
3. The Corporation has revised land license rate @ Rs. 6.00/- per sq. ft. for each term of license i.e 11 (eleven) months vide office memorandum No. Sectt./LA/Rent (Pt)/2011/1004 dated 03.09.2012 (Copy enclosed).
4. In view of above you are requested to deposit arrear amounting to **Rs.3, 24, 06,514.00 /-** **(**Rs. Three Crore twenty four Lakh Six Thousand five hundred fourteen Only) (**Including GST**) (Copy of detail bill enclosed) for lease period w.e.f **15.03.2009 to 31.01.2022** against enhanced land license rate.

Your early action in this regard is requested.

Yours faithfully

(S. K. Maji)
Dy. Chief Engineer(Civil),
Water Resources,
DVC, Maithon.

Copy to:-

1. The Chief Engineer-I (Civil) & In-charge ED(C), DVC, Maithon.
2. The G.M (Finance), DVC, DVC Tower, Kol. 54.

O/C

ANNEXURE P/7C

दामोदर घाटी निगम
Damodar Valley Corporation
प्रबंधन जलाशय प्रचालन का कार्यालय
Office of the Manager Reservoir Operations
डाकः मैथन, जिलाः धनबाद, राज्यः झारखण्ड
Post: Maithan, Dist. Dhanbad, State: Jharkhand
फोन/Phone: 06540-279445, ई–मेल/E-mail:
sanjeevkumar.1@dvc.gov.in

MRO/Water Tariff Cell/ Land//MPL /127/ 407 Date:11.09.2023

To,
The Chief Executive Officer,
Maithan Power Limited,
MA 5, Gogna Colony,
P.O-Maithan Dam,
Dist-Dhanbad, Pin-828207,

CFO
19/9/23

Sub: Arrear Payment of land license of area 562736.69 Sqr .ft in connection with Water withdrawal from Maithan Reservoir from period 01.02.2022 to 31.10.2024 (Thirty three months) and arrear GST Payment of land license for period 15.03.2009 to 31.01.2022.

Ref.: 1. Agreement No. Nil dated 14.05.2010 for drawal of Raw water from DVC Sources for MPL.
2. Our Letter No. MRO/Water Tariff Cell /47 dated 22.07.2021.
3. Our Letter No .MRO/Water Tariff Cell /83 dated 29.10.2021
4. Our Letter No .MRO/Water Tariff Cell /Land/MPL/127/138 dated 27.01.2022
5. Our Letter No .MRO/Water Tariff Cell /Land/MPL/127/154 dated 05.03.2022
6. Our Letter No .MRO/Water Tariff Cell /Land/MPL/127/208 dated 28.07.2022
7. Our Letter No MRO/Water Tariff Cell/ Land//MPL /127/ 233 dated: 29.08.2022

Dear Sir,

This is to inform that an agreement has been executed between DVC and MPL on 14.05.2010 for drawal of 30 MGD raw water including leasing of DVC land measuring **562736.69 Sqr .ft** for intake structure and pipe line etc for period 35 years (i.e. 15.03.2009 to 14.03.2044).

With reference to above, it is to mention that-

1. From the record, it has been observed that rental charges Rs. 1,96,95,784.15/- for land license from 15.03.2009 to **14.03.2044(Total 35 years)** has been paid at old rate @ Rs 1.00/- per sqr ft (for 12 months period).

2. As per the Clause -01(a)(iii) of executed agreement dated 14.05.2010, **"The rent is subject to change as and when revised by the ' The Corporation ' during the pendency of the lease period and the 'Second Party' is liable to pay the balance admissible amount".**

3. The Corporation has revised land license rate @ Rs. 6.00/- per sq. ft. for each term of license i.e. 11 (eleven) months vide DVC office memorandum No. Sectt./LA/Rent (Pt)/2011/1004 dated 03.09.2012 and @ Rs12.00/- per sq. ft. for each term of license i.e. 11 (eleven) months vide DVC office memorandum No. m-pl/hr/Genl-1/2018 dated 31.08.2023 w.e.f 17.09.2022.

4. Under above reference letter Sl.No.2, We have received the arrear of revised land license payment of Rs.3, 24, 06, 514.00 /-(Rs. Three Crore Twenty four Lakh Six Thousand five hundred fourteen only) (Including GST) for period 15.03.2009 to 31.01.2022 on dated 28.02.2022.

5. This is to intimate that bill dated 20.07.2021 for arrear payment of land license for period 15.03.2009 to 31.01.2022 under reference letter Sl.No 2 and 3, the GST has been levied wrongly Rs. 30,38,778.00 from our good office only for period 01.07.2017 to 31.01.2022 instead of GST Rs. 52,86,192.00 on entire period bill from 15.03.2009 to 31.01.2022.

6. The corrected bill for arrear land licence fee including GST Rs. 52, 86,192.00 for entire period 15.03.2009 to 31.01.2022, comes to tune of Rs. 3, 46, 53,928.00.

7. The entire corrected GST amount of Rs. 52, 86,192.00 for the period 15.03.2009 to 31.01.2022 of arrear license fee has been paid by DVC on dated 26.03.2022.

8. The arrear GST amount payable by MPL for arrear land license period 15.03.2009 to 31.01.2022 is **Rs. 22,47,414.00** (Rs. 3,46,53,928.00 - Rs.3, 24, 06, 514.00).

9. The arrear payment at revised rate for further period 01.02.2022 to 31.10.2024 (Thirty three months) comes to tune of Rs. 1,98,07,994/- including GST.

In view of above you are requested to deposit GST arrear amounting to **Rs. 22,47,414.00** for period 15.03.2009 to 31.01.2022 and also land arrear dues **Rs.1,98,07,994 /-** (Including GST) **(Copy of bill enclosed)** for lease period w.e.f. 01.02.2022 to 31.10.2024 (Thirty three months) against enhanced land license rate.

Your early action in this regard is requested.

Encl: -1. Bill of land lease
2. Land Rate revision order

Yours faithfully,

11/03/2023

Sanjeev Kumar
Sr. Manager (Civil) /Water Tariff Cell,
DVC, Maithon

Copy to:-

01. The Executive Director (Civil) & HOP, DVC, Maithon.
02. The Sr.GM (Civil), Water Management, DVC, Maithon.
03. The LALO, DVC, DVC Tower, Kol. 54.
04. The Manager (Civil), ©, Water Tariff Cell, DVC, Maithon

Tel. No - (06540) 279402 / 279683 / 279445
Fax No.- 06540-274313

DAMODAR VALLEY CORPORATION
दामोदर घाटी निगम

OFFICE OF THE CHIEF ENGINEER (CIVIL),
P. O.- MAITHON DAM, DHANBAD, JHARKHAND, PIN.- 828207
GST No.- 20AABCD0541M1Z5

Ref. No. : CE (C) / Tariff / MPL /127/ (lease of DVC Land)- 69	Date: 11-09-2023
BILL FOR RENTAL CHARGES DURING THE PERIOD FROM	01-02-2022 To 31-10-2024
BILL FOR LAND RENTAL FOR	**Maithon Power Limited**
#REF!	Bill NO. CE(C) / Tariff / MPL / 127 / Land Rental / 22-24
	BILL DATE : 11-09-2023 — DUE DATE : 11-10-2023
	Sanctioned Allocation : 30 MGD As per sanction of DVRRC
	Total DVC Land for temporary use/ Occupation of : 562736.69 sq. ft.
Billing Month : 01-February-2022 To 31-October-2024	Number of Month : 33 — Agreement Executed on :14-05-2010 Tennure of Agreement :40 Years
Source of Water Drawal	At Maithon Reservoir

DESCRIPTION REGARDING RENTAL CHARGES (Balance GST BILL)

Sl. No.	Bill. No. & date	Period		Leasing of DVC land (sq ft.) (562736.69 sq.ft.)	Bill raised for the period on the basis of Old rate				Bill raised for the period on the basis of New rate w.e.f. 3rd September 2012 vide O.M. No.- Sectt./LA/Rent(Pt.)/2011/1004 dt. 03.09.2012 & Office Order No-2018 dated 31.08.2023			
		From	To		Rate per Sq. ft (Rs.)	Month	Amount (Rs)	Payment Received	Rate per Sq. ft	Month	Amount (Rs.)	Difference (Rs.)
1	Coml/WS/Agr /MPL/3327 dated 31.12.2009	1-Feb-22	31/12/2022	562736.69	@ Rs. 1 /- per sq.ft. for 12 month	11	515841.97	515841.97	@ Rs. 6 /- per sq.ft. for 11 month	11	3376420	2860578.17
2	Coml/WS/Agr /MPL/3327 dated 31.12.2009	1-Jan-23	30-Nov-23	562736.69	@ Rs. 1 /- per sq.ft. for 12 month	11	515841.97	515841.97	@ Rs. 12.84 per sq.ft. for 11 month	11	7225539	6709697.13
3	Coml/WS/Agr /MPL/3327 dated 31.12.2009	1-Dec-23	31-Oct-24	562736.69	@ Rs. 1 /- per sq.ft. for 12 month	11	515841.97	515841.97	@ Rs. 13.74 per sq.ft. for 11 month	11	7732002	7216160.15
							1547525.9				18333961	16786435.46
									CGST @ 9 % of Rs.= 1510779			1510779.192
									SGST @ 9 % of Rs. =1510779			1510779.192
									IGST @ 18 %			0
									Total Charges			19807993.85
	Total Charges E. & O.E	(One crore Ninety Eight Lakh Seven Thousand Nine Hundred Ninety Four Only)							Say (Rs.) (A)			19807994
									Outstanding Dues GST arrear for the period of bill 15.03.2009 to 31.01.2022 (Rs.) (B)			2247414
	Total Dues (Rs.) (A + B)	(Two crore Twenty Lakh Fifty Five Thousand Four Hundred Eight Only)										22055408

COPY To:

1. The G. M.(Finance), DVC Towers, Kolkata-54
2. The Sr. Manager(Finance), DVC, Maithon, Dhanbad, Pin- 828207

Rakesh Ranjan
For and on Behalf of
DAMODAR VALLEY CORPORATION
CHIEF ENGINEER (CIVIL),
MAITHON DAM, DHANBAD, JHARKHAND

Details for Payment through RTGS
Name of the Bank : BANK OF INDIA
Branch Name : MAITHON, Dhanbad -828207
DVC's Account Number : 477721110000001
IFSC : BKID0004777 ('0' Stands for Zero)

Kindly acknowledge the Payment details to following email address:
sanjeevkumar.1@dvc.gov.in, dvcwater@gmail.com

Note: Any discrepancy observed shall be brought to the notice within 30 days from the issue of this bill which shall be modified accordingly, if required & adjusted with the forth coming bills.

दामोदर घाटी निगम

DAMODAR VALLEY CORPORATION

(Under Ministry of Power, Government of India)
Office of the Sr. Additional Director (HR)
Maithon: Dhanbad: Jharkhand:-828207

No. M-PL/HR/Genl.-1/- 2018 Date : 31/08/2023

OFFICE ORDER

In persuasion of the Corporations' Office Order no. Sectt/LA/Rend/2017/540 Dated 29/09/2022 and on the basis of subsequent recommendations of the standing committee, the license fee (per Sq. Ft) of the following mouzas has been revised w.e.f. 17/09/2022.

SL.	Name of Mouza	Minimum License Fee w.e.f 17/09/2022 as per O.C Dt. 29/09/2022	District	State
01	Dambhuin (Plot No. 37)	Rs. 12.00	Dhanbad	Jharkhand
02	Khutiyadih (Plot No.1825)	Rs. 12.00	Dhanbad	Jharkhand
03	Gogna (Plot No. 242)	Rs. 12.00	Dhanbad	Jharkhand
04	Dhankudi	Rs. 12.00	Dhanbad	Jharkhand
05	Kalipahari	Rs. 18.87	Dhanbad	Jharkhand
06	Debipur(Plot No. 01)	Rs. 18.00	Purulia	West Bengal
07	Sidhabari (Plot No. 1134)	Rs. 12.00	Purulia	West Bengal
08	Sarkuri (Plot No. 15)	Rs. 12.00	West Bardhaman	West Bengal
09	Birvhanpur (Plot No 1902)	Rs. 39.44	West Bardhaman	West Bengal
10	Birvhanpur (Plot No. 260)	Rs. 67.50	West Bardhaman	West Bengal
11	Natungram (Plot No. 01)	Rs. 12.00	Bankura	West Bengal
12	Raturia (Plot No. 60)	Rs. 25.00	West Bardhaman	West Bengal
13	Ladna (Plot No. 5659,5658,5664)	Rs. 19.50	Jamtara	Jharkhand

This issues with the approval of the competent authority (e-file No. HR-ADMN/637/2023-HR-MAITHON)

31/08/2023
(Tapas Ray)
Assistant Manager-HR
DVC, Maithon

Copy to:

1) The Executive Director(Civil) & HOP, DVC, Maithon.
2) The General Manager, Rehabilitation, acquisition & Mutation, DVC, Kolkata.
3) The General Manager (Civil), DVC, Maithon
4) The Sr. Manager (Finance), DVC, Maithon.
5) The Dy. General Manager (Admin) DVC, Maithon.
6) The Estate Officer, DVC, Maithon.
7) Office Copy.

File copy

Scanned with OKEN Scanner

दामोदर घाटी निगम / DAMODAR VALLEY CORPORATION
डीवीसी टावर्स, वीआईपी रोड / DVC Towers, VIP Road
कोलकाता- ७०००५४/ Kolkata-700054

संख्या/No. Sectt/LA/Rent/2017/540

दिनांक/Date: 29/09/2022

MEMORUNDUM

विषय/Sub: Licensing out DVC land to outsiders at various projects for non-agricultural purpose other than removal of sand, stones, earth etc.

In supersession of the rates contained in the Corporation OM No. Sectt./LA/Rent (Pt.)/2011/1004 dated 03/09/2012, on licensing out of DVC land to outsiders at various projects, the Corporation hereby revises the policy with immediate effect as per the following:

1. Rate of license fee:
   The license fee for 11 months shall be determined considering annual license fee as 6% of the land value considered as commercial purpose of use.

2. Formation of Standing Committee:
   A Standing Committee shall be formed at various field formations to examine and determine the land value/ rate of license fee of land relevant to the field formation for fresh cases as well as for renewal of old case and recommend to the Head of Project for approval/ acceptance followed by necessary approval from the Competent Authority as per Delegation of Administration Power.

3. Fixing of land value:
   The valuation of land/ market value of land shall be fixed based on the land value of the surrounding area as on 01/04/2022 as determined by the Govt. Revenue Authorities/ Office of the Registrar/ Sub-Registrar/ Circle Office.

   The land value as worked out shall be increased every year on the 1st day of April starting from 01/04/2023 at the rate of 7% over the previous year's land value to arrive at the land value for the following year based on which the annual license fee shall be fixed.

4. Minimum license fee:
   The minimum license fee is to be calculated considering rate as @Rs. 12/- per sq. ft. for each term of license of 11 (eleven) months and it will be increased every year on the 1st day of April at the rate of 7% over the previous year. At the time of determination of the license fee, first the license fee for 11 months shall be determined considering annual license fee as 6% of the land value considered as commercial purpose of use. If the license fee so calculated is lower than the minimum license fee license for the same land (i.e. @ Rs. 12/- per sq. ft.), then the minimum license fee shall have to be realised.

5. Deposit of License Fee:
   The license fee plus applicable GST shall be paid by the licensee in advance for each term of license.

6. Revision of license fee:
   The license fee will go up by 7% over the previous year's fee (either automatically due to land value escalation or due to revision of minimum license fee rate) from the 1st day of April every year provided the period of license in the preceding financial year exceeds six months.

7. Security Deposit:
   Security Deposit (S.D.) equivalent to 11 months' license fee to be paid by the licensee in advance. However, Govt. Departments are exempted from payment of S.D. The Security Deposit shall be refunded to the licensee only after expiry of license period. This clause shall apply to new licensees with immediate effect.

8. Applicability of revised rate:
   The revised rates shall apply to new licensees and renewal of old licensees with immediate expiry of the license period.

9. Agreement for license:
   An agreement for license shall be entered into with each party.

10. Duration of License:
The validity of license is for a period of 11 (Eleven) months initially, may be renewed for further terms of 11 (Eleven) months by the licensing authority on written request of licensee subject to realization of license fee, as applicable.

11. Electricity/Water Charges:
Separate charges would be levied as per approved rate in case of supply of water/electricity by DVC to the licensee.

12. Site Plan Approval:
The site plan of the proposed building/installation on the allotted DVC land shall be approved by the concerned DVC project.

13. Any special purpose land requirement, like erection of Telecom Towers/ establishment of Small Scale Industries (SSI) shall be treated separately. The license fee for such cases will be determined by any local committee of respective field formation, limited to the minimum license fee as per this committee report followed by necessary approval from the Competent Authority as per Delegation of Administration Power.

14. The license fee for licensing out of DVC land to outsiders at various Projects for non-agricultural purpose will be reviewed after every 05 (five) years.

15. In case where licensee is not interested in renewal of license, the assets created on the demised land has to be removed by the licensee within the license period, otherwise the same will vest in DVC without any compensation and DVC shall be entitled to deal with the same at licensors' discretion and at the cost of the licensee.

16. If at any time it is found that the licensee has violated the terms of the license & the activities of the licensee is detrimental to the interest of DVC and/or issues a notice to the licensee regarding termination of the license, the licensee will vacate the demised land within the notice period (one-month) without payment of any compensation by DVC, irrespective of the fact that the structure, building etc. have been erected on the demised land by the licensee at his/her cost. Licensee will be free to remove, at his/ her own cost, any structure, building etc. built by the licensee within a stipulated period to be decided by DVC.

17. Neatness & cleanliness of the area occupied should be maintained by the licensees.

18. For water & sanitary arrangements, if made by the Corporation, separate charge shall be levied by the Corporation.

19. Before granting such license, it should be ensured that the land in question can be spared without any detriment to DVC's own work and also without affecting the aesthetic beauty of the colony.

20. The above policy came into effect from 17/09/2022 and shall remain effective till further revision.

17/9/2022

[मुख्य अभियंता-१(या.) एवं निदेशक (संपदा, भूमि एवं पुनर्वास)/
Chief Engineer-I (Mech.) & Director (Estate, Land & Rehabilitation)]

MAITHON POWER LIMITED

Letter Number: MPl /FY21/20-09/018 Date:22-09-2020

To
Officer In-charge,
Nirsa PS

Sub.: Request for providing administrative support to execute work on Plot no 115 of Pandra Mauza, acquired in MPL Railway Corridor

Dear Sir,

We would like to inform you that MPL is in process of constructing the dedicated railway line, which has already been delayed excessively because of multiple issues/ litigations which is challenging the overall feasibility of our plant operations.

In order to expedite the same, Hon'ble High Court, Jharkhand has directed District Administration vide his order dated 22.02.2018 In W.P.(C) No.-5242 of 2017 to complete all the exercise to remove hurdles in the project.

With reference to the above subject, we would like to update that the said plot number 115 of Khata 346, has been acquired by DLAO and transferred to MPL vide possession letter 04.08.2009 "Abhilekh Sankhya: 8/09-08". However, while taking up the construction works, following persons are repeatedly posing resistance

1) Mr. Nimai Rawani S/o Late Sanatan Rawani, Resident of Barwa East, Govindpur (m) 8114514478, 9204249051
2) Mr. Prankisto Rawani urf Pran Rawani, Resident of Kunthal, Nirsa (m) 8873271548

We have further requested them many times to take-up their grievance, if any with concerned competent authorities and offered them full co-operation from us in this regard, however they are still retorting to unlawful means of posing threats to our contractor's workmen.

Hereby, in this situation, I would like to request you to please provide us administrative support to execute our work on the said plot, from 23rd September'2020, as we are apprehending that above mentioned persons may disturb our construction work on the site and create Law and Order Situation

Thanking you

Yours truly,
For Maithon Power Limited

(Chandrabhushan Singh)
Head-Railway Project

CC : Circle Officer, Nirsa
Enclosed : Copy of Possession Certificate "Pandra"

MPL
MAITHON POWER LIMITED

Letter Number: MPL/PA21/20-11/023 Date: 30-11-2020

To
Circle Officer,
Nirsa, Dhanbad,
Govt. of Jharkhand

Sub.: Request guidance on attached claim on Khata no 127, Plot no 1182, Mauza Pandra

Dear Sir,

This is to appraise you that Khata no 127, Plot no 1182 of Maua Pandra has been acquired for MRBTPP Railway Project, and 9 Awards (238 to 246), for the total acquired area of 20 decimal, has been issued to 10 Land losers. They have further been compensated by DLAO and subsequently Ex-gratia compensation has been disbursed by us to all 10 land losers.

However, Mrs Alka Gorai W/o Late Badal Chandra Gorai, has raised her claim citing the hereditary right over the land, and shared her details with your office on 25.11.2020, along with DLAO office and MPL.

Hereby, we would like to request your intervention and suitable action to resolve the issue and enable us in carrying out the construction activities on the said plot.

Thanking you
Yours truly,
For Maithon Power Limited

(CB Singh)
Head-Railway Project

MPL
MAITHON POWER LIMITED

Letter No. MPL/FY21/2012/021 Dated: 18-12-2020

To,
The Deputy Commissioner,
Govt. of Jharkhand, Dhanbad

Sub.: Request to provide administrative support to execute work in stretch of Pandra Village acquired in Railway Corridor

Dear Sir,

With reference to the above subject, we would like to inform you that MPL is in process of constructing the dedicated railway line, which has already been delayed excessively because of multiple issues/ litigations and thus resulted in overwhelming cost escalations which is challenging the overall feasibility of our plant operations, and posing serious risk of disapproval by CERC, of capital expenditure incurred in the project.

This is pertinent to inform you, that we have been asked by regulators to complete the Railway Project by March 2021; and accordingly we have placed all our efforts and resources to adhere the same. Currently of the total route length of 15.61 Kms, all the construction activities in around 13.61 kms are completed, and in order to complete and commission the whole project, within regulators guidelines, we require to complete construction activities in balance 2 Kms stretch in Pandra by Jan'2021.

Although, most of the litigations/disputes has been resolved by District Administration, in accordance to Honble high court order, and the balance few are sub-judice under LA Court, we are still facing frequent resistance and disturbance from miscreants, illegitimate random claimants, and opinion leaders with vested and untenable interests.

Hereby, I would like to request you to please provide us administrative support to execute our work on the said stretch of Pandra, within said timeframe

Thanking you,

For **Maithon Power Limited**

(Ramesh Jha)
Chief Executive Officer

CC: 1. SSP, Dhanbad
2. ADM-Law & Order
3. SDO, Dhanbad
4. SDPO, Nirsa

No. 283/18/2020-GRID SOLAR
भारत सरकार / Government of India
नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)
ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division
Block No. 14, C.G.O. Complex,
Lodi Road, New Delhi – 110003
Dated: 13.08.2020

OFFICE MEMORANDUM

Sub: Time Extension in Scheduled Commissioning Date of Renewable Energy (RE) Projects considering disruption due to lockdown due to COVID-19

In supersession of this Ministry's earlier O.M.s of even no. dated 17th April, 2020 and 30th June, 2020 on the subject issue, the following is hereby conveyed:

(1). The MNRE, vide its O.M. No. 283/18/2020-GRID SOLAR dated 20.03.2020, with the approval of Hon'ble Minister, had inter-alia, issued directions to SECI, NTPC and Addl. Chief Secretaries / Pr. Secretaries / Secretaries of Power /Energy /Renewable Energy (RE) Departments of State Governments /UT Govts. /Administrations, to treat delay on account of disruption of the supply chains due to spread of corona virus in China or any other country, as Force Majeure and that they may grant suitable extension of time for projects, on account of corona virus, based on evidences / documents produced by developers in support of their respective claims of such disruption of the supply chains due to spread of corona virus in China or any other country.

(2). Subsequently, RE developers had represented to this Ministry that they may be granted a general time extension on account of lock down (due to COVID-19) and additional time required for normalization after such lockdown.

(3). This issue has been examined in the Ministry and it has been decided that:

a) All Renewable Energy (RE) implementing agencies of the Ministry of New & Renewable Energy (MNRE) will treat lockdown due to COVID-19, as Force Majeure.

b) All RE projects under implementation as on the date of lockdown, i.e. 25th March 2020, through RE Implementing Agencies designated by the MNRE or under various schemes of the MNRE, shall be given a time extension of 5 (five) months from 25th March 2020 to 24th August 2020. This blanket extension, if invoked by the RE developers, will be given without case to case examination and no documents/evidence will be asked for such extension.

c) The timelines for intermediate milestones of a project may also be extended within the extended time provided for commissioning.

d) The Developers, of the projects covered under para 3(b) above, may also pass on the benefit of such time-extension, by way of granting similar time-extensions, to other stakeholders down the value chain like Engineering Procurement Construction (EPC) contractors, material, equipment suppliers, Original Equipment Manufacturers (OEMs), etc.

e) The State Renewable Energy Departments (including agencies under Power/ Energy Departments of States, but dealing in renewable energy) may also treat lockdown due to COVID-19, as Force Majeure and may consider granting appropriate time extension on account of such lockdown.

(4). This issues in line with approval of Hon'ble Minister, New and Renewable Energy and Power.

(Sanjay G. Karndhar)
Scientist-D
Email: karndhar.sg@nic.in
Tel: 011-24363498

To

1. Chairman & Managing Director, Solar Energy Corporation of India Limited (SECI),1st Floor, D-3, A Wing, Prius Platinum Building, District Centre, Saket, New Delhi.
2. Chairman & Managing Director, NTPC Limited, NTPC Bhawan, Scope Complex,7, Institutional Area, Lodhi Road, New Delhi.
3. Chairman & Managing Director, NHPC Limited, N.H.P.C Office Complex, Sector-33, Faridabad, Haryana.
4. Addl. Chief Secretaries / Pr. Secretaries / Secretaries of Power / Energy / Renewable Energy Departments of State Governments/ UT Govts./Administrations

Copy to: NIC, MNRE, for uploading on MNRE website for dissemination of information

Copy for internal circulation:

PS to Hon'ble Minister (Power & NRE) / Sr. PPS to Secretary, MNRE / JS (AKS)/ JS (BPY) / JS (DDJ)/ JS&FA / All Group Heads and Division Heads in MNRE

F. No. 283/18/2020-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)

ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Block No. 14, C.G.O. Complex,
Lodhi Road, New Delhi – 110003
Dated: 09th February, 2021

OFFICE MEMORANDUM

Sub: Time Extension in Scheduled Commissioning Date of Renewable Energy (RE) Projects considering disruption due to lockdown due to COVID-19: Clarification

1. Reference is invited to this Ministry's O.M. No. 283/18/2020-GRID SOLAR dated 13.08.2020, wherein, inter-alia, directions were issued to treat lockdown due to COVID-19, as Force Majeure. It was also instructed that all RE projects under implementation as on the date of lockdown, i.e. 25th March 2020, through RE Implementing Agencies designated by the MNRE or under various schemes of the MNRE, shall be given a time extension of 5 (five) months from 25th March 2020 to 24th August 2020. This blanket extension, if invoked by the RE developers, will be given without case to case examination and no documents/evidence will be asked for such extension.

2. Requests were received by MNRE for further extension beyond 5 months on account of COVID-19. The requests have been examined in the Ministry. The MNRE vide its O.M. No. 283/18/2020-GRID SOLAR dated 13.08.2020 has already issued instructions for a blanket extension of 5 months on account of COVID-19 without case to case examination and without asking for any documents/evidence. Further extension beyond 5 months can be granted by implementing agencies in exceptional cases, after due diligence and careful consideration of the specific circumstances of the case, and if allowed in terms of the provisions of the relevant contract.

3. It is also emphasized that this further extension beyond 5 months will not be granted in a routine manner.

4. This issues in line with the approval from Hon'ble Minister (NRE & Power).

9/2/21

(Mohd Azmal Mansoori)
Scientist-B
Email: azmal.mnre@gov.in

To

1. Chairman & Managing Director, Solar Energy Corporation of India Limited (SECI),1st Floor, D-3, A Wing, Prius Platinum Building, District Centre, Saket, New Delhi.
2. Chairman & Managing Director, NTPC Limited, NTPC Bhawan, Scope Complex,7, Institutional Area, Lodhi Road, New Delhi.
3. Chairman & Managing Director, NHPC Limited, N.H.P.C Office Complex, Sector-33, Faridabad, Haryana.
4. Addl. Chief Secretaries / Pr. Secretaries / Secretaries of Power / Energy / Renewable Energy Departments of State Governments/ UT Govts./Administrations

Copy to: NIC, MNRE, for uploading on MNRE website for dissemination of information

Copy for internal circulation:
PS to Hon'ble Minister (NRE & Power) / Sr. PPS to Secretary, MNRE / Sr. PPS to AS/ JS (AKS)/ JS (BPY) / JS (DDJ)/ JS&FA / All Group Heads and Division Heads in MNRE

F. No. 283/18/2020-GRID SOLAR
भारत सरकार / Government of India
नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)
ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division
Block No. 14, C.G.O. Complex,
Lodhi Road, New Delhi - 110003
Dated: 30th March, 2021

OFFICE MEMORANDUM

Sub: Time Extension in Scheduled Commissioning Date of Renewable Energy (RE) Projects considering disruption due to lockdown due to COVID-19: Clarification

1. Reference is invited to this Ministry's O.M. No. 283/18/2020-GRID SOLAR dated 13.08.2020, providing for a blanket extension for RE projects on account of COVID-19. Vide subsequent clarification of even no. dated 09.02.2021, it was clarified that further extension beyond 5 months can be granted by implementing agencies in exceptional cases, after due diligence and careful consideration of the specific circumstances of the case, and if allowed in terms of the provisions of the relevant contract. Reference is also invited to Ministry of Finance O.M. No. 18/4/2020-PPD dated 13.05.2020, which provides for an extension of 3 to 6 months after following due process.

2. The undersigned is directed to further clarify that the total extension provided by implementing agencies on account of COVID-19 should in no case be more than 6 months including the 5 months blanket extension given by this Ministry vide its O.M. of 13.08.2020.

3. In case an implementing agency feels that there is a requirement to give extension beyond 6 months, it shall make a reference for consideration of this Ministry with due justification and supporting documents. No such extension shall be granted by the implementing agencies on their own.

4. This issues with the approval of Hon'ble Minister (NRE & Power).

(Sanjay G. Karndhar)
Scientist-D
Email: karndhar.sg@nic.in
Tel:011-24363498

To

1. Chairman & Managing Director, Solar Energy Corporation of India Limited (SECI), 1st Floor, D-3, A Wing, Prius Platinum Building, District Centre, Saket, New Delhi.
2. Chairman & Managing Director, NTPC Limited, NTPC Bhawan, Scope Complex,7, Institutional Area, Lodhi Road, New Delhi.
3. Chairman & Managing Director, NHPC Limited, N.H.P.C Office Complex, Sector-33, Faridabad, Haryana.
4. Addl. Chief Secretaries / Pr. Secretaries / Secretaries of Power / Energy / Renewable Energy Departments of State Governments/ UT Govts./Administrations

Copy to: NIC, MNRE, for uploading on MNRE website for dissemination of information

Copy for internal circulation:
PS to Hon'ble Minister (NRE & Power) / Sr. PPS to Secretary, MNRE / Sr. PPS to AS/ JS (AKS)/ JS (BPY) / JS (DDJ)/ JS&FA / All Group Heads and Division Heads in MNRE

ANNEXURE P/8C

A

Preliminary

Report

On

Electrical Resistivity Tomography for void detection along Railway line, Thapanagar

BY

Prof. Sanjit Kumar Pal and Prof. U. K. Singh

DEPARTMENT OF APPLIED GEOPHYSICS

INDIAN INSTITUTE OF TECHNOLOGY

(INDIAN SCHOOL OF MINES)

DHANBAD-826004

Introduction

Unauthorised coal mining activities may result in development of hidden hollows, rat holes, galleries, goafs, shafts etc., which pose great threats of land subsidence, fire, water flooding leading to severe environmental hazards, health problems and safety issues to the local people. Present study deals with delineation and mapping of unauthorised coal mine voids/ galleries near Thaparnagar Station-MPL Railway that lies in Raniganj coalfield, India. Electrical resistivity tomography (ERT) study comprising Schlumberger, and Dipole-Dipole arrays have been carried out along two parallel profiles over the affected area.

Syscal Junior Switch 48 (IRIS Instrument) has been for ERT data acquisition for mapping of possible voids/ illegal mining zones and its possible horizontal extension, geometry and depth extension. The Schlumberger array is moderately sensitive to both horizontal and vertical structures. Further, dipole-dipole array is good in mapping of vertical structures, such as dykes, cavities etc. It is comparatively insensitive to vertical variations in the resistivity distribution, but much more sensitive to difference in horizontal resistivity distribution. This array has better horizontal data coverage than the Wenner (Loke 1999). Further, inversion of cumulative data multi-arrays will carried out for mapping of possible voids/ illegal mining zones in complex geological environment (Vega *et al*. 2003; Stummer *et al.* 2004; Athanasiou *et al*. 2007; Bharti *et al*. 2016a, 2016b, 2019; Das et al. 2017; Saurabh et al. 2020). In theory, combined inversion of data sets coming from different electrode arrays obtained over the same site along the same profile would allow us to combine the relative advantages of every array and thus to produce superior results (Vega *et al*. 2003; Stummer *et al*. 2004; Athanasiou *et al*. 2007). The resolution capability and signal-to-noise ratio are also optimized in joint inversion of combined array data (Zhou and Greenhalgh *et al*. 2000; Dahlin and Zhou 2006). De la Vega *et al*. (2003) presented combined inversion results of Dipole–Dipole and Wenner array data obtained from a hydrocarbon contamination site. They recommended that combined inversion results have superior depth of investigation and better lateral resolution when compared to the inversion results obtained from each array separately.

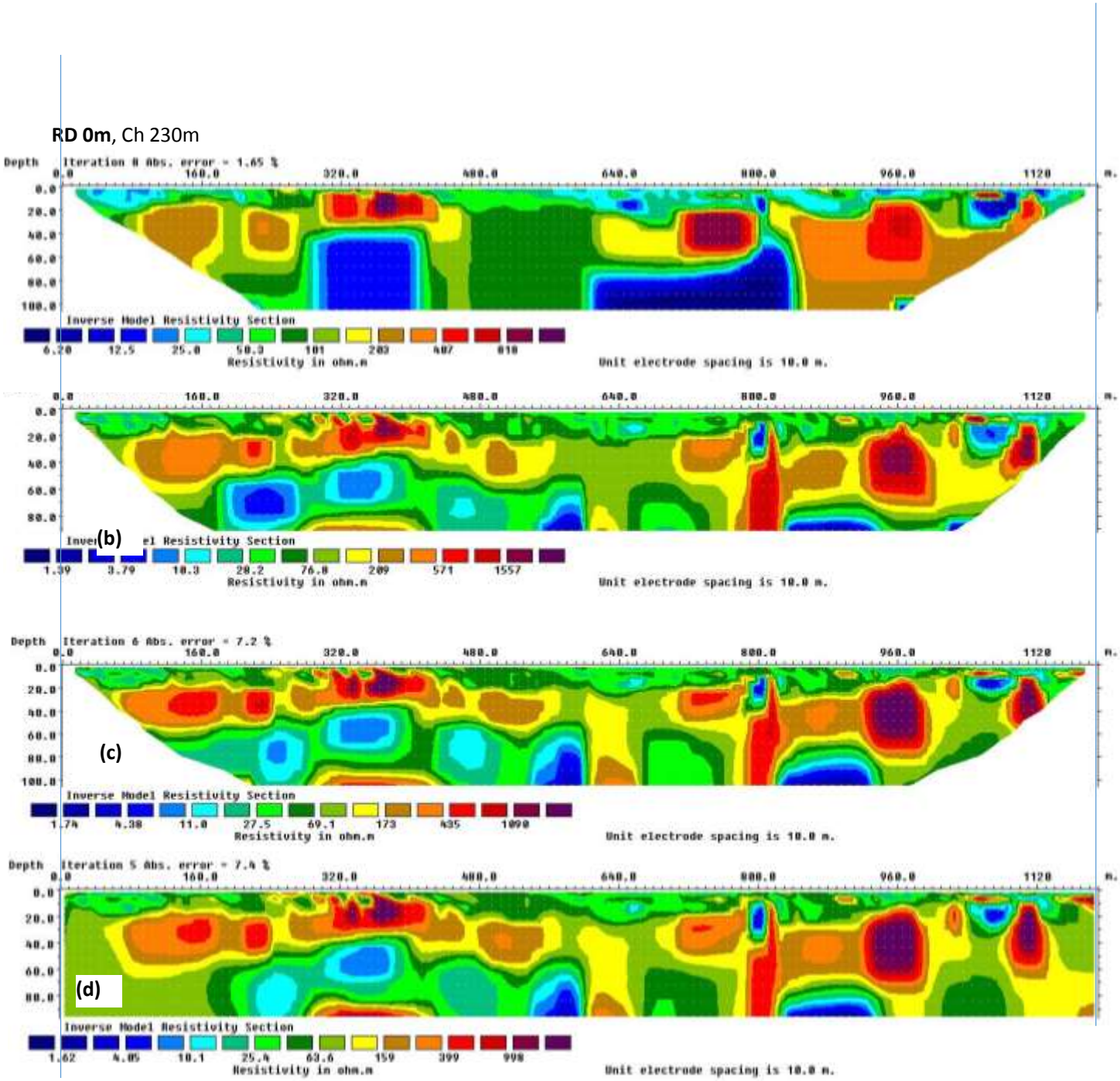


Figure 1. 2D geo-electrical section of Profile AA/ using (a) Schlumberger array, (b) Dipole-Dipole array, (c) joint analysis of Dipole-Dipole and Schlumberger arrays, (d) extended2D geo-electrical section generated using joint analysis of Dipole-Dipole and Schlumberger arrays.

RD 0m, Ch 270m **RD 950m**, Ch 1220m

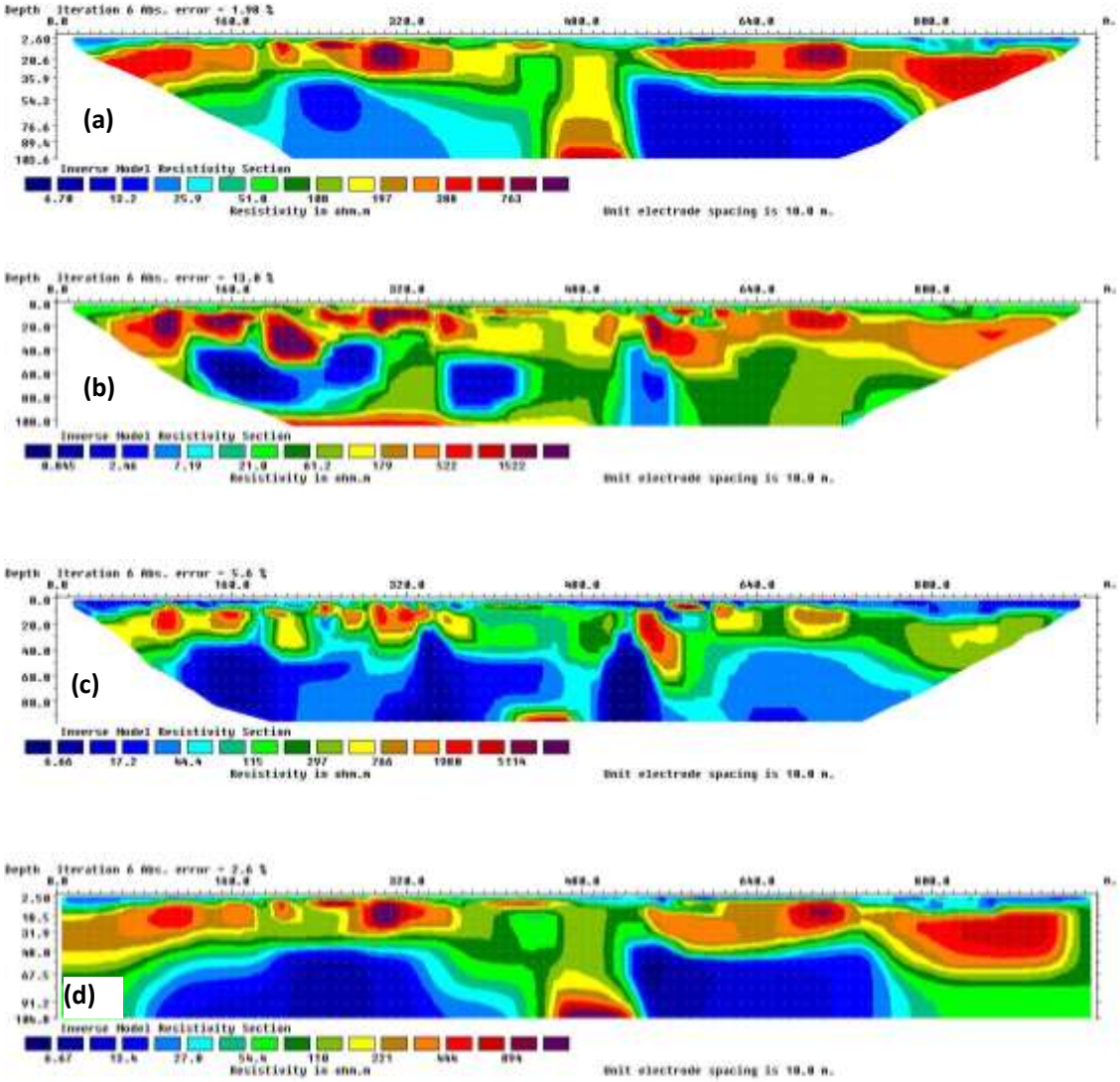


Figure 2. 2D geo-electrical section of Profile BB/ using (a) Schlumberger array, (b) Dipole-Dipole array, (c) joint analysis of Dipole-Dipole and Schlumberger arrays, (d) extended 2D geo-electrical section generated using joint analysis of Dipole-Dipole and Schlumberger arrays.

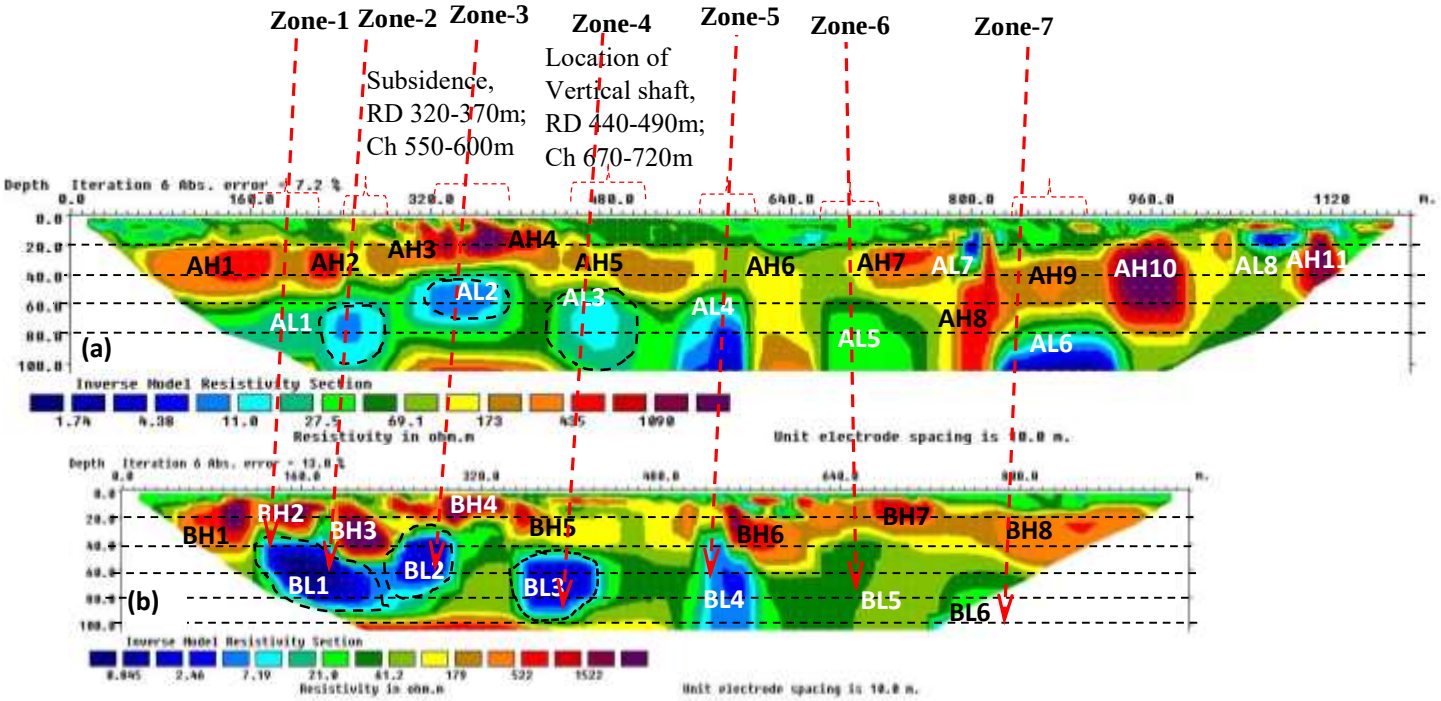


Figure 3. 2D geo-electrical sections of Profile AA/ and Profile BB/. Profile AA/ is 5 m below the Profile BB/ parallel to Thaparnagar- Mugma rail line. Profile BB/ was selected between two parallel rail lines running from Thaparnagar to Mugma. Profile BB/ is of only 950m as a railway-over-bridge on Khudia River was after RD950m.

Summary:

- Profile AA/ is 5 m below the Profile BB/ parallel to Thaparnagar- Mugma rail line. Profile BB/ was selected between two parallel rail lines running from Thaparnagar to Mugma. Profile BB/ is of only 950m as a railway-over-bridge on Khudia River was after RD950m.
- Profile AA/ lies between Reference Chanage : Ch230m (RD0) - Ch1420m (RD1190).
- Profile BB/ lies between Reference Chanage : Ch270m (RD0) - Ch1220m (RD950).
- Total eight low resistivity (~1-10 ohm-m) features (AL1-AL8) have been delineated from Profile AA/ .
- Total ten relatively high resistivity (~170-1500 Ohm-m) features (AH1-AH10) have been delineated from Profile AA/.
- Total five low resistivity (~1-10 ohm-m) features (BL1-BL5) have been delineated from Profile BB/.
- Total ten relatively high resistivity (~170-1500 Ohm-m) features (BH1-BH10) have been delineated from Profile BB/.
- A layer of relatively high resistivity (~170-1500 Ohm-m) with depth varying from 50-55m has been observed in Profile AA/.
- A layer of relatively high resistivity (~170-1500 Ohm-m) with depth varying from 50-55m has been observed in Profile AA/.
- AL1 is linked to BL1 and is associated with Zone-2.
- AL2 is linked to BL2 and is associated with Zone-3.
- AL3 is linked to BL3 and is associated with Zone-4.

- AL4 is linked to BL4 and is associated with Zone-5.
- AL5 is linked to BL5 and is associated with Zone-6.
- AL6 is linked to BL6 and is associated with Zone-7.
- High resistivity features (AH1-AH10 and BH1-BH10) are possibly associated with compact/dry / high-resistive formation.
- Low resistivity features (AL1-AL8 and BL1-BL5) are possibly associated with water saturated rockmass/ water filled gallery resulted from coal mining activity.
- All the inferred galleries resulted in low resistivity features (AL1-AL8 and BL1-BL5) are lying in the depth range of 40m to 100m. These inferred gallery zone may be stable presently due to relatively thick overlying rockmass. However, these locations covering Zone-1 to 7 may produce some subsidence due natural wear and tear process or any other natural/ man made activities.
- Some of these zone need to verify through drilling
- Based on the drilling data some additional geophysical data will be collected for further detail study.

MPL

Ref No - MPL /FY 21/21-03/005 Date-2[1] March, 2021

To,
The Sr Divisional Commercial Manager.
Eastern Railway, Asansol.

Sub: Allotment of ALPHA & NUMERICAL Code to MPL Railway Siding taking off from Thaparnagar (CH: 241.87) & Mugma (CH: 236.53) Railway Station of Asansol division for handling of coal rakes.

Ref: Approved Copy of DPR Letter No-TW 535/430/Pt/Kolkata - 30-03-2010

Dear Sir,

With reference to subject as mentioned above we would like to inform you that we have completed construction work of MPL Railway siding which is taking off from Thaparnagar & Mugma Railway station. For last mile connectivity CRS application has been processed by the office of Divisional Railway Manager Asansol. After getting CRS approval connectivity work will be taken up.

We would request you to arrange for allotment of ALPHA & NUMERICAL Code for MPL Railway Siding at the earliest for handling of coal rakes.

Warm Regards,

(C B Singh)
Head – Special Project
MAITHON POWER LIMITED

F. No. 283/18/2020-GRID SOLAR
भारत सरकार / Government of India
नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)
ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division
Block No. 14, C.G.O. Complex,
Lodhi Road, New Delhi – 110003
Dated: 12th May, 2021

OFFICE MEMORANDUM

Sub: Time-extension in Scheduled Commissioning Date of Renewable Energy (RE) Projects considering disruption due to the second surge of COVID-19

1. Reference is invited to this Ministry's O.M. No. 283/18/2020-GRID SOLAR dated 13.08.2020, providing for a blanket time-extension of 5 (five) months for Renewable Energy (RE) projects on account of COVID-19 and the associated lockdown. Vide subsequent clarifications of even no. dated 09.02.2021 and 30.03.2021 it was communicated that further time-extension beyond 5 (five) months can be granted by implementing agencies in exceptional cases. However, for any time-extension totalling beyond 6 (six) months, a reference shall be made to MNRE.

2. Representations have again been received in the Ministry for seeking time-extension on the grounds that there has been resurgence of COVID-19, leading to several States/UTs issuing instructions restricting mobility of people.

3. In partial modification to MNRE's earlier O.M. dated 30th March 2021, the total time-extension on account of first wave of COVID-19 shall be restricted to 6 (six) months, including the 5 (five) months blanket time-extension already granted by MNRE. No further time-extension shall be considered on this account.

4. Requests for time-extension on account of resurgence of COVID-19 and subsequent issuance of instructions by States/UTs restricting mobility of people have been carefully examined in the Ministry. It is noted that while there are no Central Government instructions for a countrywide lockdown, since beginning of April 2021 several States/UTs have taken various measures like night curfew, imposition of section 144, weekend lockdown, etc which may have affected RE projects. As a measure of relief to RE projects so that they can deal with difficulties arising out of the restrictions imposed on account of the second COVID-19 surge, it has been decided that RE projects, being implemented through Implementing Agencies designated by the MNRE or under various schemes of the MNRE, having their Scheduled Commissioning Date (SCD) on or after 1st April 2021 will be eligible to claim time-extension for completion of their project activities, provided such time-extensions are not used as a ground for claiming termination of Power Purchase Agreement (PPA) or for claiming any increase in the project cost. The actual quantum of time-extension shall be decided in due course depending on the COVID-19 related developments that take place in the coming weeks.

5. In view of above, the undersigned is directed to state that:

a) RE projects, being implemented through Implementing Agencies designated by the MNRE or under various schemes of the MNRE, having their Scheduled Commissioning Date (SCD) on or after 1st April 2021 after considering the time extension mentioned at Para-3 above, can apply to the concerned implementing agency for claiming time-extension in project commissioning.

b) While applying for such time-extension, RE developers shall undertake that the time-extension shall not be used as a ground for claiming termination of Power Purchase Agreement (PPA) or for claiming any increase in the project cost, including Interest During Construction (IDC) or upward revision of tariff.

c) If the conditions above are satisfied, then no other supporting documents will be required for granting time-extension.

d) On receipt of an application for time-extension, implementing agency shall not initiate any coercive action on the project for recovery of penalty on delayed commissioning, till the time-extension request is decided upon.

e) Within the extended time provided for commissioning, intermediate milestones of RE projects, scheduled for completion on or after 1st April 2021 after considering the time extension mentioned at Para-3 above, shall also be commensurately extended.

f) Developers shall pass on the benefit of time-extension to other stakeholders down the value chain including EPC contractors, material/ equipment suppliers, OEMs, etc.

6. As stated earlier, the quantum of time extension to be granted in above manner will be notified separately by the MNRE.

7. This issues with the approval of Hon'ble Minister (NRE & Power).

(Sanjay G. Karndhar)
Scientist-D
Tel: 011-24363498, Email: karndhar.sg@nic.in

To:

1. Chairman & Managing Director, Solar Energy Corporation of India Limited (SECI), Plate-B, 6th Floor, Tower 2, NBCC Office Block, East Kidwai Nagar, New Delhi-110023.

2. Chairman & Managing Director, NTPC Limited, NTPC Bhawan, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi.

3. Chairman & Managing Director, NHPC Limited, N.H.P.C Office Complex, Sector-33, Faridabad, Haryana.

Copy to:

1. Addl. Chief Secretaries / Pr. Secretaries / Secretaries of Power / Energy / Renewable Energy Departments of State Governments/ UT Govts./Administrations for considering to issue similar instructions for RE projects under them, based on their specific circumstances.

2. NIC, MNRE, for uploading on MNRE website for dissemination of information.

Copy for internal circulation:

1. PS to Hon'ble Minister (NRE & Power) / Sr. PPS to Secretary, MNRE / Sr. PPS to AS/ JS (AKS)/ JS (BPY) / JS (DDJ)/ JS&FA / All Group Heads and Division Heads in MNRE

F. No. 283/18/2020-GRID SOLAR
भारत सरकार / Government of India
नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)
ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division
Block No. 14, C.G.O. Complex,
Lodhi Road, New Delhi – 110003
Dated: 29th June, 2021

OFFICE MEMORANDUM

Sub: Time-extension in Scheduled Commissioning Date of Renewable Energy (RE) Projects considering disruption due to the second surge of COVID-19

1. Reference is invited to this Ministry's O.M. No. 283/18/2020-GRID SOLAR dated 12th May, 2021, providing for a mechanism for claiming time-extension, on account of second surge of COVID-19, for RE projects, being implemented through Implementing Agencies designated by MNRE or under various schemes of MNRE and having their Scheduled Commissioning Date (SCD) on or after 1st April, 2021.

2. It was also provided that the quantum of time-extension to be granted in this manner will be notified separately by MNRE.

3. In this regard it has been noted that with the improvement in the COVID-19 situation in the country, many States/UTs have begun the process of unlocking. Broadly, the period of disruption due to second surge of COVID-19 seems to be from 1st April, 2021 to 15th June, 2021.

4. It has also been noted that activities related to RE projects are covered under essential activities, and are allowed to continue even during the lockdown situations.

5. However, in order to facilitate the ease of doing business and as a measure of relief to RE projects so that they can deal with difficulties arising out of the restrictions imposed on account of the second COVID-19 surge, it has been decided that the entire period of disruption i.e. 1st April, 2021 to 15th June, 2021 (both dates inclusive), can be allowed as time-extension to RE projects, being implemented through Implementing Agencies designated by the MNRE or under various schemes of MNRE, following the process stated in MNRE's O.M. No. 283/18/2020-GRID SOLAR dated 12.05.2021.

6. This issues with approval of Hon'ble Minister (NRE & Power).

29/06/2021

(Mohd Azmal Mansoori)
Scientist-B
Email: azmal.mnre@gov.in

To

1. Chairman & Managing Director, Solar Energy Corporation of India Limited (SECI),Plate-B, 6th Floor, Tower 2, NBCC Office Block, East Kidwai Nagar, New Delhi-110023.
2. Chairman & Managing Director, NTPC Limited, NTPC Bhawan, Scope Complex,7, Institutional Area, Lodhi Road, New Delhi.
3. Chairman & Managing Director, NHPC Limited, N.H.P.C Office Complex, Sector-33, Faridabad, Haryana.

Copy to:

1. Addl. Chief Secretaries / Pr. Secretaries / Secretaries of Power / Energy / Renewable Energy Departments of State Governments/ UT Govts./Administrations for considering to issue similar instructions for RE projects under them, based on their specific circumstances.
2. NIC, MNRE, for uploading on MNRE website for dissemination of information

Copy for internal circulation: PS to Hon'ble Minister (NRE & Power) / Sr. PPS to Secretary, MNRE / Sr. PPS to AS/ JS (AKS)/ JS (BPY) / JS (DDJ)/ JS&FA / All Group Heads and Division Heads in MNRE

F. No. 283/18/2020-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)

ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Block No. 14, C.G.O. Complex,
Lodhi Road, New Delhi – 110003

Dated: 15th September, 2021

OFFICE MEMORANDUM

Sub: Time Extension in Scheduled Commissioning Date of Renewable Energy (RE) Projects considering disruption due to second surge of COVID-19: Clarification – reg.

Ref: (i) MNRE's O.M. of even no. dated 12.05.2021
(ii) MNRE's O.M. of even no. dated 29.06.2021

1. On account of First Wave of COVID-19 in 2020 and the consequent nation-wide lockdown, based on the directions of Ministry of Finance, MNRE vide its O.M. of even no. dated 13.08.2020, had granted a blanket time-extension of 5 months without any pre-requisite conditions attached to such extension.

2. During the 2nd wave of COVID-19 in 2021, there was no nation-wide lockdown and conditions of restriction in movement of goods/ people and other similar hardships, varied from place to place. There were no directions issued from Ministry of Finance to provide any time-extension. Despite that, to facilitate RE projects, a time-extension of 2.5 months (corresponding to the period from 1st April, 2021 to 15th June, 2021), was granted by MNRE in respect of 2nd wave of COVID-19 in 2021, vide OMs dated 12.05.2021 and 29.06.2021, subject to the condition that the RE developer desirous of seeking such time-extension (2.5 months on account of 2nd wave of COVID-19) shall give an undertaking that the said time-extension (of 2.5 months) shall not be used as a ground for claiming termination of Power Purchase Agreement (PPA) or for claiming any increase in the project cost, including Interest During Construction (IDC) or upward revision of tariff.

3. Subsequently, it was pointed out to MNRE that many RE Project Developers are in dilemma that on submission of aforesaid undertaking, they will have to relinquish their right to claim reimbursement under change-in-law provision under the PPA and MNRE was requested to provide clarity on this issue.

4. The aforesaid request has been examined in MNRE and following is hereby clarified:

   a) The time-extension given vide MNRE's OMs dated 12.05.2021 and 29.06.2021, referred at (i) and (ii) above respectively, is an out-of-contract concession extended by MNRE to facilitate Renewable Energy projects. This time-extension is optional and can be claimed by Renewable Energy Project Developers/ EPC

contractors provided they do not claim any increase in project cost on account of this time extension of 2.5 months. This increase in project cost includes any possible impact due to any change-in-law event which would not have been there had this optional time-extension was not claimed.

b) RE developers shall have the option of not claiming the time-extension as per MNRE's O.M.s dated 12.05.2021 and 29.06.2021 referred at (i) and (ii) above respectively, but approaching the appropriate forum as per their respective PPAs, for claiming appropriate time-extension as may be admissible.

5. These issues with the approval of Hon'ble Minister (NRE & Power).

15/09/21

(Mohd Azmal Mansoori)
Scientist-B
Email: azmal.mnre@gov.in

To:

1. The Managing Director, Solar Energy Corporation of India Limited (SECI),Plate-B, 6th Floor, Tower 2, NBCC Office Block, East Kidwai Nagar, New Delhi-110023.
2. Chairman & Managing Director, NTPC Limited, NTPC Bhawan, Scope Complex,7, Institutional Area, Lodhi Road, New Delhi.
3. Chairman & Managing Director, NHPC Limited, N.H.P.C Office Complex, Sector-33, Faridabad, Haryana.

Copy to:

1. Addl. Chief Secretaries / Pr. Secretaries / Secretaries of Power / Energy / Renewable Energy Departments of State Governments/ UT Govts./Administrations
2. NIC, MNRE, for uploading on MNRE website for dissemination of information

Copy for internal circulation:

PS to Hon'ble Minister (NRE & Power) / PS to Hon'ble MoS (NRE)/ Sr. PPS to Secretary, MNRE / JS (AKS)/ JS (DDJ)/ JS&FA / All Group Heads and Division Heads in MNRE

फोन / Phone : (033) 2248 3945
फैक्स / Fax : (033) 2210 5514
Rly. - 27058
27061

भारत सरकार
नागर विमानन मंत्रालय
(रेल सुरक्षा आयोग)
GOVERNMENT OF INDIA
MINISTRY OF CIVIL AVIATION
(COMMISSION OF RAILWAY SAFETY)

रेल संरक्षा आयुक्त
पूर्व परिमंडल
14, स्ट्रैण्ड रोड,(12 वी मंजिल)
कोलकाता–700 001

Commissioner of Railway Safety
Eastern Circle
14, Strand Road, (12th Floor)
Kolkata - 700 001

संख्या / No. CRS/ER/ASN/TNW/EI/106

दिनांक / Date 10.05.2021.

मण्डल रेलवे प्रवन्ध्यक
पूर्व रेलवे, आसनसोल

विषय: **Thapar Nagar Station**: Replacement of P.I. for Rail Infrastructure of 2X525 MW Maithan Right Bank Thermal Power Plant at Thapar Nagar in Asansol Division.

संदर्भ: आवेदन संख्या SH-I/Pt.XX/Drg./TNW, दिनांक 18.11.2020.

उपर्युक्त चालू निर्माण कार्य की संस्वीकृति निम्नलिखित शर्त्तों के साथ प्रदान की जाती है / Sanction accorded for the above work, subject to the following stipulations:

Thapar Nagar Station: ESP No.D-420-2010 (SH-1), Alt-1, 2 & 3; SIP No.- SI-07940/286, Alt-I, II, III & IV.

1. Station interlocking shall be commissioned in accordance with the above-mentioned ESP & SIP, provision of IRSEM, guidelines issued by Rly Bd & RDSO.
2. The compliance of Commission's observations, for which Railway has given compliance in their compliance letter, must be ensured.
3. Railway shall expedite the process for construction of ROB for closure of LC No.7.
4. Railway shall process for replacement of 1 in 8.5 Turn-Outs by 1 in 12. 10 kmph speed restriction shall be ensured while negotiating 1 in 8.5 Turn-Out having straight switches.
5. Rly shall ensure that there is no infringement to IRSOD.
6. Dispensation shall be obtained under GR 3.04(1) & 3.47.
7. Arrangement shall be made to release Crank handle after a time delay of 120 sec., in case both the VDU becomes inoperative.
8. FAT, SAT, TSAA & OEM Certificates shall be submitted. SAT test shall be recorded in Data-logger.
9. All signaling gears status including Relay Room/Hut door closer switch shall be monitored and logged in Data logger with networking.
10. In terms of Railway Boards' letter no.2015/Sig/A/Fire/Pt dated 08.11.2016, 'Automatic fire detection and alarm system shall be provided.

10.5.21

Contd to Page-2

No. CRS/ER/ASN/TNW/EI/106 Date: 10.05.2021.

Contd from Page-1

11. A yard diagram showing Points and Signals with proper font size shall be displayed in front of SM to facilitate the on-duty Panel operator to manually operate the point in case both the VDU becomes defective.
12. A history sheet of changes in application logic from FAT to execution version need to be jointly signed by competent officers of OEM & Railways which shall be a part of completion drawings.
13. Visibility of newly erected signals shall be certified by 'signal sighting committee'. The actual visibility distance shall be mentioned.
14. All crew, Guards & Gatemen shall be adequately counselled regarding the change in Signalling system and the location of Signals and their assurance obtained.

मैं इस निर्माण कार्य के यात्रियों के परिवहन के लिये खोले जाने से पहले निरीक्ष्यण करने का इरादा नहीं रखता हूँ। जब कार्य पूरा हो जायेगा तब इसे संरक्षा प्रमाणपत्र के आधार पर खोला जा सकता है (अपने पत्र के तीसरे पैराग्राफ को देखने की कृपा करे), जो सीधे मेरे पास अबिलम्ब भेज दिया जाय। *I do not propose to inspect the work prior to its opening for the carriage of passengers, when ready, it may be opened on Safety Certificate (Vide paragraph 3 of your letter) which would be submitted to me direct without any delay*

10.5.21
(ए एम चौधरी)
रेल संरक्षा आयुक्त
पूर्व परिमंडल कोलकाता

ANNEXURE P/8G

Track fit

TRACK FITNESS CERTIFICATE OF PRIVATE RAILWAY SIDING TAKING OFF FROM MMU AND TNW STATION UNDER ASANSOL DIVISION EASTERN RAILWAY TO SERVE MAITHN POWER LTD

AS PER MEASURMENT TAKEN ON THE NEWLY LAID TRACKS AT MUGMA STATION END (FROM CH 3200M UPTO "Y" JUNCTION END ABUNTMENT OF BRIDGE NO-1 OVER NH) AND AT THAPARNAGAR STATION END (FROM LC AT CH 212M TO CH UPTO 14925 817M (SRJ OF BULB MEETING POINT) COVERING ALL THE LINES OF IN-PLANT YARD, THROUGH TRACK HOPPER LINE, THE TRACK PARAMETERS LIKE GUAGE, CROSS LEVEL, CURVES POINT AND CROSSINGS ARE FOUND TO BE WITHIN THE TOLERANCE LIMIT AS PERSCRIBED IN IRPWM-2020 FOR THE PRIVATE SIDING OF MAITHAN POWER LTD

THIS IS TO CERTIFY THAT ALL TRACK STRUCTURE BETWEEN THE AFOREMENTIONED CHAINAGES ARE **FIT FOR MOVMENT OF GOODS TRAIN WITH RESTRICTED SPEED 15 KMPH**

04/06/2021

वरिष्ठ अनुभाग अभियंता (पी-वे)
पूर्व रेलवे, कुलटी
Sr. Section Engineer (P-Way)
E. Rly., Kulti

DATE: 04-06-2021

ANNEXURE P/8H

Notes taken by Sr. DEE/TRD/ASN during Inspection of newly constructed OHE on Maithon Power Limited Siding taking-off with "Y"-connection from Taparagar & Mugma Stations on 18.08.2021.

The following observations were noticed during the Inspection :

1. All trees enroute which are situated near the OHE wire and can fall on it must be trimmed or cut to avoid any unforeseen OHE breakdown.
2. Anti-theft Jumpers have not been provided at so many locations and only 02 Nos. Anti-theft Jumpers have been provided instead of 03 Nos. at some locations. It has also been found that spacing of Anti-theft Jumper in the entire siding is not proper. Out of 03 Nos. of Anti-theft Jumpers, first Jumper should be provided within 1.5 mtrs from the catenary ending clamps of anchor location and balance two Jumpers should be provided at equal distance on the balance length of the span.
3. Bracket Tubes of cantilever assembly needs to be replaced by new one due to less projection at Loc. Nos. MPL-4/18, MPL-5/6, MPL-5/20 & MPL-8/19.
4. Balance weight Guide Tubes are missing at so many locations. It should be ensured to be there in straight form so that it can not obstruct its free movement and to avoid swinging of the balance weights.
5. OHE mast leaned at Loc. No. MPL-9/12 needs to be corrected or new mast to be provided.
6. Implantation of some OHE masts cross checked and found more than 2.50 mtrs against Standard Implantation of 2.36 mtrs for Siding Lines as per Rly. Board's L/No. 2002/RE/161/11 dtd. 10.08.2007. Implantation of the following masts in between Line Nos.- 2 & 3 inside MPL Plant measured as below.

Loc. No.	Front Implantation	Reverse Implantation
MPL-11/9	3.20 Mtrs.	2.65 Mtrs
MPL-11/10	3.19 Mtrs	2.65 Mtrs

7. Balance weights at some locations found in higher side and the X & Y values needs to be adjusted as per the Tension-Temperature Chart. Temperature marking at 5^0C, 35^0C & 55^0C is to be done on the face of all ATD masts.
8. Several balance weights in the section found rusted or not painted. All balance weights should be painted by two coats of Aluminium Paint.
9. SED parameters to be written on the face of all masts by Black Enamel Paint over Golden Yellow base Paint.
10. All types of missing bonds are to be provided and exposed Bonds should be provided all around two coats of paint to colour Grass Green, Shade-218 conformig to IS : 5 for protection against corrosion.
11. Duplicate earth connection needs to be provided on each traction rail at the In-Motion Weigh Bridge for continuity of traction rails as the rails of In-motion Weigh Bridge are isolated from the remaining system.

18.08.2021

(Khursheed Ahmad)
Sr.DEE/TRD/ASN

No. ACT/34/ 270 Asansol, dated: 18.08.2021

Distribution:

1. Head-Electrical/MPL/Maithon : For information & early compliance please.
2. Project Manager/L&T/Maithon : For information & early compliance please.
3. DEE/TRD/Asansol : For information please.
4. SSE/OHE/Barakar. : For information & necessary action please.

EIG - OHE Fit

EASTERN RAILWAY
HEAD QUARTERS OFFICE, KOLKATA

NO. EL/237/3/TRD/ASN/Vol -X Kolkata dated 31.08.2021

Sr. Divisional Electrical Engineer/TRD
Eastern Railway
Asansol

Sub: EIG Sanction for energisation and commissioning of new Switching Post at Mugma (SS) in Asansol Division of Eastern Railway.

Ref: Your letter No. ACOW/80/Pt-IV/256 dtd. 18.08.2021

Sanction is hereby accorded to energize the new Switching post at Mugma (SS) at 25 KV AC, 50 Hz, single phase with subject to the following -

i) Observance of all safety and precautionary measures as stipulated in AC Traction Manual, Indian Electricity Rules and relevant IS specification prior to energisation of the above new Nimcha/SS.

ii) Measurement of IR values of Interrupters, CB, PTs, CT, LAs, AT, DP & SP Isolators and certified by Sr DEE/TRD/ASN.

iii) Round the clock manning of SS by staff till SCADA gets commissioned and stabilized. Competency to the manning staff to be given by Sr DEE/TRD/ASN.

31.8.21

(Dr. Jaideep Gupta)
Principal Chief Electrical Engineer
&
Electrical Inspector to Govt. of India
Eastern Railway/Kolkata

HEAD QUARTERS OFFICE, KOLKATA

No. EL/237/3/TRD/ASN/Vol.-X Kolkata, dated 31.08.2021

Sr. Divisional Electrical Engineer/TRD
Eastern Railway,
Asansol

Sub: Sanction of EIG for 25 KV AC 1-Phase charging of newly erected traction OHE on the following Lines of M/s Maithon Power Ltd. Siding (MPL) at Maithon taking off with 'Y' connection from Thapamagar & Mugma Stations in STN-PKA GC Section: (i) Line-1 from Loc-241/20A to 01/25 (1751.76 Mts.), (ii) Line-2 from 04/04 to 01/05 (697.05 Mts.), (iii) En99 Siding Line from Loc-1001 to 1009A (400.43 Mtrs.), (iv) JNC UP / DN Line from Loc-01/25 to 04/09 (1349.50 Mtrs.) (v) Mugma Siding Line from Loc- 03/01 to 03/24 (630.50 Mtrs.), (vi) MPL UP/DN Line from Loc-04/09 to 10/21 (6592.00 Mtrs.), (vii) RCD Line No.-1 from Loc-11/04 to 11/21 (819.00 Mtrs.), (viii) RCD Line No.-2 from Loc-11/01 to 12/16 (1323.00 Mtrs.), (ix) RCD Line No - 3 from Loc-10/21 to 12/15 (1355.00 (Mtrs.), (x) RCD Line No -4 from Loc-14/65 to 11/06 (977.50 Mtrs.), (xi) RCD Line No -5 from Loc-15/03 to 11/03 (882.00 Mtrs.), (xii) MGR Line No.-1 with Track Hopper from Loc-12/15 to 14/55 (2741.21 Mtrs.) & (xiii) MGR Line No.-2 from Loc-14/12 to 14/65 (603.89 Mtrs.) with 02 Nos. Auxiliary Transformers in Dist - Dhanbad, Jharkhand in Asansol Division of Eastern Railway [TKM 20.52]

Ref: Your letter No. ACOW/60/Pt-IV/257 dt. 16.08.2021.

Sanction is hereby accorded for 25 KV AC, 1-Phase energisation on regular measure of completed OHE of new Railway Siding at M/s Maithon Power Ltd. (MPL) at Maithon taking-off with 'Y'-connection from Thapamagar & Mugma Stations in STN-PKA GC Section with 02 Nos. Auxiliary Transformers of Asansol Division of Eastern Railway subject to the following conditions:-

1. Feeding arrangement for energisation on 25 KV AC shall be done as per write up duly signed by Sr.DEE/TRD/ASN.
2. Continuity and insulation resistance values of newly erected OHE shall be checked at the time of energisation and result to be sent to HQ.
3. Ensure Earthing & Bonding as per Code for Bonding & Earthing (Appendix II of ACTM Vol. II Pt. II). It should be done before energizing the OHE on 25 KV AC.
4. Energisation of the section shall be carried out as per relevant RDSO/ACTM/ Railway Board's instructions issued from time to time and taking all safety precautions accordingly.
5. After charging of OHE on 25 KV, information to this effect to be issued to all concerned.

31.8.21

(Dr. Jaideep Gupta)
Principal Chief Electrical Engineer
&
Electrical Inspector to Govt. of India
Eastern Railway/Kolkata

Copy to - DRM/ASN – for information please.

(Dr. Jaideep Gupta)
Principal Chief Electrical Engineer
&
Electrical Inspector to Govt. of India
Eastern Railway/Kolkata

NO. EL/237/3/TRD/ASN/Vol.-X Kolkata, dated: 31.08.2021

Sr. Divisional Electrical Engineer/TRD
Eastern Railway
Asansol

Sub: EIG Sanction for energisation and commissioning of new Switching Post at Mugma (SS) in Asansol Division of Eastern Railway.

Ref: Your letter No. ACOW/80/Pt-IV/256 dtd. 18.08.2021

Sanction is hereby accorded to energize the new Switching post at Mugma (SS) at 25 KV AC, 50 Hz, single phase with subject to the following:-

i) Observance of all safety and precautionary measures as stipulated in AC Traction Manual, Indian Electricity Rules and relevant IS specification prior to energisation of the above new Nimcha/SS.

ii) Measurement of IR values of Interrupters, CB, PTs, CT, LAs, AT, DP & SP Insulators and certified by Sr.DEE/TRD/ASN.

iii) Round the clock manning of SS by staff till SCADA gets commissioned and stabilized. Competency to the manning staff to be given by Sr.DEE/TRD/ASN.

31.8.21

(Dr. Jaideep Gupta)
Principal Chief Electrical Engineer
&
Electrical Inspector to Govt. of India
Eastern Railway/Kolkata

JOINT NOTE OF LOCO TRAIL

TNW – MPL Siding Line

Place – TNW

Date – 03 – Sept – 2021

Joint note in connection with electric engine trial run on track for MPL siding line from Thaparnagar To MPL siding line inside plant including MGR via Hopper line on dated:- 03/09/2021

Engine No- Elect/L/Engg No.33179 WAG-9 HC, Kazipet

Loco Pilot:- Sri D .Hazara & Sri Arun Kumar- 4 Both ASN

ALP:- Sri Victor Ray/ASN

Time:- E/L/Engg No. 33179 Crossed from UP GC TNW To MPL line no. 1 at 14:05 HR

Arrived on line no. 3 inside plant at 15:00 HR, finally left plant at 17:25 & arrived MPL line no. 2 at TNW at 18:10 hr.

We the undersign on engine trial run on track from MPL siding line at TNW To MPL siding line inside plant including all 5 lines with MGR line via track hopper line inside plant & Eggg siding line at the maximum speed of 15 KMPH.

Observation from TRD side :-

1. ATJ not provided LOC MPL- 6/1, 5/12, 5/11, 4/16, — done
2. Out of run dropper not provided LOC MPL- 12/13 To 35, 13/70 To 69 — done
3. BKT insulator broken LOC MPL – 10/08 — done
4. STG adjustment required MPL- 1/14 (+45) MPL- 1/31 (+40), MPL- 2/05 (+45), MPL- 2/07 (+40) — done
5. CATENARY clip loose- LOC 11/08 To 56, 11/57 - 07 — done
6. Required anti wind- LOC MPL – 11/08 , 11/15, 11/18, 11/24, 11/27, 11/60 MPL – 15/39 To 37 — done
7. Contact Wire robbing LOC MPL- 11/60 - 62 — done
8. Contact Wire twist LOC MPL- 11/62 – 63 — done
9. AT jumper required set right LOC MPL – 11/59 — done
10. Switch jumper spark notice LOC MPL- 4/07 — done
11. All isolator power block working limit board not provided — done
12. Electric engine stop board at buffer end at engineering siding &unwired turnout caution board buffer line, at near girder Br/5, y-junction in-plant- Line-4 — done
13. Nomenclature plate for km post not provided from MPL 14/2A To 14/22 & also SED not marked on mast at same LOC — done.
14. Tree trimming required MPL- 3/25, engineering siding MPL- 13/6 To13/65 — done
15. Out of run prospering required at Loc- MPL-13/70 -69, MPL-12/33-35. — done

Observation from TI/GC side :-

1. Nomenclature plate not-available at home signal no. S/2 and starter sig no. S/5 of Y Junction cabin & also not available SH-113 inside plant — Completed
2. Facility for lighting arrangement to be provided at MPL siding lines at TNW & all 5 lines inside plant as not available — Shall be Completed by due co
3. One path way to be provided parallel to track at MPL siding lines at TNW & all 5 lines inside plant — shall be done as per feasibility
4. One path way is required beside bridge no. 5 over Khudia River. It will be very helpful at the time of any incident at this location MPL- 01/22 – MPL 01/25. — work done

03/9/21

5. Tipper dumper passing Location through track surface inside plant in between mast no. 12/09 To 12/10, 13/64 To 13/66 & just after exist of track hopper ch.km 14100 To 14200. the Location to be closed for safe train operation. — ~~Closed~~ Completed
6. All points & signals to be locked towards movement of track which is not fit inside plant (wharf line). — Completed

Observation from CLI side:-

1. Sharp Curve – throughout Section TNW -MPL siding. — As per drawing.
2. Throughout Gradient – 1 in 150 (15Kmph Section Speed). — As per Drawing
3. Stop Board – at Hopper — Completed
4. Siding interlocking gate in necessary (2nos – Near track hopper & Stn. Building) — Shall be maintained by deployed person dedicatedly 2x2
5. Check rail Heel Block Cleaning — Completed.
6. Turnout board to be provided at TNW — Completed.
7. TNW Engg. Siding Electric Stop Board to be provided. — Completed

Observation from SSE/P-WAY/KAO side :-

1. TNW – Sleeper at Platform to be removed — Completed
2. MPL – 0 / 11-13 / Miss Alignment — Completed
3. MPL - 0 / 13 -14 / Sag to attained. — Completed
4. MPL – 1/ 1-3 / Ballasting Required. Br 5
5. MPL –11-15 / Low Cess and Ballast required.
6. MPL – Curve No. 6 Outer side ballast to be Checked, if required to be rectified. — Completed
7. MPL – 3 / 24-25 Tree trimming is required. — Completed
8. MPL – 3 / 17-18 -Miss Alignment and Low cess, Cess to be repaired. — Junction
9. MPL – 5 / 8-11 – Cess repairing required. Completed
10. MPL – 5 / 12-15 - Cess repairing required.
11. MPL – 5 / 19 -21 – Jointing & Ballast required. —
12. MPL – 6 / 1-3 – Miss Alignment track — Completed
13. MPL – 6 / 7-17 – Low Cess - Less Ballast – Ballasting Required. —
14. MPL – 7 / 11 -15 – Transition of Curve to be / Versine to be checked / Cess Repair work. — Completed
15. MPL – 7 / 17 -21 – Cess repairing to be done.
16. MPL – 7 / 17 -28 – Cess repairing to be done / Ballast required.
17. MPL – 8 / 5-7 – Low cess and Less Ballast.
18. MPL – 8 / 17 -21 – Ballast deficiency.
19. MPL – Ch. 8100 to Ch.8500 – Low Cess & Repair work required.
20. MPL - 9 /9-18 –Check XL and track parameter. — Completed
21. MPL – 9 /21-13 –Unevenness & Sag found , to be rectified. Completed
22. MPL - 10 / Hywa LC gate - Check rail to be clean siding urgently. Completed
23. MPL - 10 / 18 -21 – Ballasting and Packing required.
24. MPL - 10 / 7-9 –Alignment to be checked. — Completed
25. In hopper line – Water logging to be clean and side drain required for avoid water logging. — done
26. MPL-13/13-15-Stone to be removed nearby track due land slide portion. — Completed shall be
27. Hopper Line and MPL-13/59-66-Water logging and required and drainage required. — ~~Completed~~
28. Trolley Refugee is not found throughout the section, it my advice to provide at at least at 200mtr interval apart. — Feasibility shall be explored Completed
29. Br.no.6 – Path way/Man refuge required to be provided. Feasibility
30. MPL – 13 /13-15 - Side slope failure (Stone) to be removed.
31. Gradient sign painted on concrete pillar was observed at following location from movements TNW To MPL
    1: 150 (Rise) LOC MPL – 04/13.

DY SSE/P-Way/KAO 03/09/21

CMI/P/KAO (CLI Side)

Approved

LOC MPL- 7/13 1: 235 (Rise)
1:200 (Rise) from MPL- 07/20
1:150 (Rise) MPL- 7/25.
1:150 MPL- 08/20.
1:215 (Rise) MPL- 09/14.
1:150 (Rise) MPL- 09/19

Conclusion,

All Observation should be rectified & to be verified from our side for safe movement of traffic, Engine trail Max Speed train is 10 to 15kmph found satisfactory.

(Mr. Rakesh Kumar) L&T – Project Manager	(Mr. P V. Deshmukh) Group Head-Elec. Const	02-05-2021 (Mr. A. K.Gupta) TI/ASN
03/09/2021 (Mr. Santosh Kumar) SSE/P-WAY/KAO	03/09/2021 (Mr. D.C.Marandi) SSE/TRD/BRR	03/9/21 KACHHAP (Mr. ~~KACCAHP~~) CLI/ASN

1. Santosh

JOINT NOTE: -OHE/TRD Observation (MPL SIDING)

PLACE -Thapar Nagar station

DATED:- 03.09.2021

Joint note in connection with electric engine trial run on track for MPL siding line from Thaparnagar To MPL siding ine inside plant including MGR via Hopper line on dated:- 03/09/2021.

Engine No- Elect/L/Engg No.33179 WAG-9 HC, Kazipet

Loco Pilot:- Sri D .Hazara & Sri Arun Kumar- 4 Both ASN

ALP: - Sri Victor Ray/ASN

Time:- E/L/Engg No. 33179 Crossed from UP GC TNW To MPL line no. 1 at 14:05 HR

Arrived on line no. 3 inside plant at 15:00 HR, finally left plant at 17:25 & arrived MPL line no. 2 at TNW at 18:10 hr.

We the undersign on engine trial run on track from MPL siding line at TNW To MPL siding line inside plant including all 5 lines with MGR line via track hopper line inside plant at the maximum speed of 15 KMPH.

Observation: -

i) ATJ not provided LOC MPL- 6/1, 5/12, 5/11, 4/16,

ii) Out of run dropper not provided LOC MPL- 12/13 To 35, 13/70 To 69

iii) BKT insulator broken LOC MPL – 10/08

iv) STG adjustment required MPL- 1/14 (+45) MPL- 1/31 (+40), MPL- 2/05 (+45), MPL- 2/07 (+40)

v) CATENARY clip loose- LOC 11/08 To 56, 11/57 - 07

vi) Required antiwind- LOC MPL – 11/08, 11/15, 11/18, 11/24, 11/27, 11/60 MPL – 15/39 To 37

vii) Contact Wire robbing LOC MPL- 11/60 - 62

viii) Contact Wire twist LOC MPL- 11/62 – 63

ix) AT jumper required set right LOC MPL – 11/59

x) Switch jumper spark notice LOC MPL- 4/07

xi) All isolator power block working limit board not provided

xii) Electric engine stop board at buffer end at engineering siding & unwired turnout caution board buffer line, at near girder Br/5, y-junction inplant- Line-4

xiii) Nomenclature plate for km post not provided from MPL 14/2A To 14/22 & also SED not marked on mast at same LOC

xiv) Tree trimming required MPL- 3/25, engineering siding MPL- 13/6 To13/65

xv) Out of run droppering required at Loc- MPL-13/70 -69, MPL-12/33-35.

Sr.ENGG-ELEC	Group Head-Elec. Const.	SSE/OHE/TRD/BRR
(L&T – RAJIB SARKAR)	(MPL – P.V DESMUKH)	(E.RAILWAY –D.C MARANDI)

OHE-FIT.

ANNEXURE P/8L

1138

JOINT NOTE: - OHE/TRD Fit Certificate (MPL SIDING)

Ref: Joint note dated :03.09.2021 in connection with electric engine trial run on at Thaparnagar to MPL siding & OHE /TRD observation given to MPL & L&T to compile.

I undersign on observation compliances given (as Below) after engine trial run on 03.09.2021 on track from Thapar Nagar siding line at TNW To MPL siding line inside plant including all 5 lines with MGR line via in plant track hopper Return line.

Compliances has been attained and compiled as below

i) ATJ not provided LOC MPL- 6/1, 5/12, 5/11, 4/16, - **Completed**

ii) Out of run dropper not provided LOC MPL- 12/13 To 35, 13/70 To 69-- **Completed**

iii) BKT insulator broken LOC MPL – 10/08 -- **Completed**

iv) STG adjustment required MPL- 1/14 (+45) MPL- 1/31 (+40), MPL- 2/05 (+45), MPL- 2/07 (+40) - **Completed**

v) CATENARY clip loose- LOC 11/08 To 56, 11/57 – 07-- **Completed**

vi) Required antiwind- LOC MPL – 11/08 , 11/15, 11/18, 11/24, 11/27, 11/60 MPL – 15/39 To 37-- **Completed**

vii) Contact Wire robbing LOC MPL- 11/60 - 62 - **Completed**

viii) Contact Wire twist LOC MPL- 11/62 – 63 - **Completed**

ix) AT jumper required set right LOC MPL – 11/59 - **Completed**

x) Switch jumper spark notice LOC MPL- 4/07-- **Completed**

xi) All isolator power block working limit board not provided-- **Completed**

xii) Electric engine stop board at buffer end at engineering siding & unwired turnout caution board buffer line, at near girder Br/5, y-junction, & inplantto be provided - Line-4 -- **Completed**

xiii) Nomenclature plate for km post not provided from MPL 14/2A To 14/22 & also SED not marked on mast at same LOC-- **Completed**

xiv) Tree trimming required MPL- 3/25, engineering siding MPL- 13/6 To13/65-- **Completed**

xv) Out of run dropper required at Loc- MPL-13/70 -69, MPL-12/33-35-- **Completed**

Sr.ENGG-ELEC (L&T – Rajib SARKAR)	Group Head-Elec. Const. (MPL – P.V DESMUKH)	SSE/OHE/TRD/BRR (E.RAILWAY –D.C MARANDI)

PLACE -INPLANT- MPL

DATED: - MPL PLANT
18.09.21)

Observation

1139

ANNEXURE P/8M

Eastern Railway

No. WM/LC/LIC/MPL/St.-II PhI

Asansol Dt. 06.10.2021

Head Railway projects,
Maithon Power Ltd,
MA-5 Ganga Colony,
P.O.. Maithon Dam.
Dist. Dhanbad,
Jharkahand-828205

Sub : Commissioning of MPL Siding

Ref : Joint Note of Loco Trail TNW-MPL siding line conducted on 03.09.2021

Reference above a joint inspection was conducted on 03.09.2021 regarding Loco Trail from TNW-MPL siding for track fitness and commissioning of MPL Siding. Copy of the joint note is enclosed. You are requested to rectify the itemwise déficiences noted while inspection. After rectification of the same, fresh joint inspection shall be carried out and safe movement of traffic will be allowed accordingly.
This is for your information and necessary action .

DA : As stated.

6.10.21

Sr. Divl. Engineer (Co-ordn),
Eastern Railway, Asansol.

Copy to : AEN/II/ASN for information and necessary action.

Sr. Divl. Engineer (Co-ordn),
Eastern Railway, Asansol.

Observation Compliance

MPL
MAITHON POWER LIMITED

Ref No: MPL/ FY 22/ 21- 10/005 Date: 11 Oct'2021

To,
Sr. DEN (Coordination)
Eastern Railway,
Asansol Division

Subject: Commissioning of MPL Siding
Ref: Your Letter WM/LC/LIC/MPL/St-II Phl Asansol Dt. 06.10.2021
Joint Note of Loco Trail TNW-MPL siding line Conducted on 03.09.2021

Dear Sir,

With reference to above subject and above references, we are here by submitting the status of observations mentioned in the Joint Inspection Note dt 03.09.2021 as per attached Annexure-I, wherein most of the observations have already been attended barring a few where we are evaluating the feasibility of the suggestions and its implementation.

We have also attached Joint Note: OHE/TRD Fit Certificate (MPL Siding) dt 18/09/2021 as per Annexure-II for your ready reference.

We request your kind review of the same and accord your acceptance.

Warm Regards,

From,
For Maithon Power Limited

11/10/2021
(Dinesh Gangwal)
Head-MPL Railway Project

Encl:
Annexure-I: Joint Note Observation Status Dt 11/10/2021
Annexure-II: attached Joint Note: OHE/TRD Fit Certificate (MPL Siding) dt 18/09/2021

CC:
AEN/II/ASN: For your information please.

JOINT NOTE

Ref: joint note dated 03/09/2021 in connection with electric engine trial run on track for MPL siding line from Thaparnager to MPL siding line inside plant including MGR via hopper line given MPL and L&T to comply .

We the undersigned on observation compliances given (as below) after engine trial run on 01/09/21 on track from Thaparnager siding line at Thapernager to MPL siding line inside plant including all five line with MGR line via track hopper return line.

Observation from TI/GC side:-

1. Nomenclature plate not available at home signal no. S/2 and starter sig no. S/5 of Y Junction cabin & also not available SH-113 inside plant -complied
2. Facility for lighting arrangement to be provided at MPL siding lines at TNW & all 5 lines inside plant as not available- not complied
3. One path way to be provided parallel to track at MPL siding lines at TNW & all 5 lines inside plant -Not complied .
4. One path way is required beside bridge no. 6 over Khudia River. It will be very helpful at the time of any incident at this location MPL- 01/22 – MPL 01/25.-Not complied
5. Tipper dumper passing Location through track surface inside plant in between mast no. 12/09 To 12/10, 13/64 To 13/66 & just after exist of track hopper ch.km 14100 To 14200. The Location to be closed for safe train operation-Compliance as below .
   I) Lifting barrier was provided at km12/09-12/10 But withought gate lodge . gate lodge to be provided and should be inter locked.
   II) Only sliding gate is provided at 13/64-66.Continer will be provided for manning. It should be interlocked.
   iii) Lifting barrier was provided at km14100 to 14200. The same will be closed permanently when train operation will start
6. All points & signals to be locked towards movement of track which is not fit inside plant (wharf line).Not complied.

Observation from CLI side:-

1. Sharp Curve – throughout Section TNW -MPL siding.-As per ESP
2. Throughout Gradient – 1 in 150 (15Kmph Section Speed).As per ESP
3. Stop Board – at Hopper-complied
4. Siding interlocking gate in necessary (2nos – Near track hopper & Stn. Building)
   I) Only sliding gate is provided at 13/64-66.Continer will be provided for manning. It should be interlocked.
   i) Lifting barrier was provided at km14100 to 14200. The same will be closed permanently when train operation will start
5. Check rail Heel Block Cleaning-complied will be done in regular basis.
6. Turnout board to be provided at TNW and inside plant-Not complied.
7. TNW Engg. Siding Electric Stop Board to be provided. Not complied.

23.11.2021

(M/s. Rakesh Kumar)
L&T – Project Manager

(M/s. A. K.Gupta)
TI/ASN

23/11/21

(M/s.Vikash kumar)
Railway project,MPL

(M/s. Ram Babu)
CLI/ASN

Eastern Railway

No: - C.490/575/BG Kolkata, dated 08.03.2022.

Divisional Railway Manager/ER/ASN
CFTM/ER/KKK
Sr. DCM/ER/ASN
Sr.DOM/ER/ASN
Director/ Rail Movement/ Railway Board/FP.

Sub: - Provisional opening of the GCT of M/s Mithon Power Limited served by Thaparnagar Station.

Ref: - i) This office circular of even no. dated 22.02.2022.

ii) This office FOIS message dated 22.02.2022 at 22.36.22 hrs.

The subject GCT was declared provisionally opened w.e.f 23.02.2022 through this office circular referred under item (i) above. Subsequently it was kept in abeyance through this office FOIS message referred under item (ii) above.

Competent Authority has permitted to withdraw the "kept in abeyance" status for opening of the GCT. Accordingly, the subject GCT will be provisionally opened w.e.f 09.03.2022.

All other conditions notified earlier will remain unaltered.

8/3/22

(Ananta Mukherjee)
Sr. Commercial Manager/ Catg & PS
For Principal Chief Commercial Manager

MAITHON POWER LIMITED

MPL/FY 22/22-03/007

14TH March 2022

To
Divisional Railway Manager
Eastern Railway
Asansol

Sub: Commissioning of MPL Siding (MMMT) – Migrating to "Gati Shakti Multi-Model Cargo Terminal (GCT Policy-2021)" and First Coal Rake Receipt.

Respected Sir,

Please accept our heartiest congratulations for commissioning of the very first private railway siding under the recently introduced "Gati Shakti Multi-Model Cargo Terminal (GCT Policy-2021)". Maithon Power Limited takes pride in becoming the first siding to get notified under GCT-2021 policy and successfully commissioning the siding with first rake receipt on 10th March 2022.

The commissioning of MPL siding has been made possible with joint effort of MPL project team and Asansol Division over the last few years and indeed is an event to be cherished for times to come. Henceforth, we will be able to receive coal on a sustainable and environment friendly manner, thereby contributing to the cause of reduction in carbon emission for our company and Nation at large.

Your gracious presence along with senior officers of Asansol Division during receipt of first Rake at MPL Siding (MMMT) on 10th March 2022 made it an even more joyous and memorable event for us.

We are thankful for all the support provided by Eastern Railway Kolkata & Asansol Division to achieve this milestone and look forward for continued association with Asansol Division and Eastern Railway.

Thanking You.

Yours faithfully,
For **Maithon Power Limited**

Vijayant Ranjan
CEO-MPL & Chief ER Generation

Copy to:
Sr. DOM, Eastern Railway Asansol
Sr. DCM, Eastern Railway Asansol

ANNEXURE P/8R

Minutes of the Meeting held on 24.11.21 with M/s MPL, regarding commissioning of Private siding at Thaparnagar station.

Members present:

Eastern Railway
1. Sri Arun Arora, GM
2. Sri U.K.Bal, PCOM
3. Sri S. Majumdar, PCCM
4. Sri P. N.Sharma, DRM/ASN (on VC)
5. Sri S. Biswas, CTPM
6. Sri R.Gupta, CE(P & D)
7. Sri A. Upadhyaya, Dy. CCM/FM

M/s MPL.
1. Sri R.Jha, CEO
2. Sri. D.K.Gongwal, Head/Rly.Project
3. Sri. S.H.Pandey, Chief OSMS

PCOM welcomed all the members present in the meeting and apprised them that the meeting has been convened for discussion on the issue of completion of pending works related to the commissioning of MPL siding at Thaparnagar/Mugma.

1. PCOM mentioned that, besides some maintenance job on the track, 11 major works have to be undertaken in Phase-I of which 9 no. of works have been completed and the other 2 works i.e.(i) provision of wagon Tippler & (ii) provision of another loop line at up side of Mugma station is still pending.

   He also mentioned that some observations related to track repairing and yard lighting, as mentioned in joint note, sent by the Division are yet to be complied by MPL.

2. DRM/ASN stated that connectivity of the siding from Mugma end has been recently established. He acknowledged that the deficiencies, as mentioned in joint note, are minor which could be complied within a very short time.

3. CEO/MPL mentioned that due to rocky soil, installation of Wagon Tippler at the in-plant yard could not be feasible. Arrangement has been made for unloading of BOXN wagons at the wharf, manually, in the in-plant yard. At present the coal rakes meant for power plant is being unloaded on wharf at Damagoria siding manually. By deputing additional manpower, BOXN rakes can be unloaded within scheduled time.

5. PCOM mentioned that there is a limited supply of BOBR rakes in the circuit while BOXN rakes are available for supply. Mostly BOXN rakes are being supplied in the power plants located in this Railway. There is no guarantee from Railway for supply of only BOBR rakes to the Power Plant.

(9)

6. MPL authorities present in the meeting mentioned that1500 trucks are regularly plying on the village road for supply of coal to the power plant and thereby creating pollution in the surrounding area. Villagers are protesting to stop it immediately.

7. CTPM asked about the undertaking given about construction of One loop line at Mugma station. On reply MPL authorities mentioned that earlier maximum quantity of coal linkage was scheduled from BCCL sources and small volume from ECL sources. But in the present scenario, coal rakes meant for the plant are all sourced from BCCL, so there is no need of the proposed loop at Up side of Mugma station.

8. General Manager was kind enough to address the meeting. He mentioned that there is no provision in the Policy framed by RB to issue provisional notification for opening the siding pending some works. In the instant case since Ph-II, Ph-III works are not coming in recent times, the siding may be opened once completion certificate for Ph-I works is issued by Division. He also mentioned that at present 7 hrs is needed for unloading of open wagons at Damagoria siding and 2hrs detention occurs in every rake beyond free time. In absence of Wagon Tippler, there will be huge demurrage charge for MPL to pay.

   He advised MPL authorities to write to DRM giving reasons for delay in completion of Ph-I work and also deviation from project report with proper justification. Division after examination of the issue, would forward it to HQ for getting dispensation of Railway Board. Once dispensation is issued from Railway Board, the issue will be suitably appreciated.

(P.K.Bal) 26.11.21
STM/Planning
for Chief Transportation Planning Manager

No. TW.535/439/Pt.II Kolkata, the 26th November,2021

Distribution:
1.CEO,.M/s. Maithon Power Ltd.,villageDambhui, P.O. Barbindia, P.S. Nisra-Dist.:-Dhanbad-828205, , Jharkhand
2.Secretary to GM for kind information of GM
3. DRM/ER/Asansol
4. CE (P& D)/ ER/Kolkata
5.Secretary to PCOM for kind information of PCOM.
6. Secretary to PCCM for kind information of PCCM

ANNEXURE P/8S

1146

MPL
MAITHON POWER LIMITED

Ref: MPL/FY 22/ 21-11/015

26th November 2021

To
Divisional Railway Manager
Eastern Railway
Asansol

01
E/Mcp
HB
Receipt & Despatch, Eastern Railway
30.11.21
30 NOV 2021

Sub: Commissioning of MPL Siding- Issue of Siding Notification

Ref:
1. Approval of ESP vide PCE/ER/KKK's Letter no. W (1)400/4/Maithon Right Bank/DPR dated-08/07/10
2. ER CFTM letter no. TW.535/439/Pt.II dated 05.02.18
3. Meeting at ER HQ on 24/11/2021 held at Kolkata

Dear Sir,

This is to inform you that 2x525 Power Plant has been set up by Maithon Power Limited (MPL), a Joint venture company between DVC & Tata Power. This power plant has been set up on the right bank of the river Barakar in the Nirsa-cum-chirkunda Block of Dhanbad district, Jharkhand at a road distance of about 7.5 KM North of GT Road and 9/10 Km North of Thaparnagar/Mugma Station (these Railway Stations are in Asansol Division under jurisdiction of Eastern Railway) on the Howrah-New Delhi Grand Chord line of Indian Railways. This is first Power Plant set up on Public Private partnership (PPP) model and both the units are commissioned and supplying power to WBPDCL, DVC, TPDDL & KSEB since commissioning of the plant in (Unit#1/Unit#2 in the year 2011 and 2012 respectively).

As per approved DPR and ESP/Drawings, work of Railway infrastructure has been taken up by the company in the year 2010 onwards primarily to complete the activities planned under Phase-I and shown in attached key plan. We have faced many challenges during the execution of the project mainly issues related to land acquisition wherein land has been acquired under the provision of linear acquisition by District Land acquisition officer (DLAO), Dhanbad (Jharkhand) and execution of licensing for Railway land for stage-I and Stage-II. Though notification has been issued by GoJ in 2008 and acquisition has been started by making necessary payments to identified awardees, many irregularities has been noticed in the process, for which MPL has approached Hon'ble High Court Ranchi (Jharkhand) in 2016 for review of awards and necessary changes in award made; same was implemented by District authorities in the year 2018-19 and further work on project has been taken up. In case of Railway land, licensing of land has been executed for Phase-I of stage-I in 2014 and Stage-II in 2017, activities has been taken up by the company in that portion of Railway line subsequently.

We extend our gratitude and sincere thanks to entire team of Eastern Railway Head Quarter and Asansol division for the support extend during the execution of the project and various checks/inspections for readiness of siding. Now entire stretch of Railway line as per Phase-I is ready for Operation (except

MPL
MAITHON POWER LIMITED

installation of Wagon Tippler & additional loop line at Mugma), awaiting Notification for siding for which a formal request has been submitted by the company.

Based on readiness of siding following checks/clearance has been obtained by the company:

Sl. No.	Description	Date of Completion	Remarks
1	CRS Sanction	10/05/2021	Ref CRS/ER/ASN/TNW/EI/106 dt 10.05.2021
2	Track Fitness Certificate	04/06/2021	
3	OHE Checking	18/08/2021	
4	Diesel Loco Trial	30/08/2021	
5	EIG Clearance & EOL Agreement	31/08/2021	
6	25 KV OHE Charging	01/09/2021	
7	Electric Loco Trial	03/09/2021	
8	Calibration of Inline Motion Weighbridge by Test wagon	16/09/2021	
9	Alpha Numeric Code & Siding Notification and Placement of Rake	Awaiting	

The Present status of Phase-I work scope is as below

Sl. No.	Scope Of Work	Present Status	Remarks
1	Y Connection at Thaparnagar	Completed	
2	Two (2) Loop lines at Thaparnagar	Completed	
3	New EI cabin at Thaparnagar	Completed	
4	Y Junction cabin on Pvt. Land	Completed	
5	Five (5) R&D lines in In-Plant-Yard	Completed	
6	Bulb arrangement in In-Plant-Yard	Completed	
7	1 Track Hopper	Completed	
8	1 Unloading Wharf for unloading BOX N wagon	Completed	
9	1 Wagon Tippler	Balance	Dispensation requested -Wharf arrangement has been made ready as per PCE's DRG no. D-13-2020 for Unloading of BOX N
10	Y Connection from Mugma end	Completed	
11	One Loop line at Mugma on Upside	Balance	Dispensation requested

It is evident from above tables for readiness checks for siding and status of work, the siding is ready for immediate operation and accordingly MPL has submitted request for issuance of Siding Notification to start

MPL
MAITHON POWER LIMITED

the receipt of Rake to meet its requirement of coal (approx. 4.2 Million MT/Year) and dispatch of Ash (having a potential of 2 Millon MT/Year). This will also provide Railway by way of Revenue through freight charges (approx. 160-200 Crs/year) through inward receipt of Coal and incremental revenue through outward movement of Ash (for which company has installed Two nos. of Bagging units near Ash Silo).

In this regard existing infrastructure has been Jointly checked by the division and minor maintenance issues were reported which were left unattended due to siding not in operation. We assure you to set right all the issues within next fortnight before the train operation starts. Thereafter a regular maintenance process will be undertaken by MPL for which necessary contract has already been placed and agency has been mobilized at site.

On getting the notification, we shall immediately start receipt of Rake directly to the plant (which is presently being done through Road mode since commissioning of Units) in a sustainable & environment friendly manner, which is crucial for the plant's continuous operation. We assure you that present infrastructure is ready to handle requisite rakes based on In-built redundancy to unload BOBRN Rakes in Track hopper and BOXN Rakes at Unloading Wharf.

Our humble request for issuance of Notification shall be considered on priority based on readiness of Railway Infrastructure of Phase-I as detailed above (except Wagon Tippler & Mugma Loop Line for which Dispensation is being requested).

Dispensation for Wagon Tippler & Mugma Loop line:

We also request for consideration of Dispensation for requirement of Wagon Tippler & Additional loop line at Mugma Station based on following:

Wagon Tippler:

MPL has prepared DPR at the time of inception of project after getting allocation of coal through CIL; wherein a total coal Quantity of 4.864 MT per annum for 2x525 MW units (MPL has also made provision of further expansion of plant by installing 2x660 MW units and accordingly land acquisition and other arrangement were made, in this case incremental coal requirement of 6.24 MT has been envisaged). However formal FSA with CIL's subsidiaries has been made, wherein FSA for 1.659 MT/Year coal supply was made with BCCL and 1.975 MT/Year was made with CCL, totaling 3.634 MT/Year under FSA and balance quantity is being procured under E-auction and other available options.

The present provision of Track hopper is designed for evacuation of coal@2000 MT/hr and ready to unload BOBRN Rakes & its immediate evacuation by stacking at stacker-reclaimer/coal Bunkers. Company has also made arrangement for unloading of BOXN Rakes at WHARF (same shall be used for unloading of coal and for dispatch of Ash from the plant), thus offering redundancy of handling of all types of Rakes in the plant.

In addition, as per present arrangement of coal receipt by Rake at Damagoria (and other nearby siding) shall be utilized till In-Plant operation of coal unloading at Track hopper and/or Wharf stabilizes.

MPL
MAITHON POWER LIMITED

In this regard MPL has already applied and permission has been received from CFTM vide letter TW.535/439/Pt.II dated 05.02.18 for construction of unloading Wharf for unloading of BOXN rakes.

So far as detention of rakes is concerned, we are presently able to unload rakes at Damagoria siding within 7 hrs. Normally the delay is on account of Bunching/Wharf not cleared by earlier unloaded coal due to transportation requirement of approx. 25 KM from Damagoria to MPL plant. When BOXN will be unloaded inside our plant, we will be able to clear Wharf and made it ready for receipt of next Rake.

With mixing of BOBRN rakes & BOXN rakes, the bunching problem will also be taken care of hence we are fully optimistic of rake unloading within 5 hrs of stipulated time.

However, if due to any unavoidable circumstances, any demurrage is applicable, MPL agrees to pay the same.

All the facilities required for unloading of rakes, redundancy of operations and other operational requirements has been made by the company, and installation of wagon tippler is not required and not possible at this juncture, we request Dispensation to the requirement of Wagon Tippler (which was part of DPR approved in 2010).

Mugma Loop Line:

In DPR, at Mugma Up loop line is proposed with the assumption that coal rakes are coming from ECL i.e. Mugma side; however after our Fuel Supply Agreement (FSA) was signed with BCCL and CCL which is valid till the year 2030 and 2032 respectively. So, we will be receiving our coal rakes only from Thaparnagar end. Even in future, Aforesaid FSA shall be extended with BCCL & CCL for ensuring coal supply for plant operation.

Therefore, the entire rake movement shall be on downside of Pradhankhunta to Sitarampur section. Hence, up loop line will not be required by MPL in future.

Therefore, the requirement of Mugma Up loop line may please be Dispensed with at present. In case in future it will be required for use of MPL, MPL agrees to undertake the works.

It is pertinent to mention that since the start of plant operation in 2011 onwards, coal requirement to the plant and disposal of Ash from the plant is being carried out through Road mode (due to non-availability of Railway Infrastructure) posing great risk to the plant's sustainable operation and hazards. Since plant has implemented the work scope required for operation of siding along with all the arrangement required for connectivity with Thaparnagar & Mugma Station and arrangement of coal unloading in Track hopper (for BOBRN Rakes) and at WHARF line (for BOXN Rakes), a formal Notification for Siding and Dispensation of above two requirements shall be considered.

MAITHON POWER LIMITED

Thanking You.

Yours faithfully,
For Maithon Power Limited

Ramesh Jha
CEO-MPL

CC:
General Manager/Eastern Railway HQ Fairlie place, Kolkata
PCOM/ Eastern Railway HQ Fairlie place, Kolkata
PCCM/ Eastern Railway ~~HQ Fairlie place~~, Kolkata – 01
3, KOLLAGHAT STREET

ANNEXURE P/8T

Divisional Railway Manager's Office
Eastern Railway, Asansol

No.G/DRM/ASN/MPL/2021 Asansol, 3rd December,2021

Pr. Chief Operations Manager,
Eastern Railway, Kolkata.

Pr. Chief Commercial Manager,
Eastern Railway, Kolkata.

Sub: Commissioning of MPL siding.
Ref: i)MPL's letter No. MPL/FY22/21-11/015 dt 26.11.2021.
ii)Meeting at ER HQ on 24.11.2021
iii) This office letter No TPM/215/New Siding/2002 dt 3.11.21

As discussed in the meeting at Eastern Railway, Headquarter on 24.11.2021, CEO/MPL has requested the division for issue of notification clarifying various issues discussed during the meeting.

The details have been examined thoroughly and observations of division are as below:-

The present status of Phase-I work scope is as below:-

Sl.	Scope of Work	Present Status	Remarks
1.	Y Connection at Thaparnagar	Completed	
2.	Two (2) Loop lies at Thaparnagar	Completed	
3.	New EI cabin at Thaparnagar	Completed	
4.	Y junction cabin on Pvt. Land	Completed	
5.	Five(5) R&D lines in In-Plant Yard	Completed	
6.	Bulb arrangement In –Plant Yard.	Completed	
7.	1 Track Hopper	Completed	
8.	1 Unloading Wharf for unloading BOX N wagon	Completed	
9.	1 Wagon Tippler	Balance	Discussed in Para-a
10.	Y connection from Mugma end	Completed	
11.	One Loop line at Mugma on upside	Balance	Discussed in Para-b

Para (a) – 1 Wagon Tippler - M/s MPL have stated that the coal requirement has to be met by BCCL & CCL as per their Fuel Supply Agreement. As tied up with Dhanbad Division they are to get BOBR rakes having bottom discharge for which facilities have been created at MPL. BOX N rakes unloading facility has been created by a concrete wharf with manual unloading. MPL is also using Damagoria siding for unloading of BOX N rakes which they will continue to utilize for BOX N rakes for some time till the system of receiving coal inside the plant gets stabilized.

In view of this it is presumed that coal unloading inside the plant can be handled through BOBR rakes and if one or two rake of BOX N comes, that can be handled inside the plant or at Dmaggoria siding. Movement of rakes by the division will not be the problem. Hence the dispensation for not commissioning of wagon tippler may be considered.

Para (b)- **One Loop line at Mugma on upside-** As detailed and discussed that all coal rakes will be coming from Dhanbad and will be in down direction and will directly entered the plant premises from Thaparnagar in down direction. The empty rake can be exited from plant in up direction through Thaparnagar and in down direction from Mugma as both linking are completed. As there is no plan to get coal from ECL or any other sources coming from Sitarampur side, there will not be any need for holding the rake at Mugma for stabling of MPL. Therefore operationally the loop at this juncture is not needed until MPL started to gets coal from Sitarampur side.

The infrastructure inside the plant including track & OHE had been jointly checked and shortcomings noted have been communicated to MPL. MPL has communicated that they are takings steps for rectifying the deficiencies and hope to complete the work in 2 weeks. A joint check will again be conducted by the division with MPL authorities once the defects noticed have been rectified. This will be concluded before actual operation of train is done.

In view of above, the proposal of MPL for issue of notification may please be considered for enhancing rail share of freight and also expected back loading of fly ash from MPL. Issue of modification of approved DPR may please be dealt with appropriately.

P. Sharma

(Permanand Sharma)
Divisional Railway Manager
Eastern Railway,Asansol

Master Circular on 'Gati Shakti Multi-Modal Cargo Terminal (GCT)' - 2021

भारत सरकार **GOVERNMENT OF INDIA**
रेल मंत्रालय **MINISTRY OF RAILWAYS**
(रेलवे बोर्ड **RAILWAY BOARD)**

No. 2021/TC(FM)/18/23 Rail Bhavan, New Delhi-110 001, Dated 15.12.2021

The General Managers.

1. Central Railway, Mumbai
2. Eastern Railway, Kolkata
3. East Central Railway, Hajipur
4. East Coast Railway, Bhubaneshwar
5. Northern Railway, New Delhi
6. North Central Railway, Prayagraj
7. North Eastern Railway, Gorakhpur
8. Northeast Frontier Railway, Maligaon
9. North Western Railway, Jaipur
10. Southern Railway, Chennai
11. South Central Railway, Secunderabad
12. South Eastern Railway, Kolkata
13. South East Central Railway, Bilaspur
14. South Western Railway, Hubli
15. Western Railway, Mumbai
16. West Central Railway, Jabalpur

Sub: **Master Circular on 'Gati Shakti Multi-modal Cargo Terminal (GCT)'.**

Ref: (i) Private Siding Policy issued vide Freight Marketing Circular no. 11 of 2016 under Board's letter No. 99/TC(FM)/26/1/Pt. II dated 22.08.2016 and amendments thereof.
(ii) Master Circular on Private Freight Terminal (PFT)/2020/0. Dated 23.06.2020 and amendments thereof.

In order to boost investment from industry in development of additional terminals for handling rail cargos, a new 'Gati-Shakti Multi-modal Cargo Terminal (GCT)' policy has been framed.

All new as well as under-construction / under-approval Cargo Terminals (approved / proposed under 'Private Siding' or Private Freight Terminal policies) shall be covered by this 'Gati-Shakti Multi-Modal Cargo Terminal (GCT)' policy. Existing Siding / Terminals can also migrate to this new GCT policy by submitting request to Division.

Private Siding / Terminal which opt to migrate in GCT policy will need to sign a supplementary Agreement for this purpose. Private Siding / Terminal which do not opt to migrate in new GCT Policy, will continue to be governed by their existing Agreement.

The policy is in supersession of existing Private Siding Policy 2016 (FMC 11 of 2016) and Master Circular on Private Freight Terminal/2020 mentioned under references above.

This issues in consultation with Civil Engineering, Land and Amenities, Traffic Transportation, Mechanical Engineering and Signal Directorates, and with the concurrence of Finance Directorate of Ministry of Railways.

Enclosure/As Above

15.12.21

Anshoo Pandey
Director Freight Marketing

No. 2021/TC(FM)/18/23 New Delhi, Dated 15.12.2021

Copy forwarded for information to :

1. The PFAs, All Indian Railways.
2. The Deputy Comptroller & Auditor General of India (Railways), Rail Bhawan

15.12.21

For Member (Finance)

No. 2021/TC(FM)/18/23 New Delhi, Dated 15.12.2021

1. The Principal Chief Operations Managers, All Indian Railways.
2. The Principal Chief Commercial Managers, All Indian Railways.
3. The Chief Traffic Planning Manager, All Indian Railways.
4. The Principal Chief Engineers, All Indian Railways.
5. The Chief Commercial Managers (FM), All Indian Railways.
6. Director General, RDSO, Manak Nagar, Lucknow.
7. Director, Indian Railways Institute of Transport Management (IRITM), Manak Nagar, Lucknow.
8. Director General, National Academy of Indian Railways, Vadodara.
9. The Managing Director/Chief Commercial Manager, Konkan Railway Corporation Ltd., Belapur Bhawan, Plot No. 6, Sector-11, CBD Belapur, Navi Mumbai – 400014.
10. Managing Director, CRIS, Chanakyapuri, Near National Rail Museum, New Delhi.
11. Managing Director, DFCCIL, Pragati Maidan, New Delhi

Anshoo Pandey
Director Freight Marketing

No. 2021/TC(FM)/18/23 . New Delhi, Dated 15.12.2021

1. Copy for kind information to:
2. Chairman & CEO, Member (O&BD), Member (Finance), Member (Infra.), Member (T&RS), DG(RPF), and Secretary Railway Board, New Delhi.
3. AM(Traffic), AM(C), Adv (Infra), Adv. (Vig.), EDTC(Rates), EDTT(M), EDTT(S), EDTT(F), ED(Plg.) EDT(PPP), EDV(T), EDF(C), DTT(Coord), OSD/Chairman & CEO, OSD/Member (O&BD), Co-Chairman/TMIR, Chairman and Convener/AGE and DTC(R)/ Railway Board, New Delhi.

Sub: Policy for 'Gati Shakti Multi-Modal Cargo Terminal'

1. Introduction

1.1 This policy seeks to promote proliferation of new Cargo Terminals and improve existing Cargo Terminals to accelerate the growth in Railways' cargo traffic. All new as well as under-construction/ under-approval Cargo Terminals (approved/ proposed under 'Private Siding' or 'Private Freight Terminal' policies) shall be covered by this 'Gati Shakti Multi-Modal Cargo Terminal (GCT)' policy.

1.2 Existing Cargo Terminals, governed by Private Siding or Private Freight Terminal policies, shall have the option to continue with their existing Agreements, or to migrate to this new GCT policy.

1.2.1 Existing Cargo Terminals can migrate to this new GCT Policy by submitting a request to the Divisional Railway Manager (DRM) of the concerned Division of Railway, after clearing pending Railway dues and withdrawing all pending arbitration cases/ court cases, if any. The provisions of this Policy shall be applicable on such Cargo Terminals from the date the request is approved by the DRM.

1.2.2 Existing Cargo Terminal owners shall be allowed to migrate to this new GCT policy only when all pending Railway dues of all Cargo Terminals belonging to the same owner/ its subsidiaries/ parent company/ sister concerns over Indian Railways are cleared and all pending arbitration cases/ court cases over Indian Railways are withdrawn.

2. Definitions

2.1 The Key Terms used in these policy guidelines have been defined below for correct interpretation and elimination of ambiguities.

i. Act: The Railways Act, 1989, as amended from time to time.

ii. Agreement: Document executed by a Gati Shakti Multi-Modal Cargo Terminal Operator (GCTO) and Railway Administration (RA) setting forth the terms and conditions for operation of a Gati Shakti Multi-Modal Cargo Terminal (GCT).

iii. Authorized Users: Rail users authorized by the GCTO to make use of the facilities at a GCT.

iv. Benchmark Traffic: Traffic (inward plus outward, combined) expected to be handled per annum at Cargo Terminals established fully or partially on Railway land.

v. Cargo Terminal: Terminal where goods are loaded in wagons/ coaching vehicles for transportation over Indian Railway network, and/or unloaded from wagons/ coaching vehicles after being transported over Indian Railway network.

vi. Charging on Through Distance Basis: The system of charging freight up to the buffer end of the siding, instead of levying Siding Charges.

15.12.24

vii. Common User Facility: A facility available for common use of all Rail users without any discrimination including yards/ additional lines/ loop lines at the serving station, crossing station, patch doubling, etc.

viii. Consignee: The person named as consignee in Railway Receipt.

ix. Consignor: The person named in Railway Receipt as consignor, by whom or on whose behalf goods covered by the Railway Receipt are entrusted to a Railway Administration for carriage.

x. EIMWB: Electronic In-motion Weighbridge.

xi. FOIS: Freight Operations Information System.

xii. Gati Shakti Multi-Modal Cargo Terminal Operator (GCTO): The entity constructing and/or managing a Gati Shakti Multi-Modal Cargo Terminal (GCT).

xiii. Good Industry Practices: The practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability, and prudence which are generally and reasonably expected from a reasonably skilled and experienced operator engaged in the same type of undertaking as envisaged under this Policy, following applicable laws and applicable permits in reliable, safe, economical and efficient manner; and which are expected to result in fulfillment of obligations of operator under the Agreement.

xiv. Over Head Equipment (OHE): Infrastructure and equipment installed to provide electric traction.

xv. Private Freight Terminal (PFT): A terminal notified under Private Freight Terminal (PFT) policy of Indian Railways, to deal with rail-based cargo.

xvi. Private Siding: Privately owned siding constructed by a 'customer' at its own cost for railway cargo services at the premises of its plant, or manufacturing unit, or production unit, or mine, etc, connecting the customer's works with the Railway system.

xvii. 'Railway Administration (RA)' means Divisional Railway Manager (DRM) including Railways' Divisional officers, viz. Senior Divisional Operations Manager (Sr.DOM), Senior Divisional Commercial Manager (Sr.DCM), Senior Divisional Finance Manager (Sr.DFM), Senior Divisional Engineer (Sr.DEN), Senior Divisional Electrical Engineer (Sr.DEE), Senior Divisional Signaling & Telecommunication Engineer (Sr.DSTE), Senior Divisional Mechanical Engineer (Sr.DME), and their representatives.

xviii. Railway Land: Land owned by Railways.

xix. Railway Receipt (RR): The receipt issued by Railway Administration (under section 65 of The Railways Act, 1989) on acceptance of goods and which entitles the consignee to take delivery of the goods at the destination Rail Terminal.

15-12-21

xx. Rake: A train load of wagons with a prescribed composition.

xxi. Take-off point: The Stock Rail Joint of 'last point and crossing' at serving station, through which the rolling stock can be diverted towards a Cargo Terminal.

xxii. Terminal Access Charges: Charges levied by Railways on rail-customers for handling of ***privately-owned*** rakes at 'Railway goods-sheds' and 'Cargo Terminals fully or partially on Railway land' as per the Policy, at the rates prescribed by Railways.

xxiii. Terminal Charges: Charges levied by Railways on rail-customers for handling of ***railway-owned*** rakes at 'Railway goods-sheds' and 'Cargo Terminals fully or partially on Railway land' as well as on rakes at 'Cargo Terminals entirely on non-Railway land' as per the Policy, at the rates prescribed by Railways.

xxiv. TMS: Terminal Management System of FOIS.

3. **Eligibility for GCT Operators (GCTO)**

3.1 The categories of applicants permitted to set-up GCTs, as GCTO, shall be as under:

Category	***Supporting Documents*** *(self-attested copies to be submitted/ uploaded)*
a) Individual/ Sole Proprietorship Firm	1. PAN and TAN
b) Hindu Undivided Family (HUF)	1. PAN 2. Notarized Affidavit declaring that the signatory is the 'Karta' of the HUF and has the authority, power, and consent of other members
c) Partnership Firm	1. PAN and TAN 2. Notarized copy of the Partnership Deed/ Partnership Deed registered with the Registrar 3. Notarized or registered copy of Power of Attorney in favour of the individual to sign on behalf of, and to create liability against the firm
d) Company registered under Companies Act 2013	1. PAN and TAN 2. Memorandum of Association (MoA)/ Articles of Association (AoA) 3. Certificate of Incorporation 4. Notarized or registered copy of Power of Attorney in favour of individual to sign on behalf of, and to create liability against the company 5. Resolution of the Directors of the Company, permitting the company to set up and/or operate a GCT
e) Limited Liability Partnership (LLP)	1. PAN and TAN 2. LLP Agreement 3. Certificate of Incorporation 4. Notarized or registered copy of Power of Attorney in favour of individual to sign on behalf of, and to create liability against the

15.12.21

	LLP
f) Registered Society/ Registered Trust	1. PAN and TAN 2. Certificate of Registration 3. Memorandum of Association of Society/ Trust Deed 4. Rules & Regulations of the Society 5. Notarized or registered copy of Power of Attorney in favour of individual to sign on behalf of, and to create liability against the Society/ Trust
g) Joint venture (JV)/ Consortium	1. JV/ Consortium Agreement 2. Name and authorization of lead member (*Note:* On receipt of approval of Railway Administration for setting-up and/or operation of GCT, JV/Consortium shall have to convert into a legal entity – Firm/ Company/ LLP. Agreement shall be entered into by RA with the above legal entity only.)

4. **Application and Approval Process**

4.1 For the matters pertaining to GCTs, DRM of the concerned Division shall be the Nodal Officer for all issues regarding setting up and/or operation of a GCT. During approval and construction stage for setting up a new GCT, Sr.DOM shall be the co-ordinating officer; and after commissioning of the GCT, Sr.DCM shall be the co-ordinating officer.

4.2 The processing of Application and approval of GCTs shall be in accordance with the time-lines given in Schedules '1' & '2'.

5. **Capital Cost of GCT**

5.1 The GCTO shall bear the entire capital cost of new GCT from the take-off point onwards (to be marked on the Engineering Scale Plan (ESP)) at the serving station.

5.1.1 For the linear connectivity portion of GCT passing through the Railway land, including the land to be acquired by Railway for this purpose under para 17.2 of this policy, only the minimum essential infrastructure of track, OHE and signalling equipment shall be provided at the cost of GCTO (other assets not related to track, signalling, or OHE, if required, shall be constructed by Railway at its own cost). In case of any dispute, the decision of DRM shall be final in this regard.

5.1.2 The ownership of infrastructure including the track, signalling equipment and OHE created on Railway land under para 5.1.1 above shall belong to Railway, even though the capital cost for these shall be borne by the GCTO.

5.1.3 For migration of existing Terminals to this new policy, the GCTO will be required to transfer the ownership of assets (track, OHE and signalling equipment) created on Railway land to Railway free of cost. The cost of up-gradation of assets (if required) to the desired standards, at the time of transfer of ownership to Railway, shall also be borne by the GCTO.

5.2 The capital cost for all common-user traffic facilities (to be marked on the ESP) at the serving station, including Signalling & Telecommunication works,

15-12-21

modification and up-gradation to existing interlocking/ OHE, or electrification in future within the station limit up to take-off point, shall be borne by the Railway.

5.2.1 Zonal Railway shall ensure adequate availability of funds to ensure timely completion of common-user traffic facility works at the serving station, so that commissioning of GCTs is not delayed.

5.3 Maintenance and operation of assets created under para 5.2 above (common-user traffic facilities) at the serving station including staff costs, shall be the responsibility of the Railway.

5.4 The capital expenditure required for augmenting or up-grading the facilities and infrastructure on the connectivity portion from take-off point onwards towards Terminal and within the premises of Terminal shall be borne by the GCTO.

5.5 The connectivity to GCTs shall normally take-off from the existing serving station. However, in case when it is operationally not feasible to provide a connection from an existing serving station, provision of a Block Hut/ Block station (between two existing stations) with required points & crossings may be considered, provided it is operationally feasible. This will be done on the request of GCTO.

5.5.1 In such cases, the entire capital cost of the new Block Hut/ Block station and related infrastructure shall be borne by the GCTO. However, this work will be executed by Railway, and ownership of the same shall remain with the Railway.

5.5.2 However, for new GCTs planned to load one million Tonne or more (outward traffic) per annum, the capital cost of new Block Hut/ Block station will be repaid to the GCTO by Railway.

5.5.2.1 The repayment of capital cost of the new Block Hut/ Block station will be made by Railway through 10% rebate on the outward traffic loaded at the Terminal, till such time the capital cost has been repaid to the GCTO.

5.5.2.2 The repayment of capital cost will be done only if the Terminal achieves the target of loading one million Tonne per annum within two Calendar Years of commissioning (excluding the year of commissioning). For example, if a GCT commissioned during calendar year 2022 achieves one million Tonne loading during calendar year 2024, then the repayment of capital cost of new Block Hut/ Block station (through 10% rebate on outward traffic) shall start from 01st April 2025.

5.5.2.3 This repayment shall be made for the investment made by the GCTO on behalf of Railways. As such, this repayment through freight rebate shall be admissible over and above all other rebates that the GCTO may become eligible for in future.

5.5.2.4 This provision of repayment shall be applicable only for GCTs for which Agreement between RA and GCTO has not been entered into till the date of issue of this Policy.

15.12.21

5.5.3 The cost of operation and maintenance of such Block Hut/ Block station shall be borne by the Railway w.e.f. the date of issue of this policy. However, for existing Terminals (*where PFT/Private Siding Agreement has been entered into between RA and operator before the issue of this Policy*) where cost of operation and maintenance of such Block Huts/ Block stations has already been deposited by the GCTO, there shall be no refund. Further, dues of operation and maintenance cost of Block Hut/ Block station, if any, pending as on the date of issue of this policy shall be payable by GCTO.

6. Security of Assets

6.1 The responsibility of security of railway assets over Railway land shall be of Railways. However, the responsibility of security of railway assets outside Railway Land or on land licensed to GCTO shall be of GCTO.

6.1.1 In case of theft of any railway asset on non-Railway land or railway land licensed to GCTO, the maintenance of which is with Railway, the restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

6.1.2 In case of theft of OHE including OHE on non-Railway land or railway land licensed to GCTO, restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

7. Maintenance of Assets

7.1 Maintenance of assets on Railway land (excluding the Railway land licensed to GCTO), including Track and Signalling Equipment installed on Railway land under para 5.1.1, shall be done by Railway at its own cost.

7.2 Maintenance of OHE from the take-off point onward including inside the Terminal shall be done by Railway at its own cost – as this involves safety of men and equipment, and can also impact rail operations outside the Terminal boundary.

7.3 In addition to above, the maintenance of assets (track, bridges, signalling equipment, etc) on non-Railway land including the land licensed to GCTO, ***outside the Terminal***, may also be done by Railway at its own cost if the GCTO transfers the ownership of these assets to Railway (the ownership of land on which such assets are created shall however continue to be with GCTO). Provided further, this provision shall be applicable only to those GCTs where freight tariff is charged on 'through distance basis.'

7.3.1 In case maintenance of assets, including Track and Signalling Equipment, is being handed over to Railways on migration to this policy by GCTO, the GCTO will ensure that the standards of track and signalling infrastructure being transferred to Railway is in accordance with the prescribed standards for GCTs, as decided by Railways (Annexure 'D'). If any up-gradation/ replacement/ renewal of any infrastructure is required, the GCTO shall bear the cost for the same.

15-12-21

7.3.2 In case of damages to the assets due to accident, etc, the replacement shall be done by Railway. However, if the responsibility of accident, after Enquiry (joint enquiry by representatives of Railway as well as GCTO), is fixed on the GCTO – the GCTO shall have to bear the cost of all the replacements. The decision of the Nodal Officer, i.e. DRM, in this regard shall be final.

7.3.3 In case the damage to assets is due to an external cause (floods, breaches, terrorist activity, etc), the cost of restoration shall be borne by the GCTO.

7.3.4 If the GCTO does not agree to transfer the ownership of assets (track, bridges, signalling equipment, OHE, etc) to Railway or freight tariff is not chargeable 'on through distance basis'; the maintenance of these assets – except OHE – shall continue to be the responsibility of GCTO.

7.3.4.1 Railway shall be entitled to conduct periodic inspections of such GCTs being maintained by the GCTO, for which Inspection Charges will be levied as per the prescribed norms.

7.3.4.2 GCTO may also get the maintenance done through Railway for such Terminals, in which case Maintenance Charges shall also be levied as per the prescribed norms.

7.3.5 The maintenance of GCT yard, including loading/ unloading lines, shall be the sole responsibility of GCTO. Distribution of the responsibility of track has been explained in Schedule '3'.

7.3.6 At such GCTs, Railway shall maintain the signalling equipment till the line-clear/ receipt-despatch arrangement with serving station(s), at its own cost. Maintenance of signalling equipment internal to the Terminal shall be the sole responsibility of the GCTO.

7.4 The cost of all subsequent up-gradations (on account of change of technology, standards, etc) shall be borne by the GCTO.

7.5 Maintenance of all the infrastructure and equipment inside the GCT which are not to be accessed by Railways' rolling-stock, and maintenance of infrastructure required for loading/ unloading (tipplers, hoppers, etc) shall be the responsibility of GCTO.

7.6 Schedule '3' indicates the ownership and responsibility for maintenance of assets for a GCT.

8. **Cost of Electrification**

8.1 In case of new GCT, the entire cost of electrification of the Terminal and the connectivity portion between take off point and GCT, shall be borne by the GCTO.

8.2 While undertaking electrification of main line and serving station by Railways, the electrification of the existing GCT(s) including the rail-line connecting the Terminal(s) shall be undertaken at the Railway's cost.

9. **Handling of Wagons in GCTs:**

15.12.21

9.1 If any damage and deficiencies is caused to railway wagons due to the fault of the GCTO, the damage and deficiency charges shall be raised by Railway and paid by the GCTO as per the extant rules of Railways.

9.2 All tipplers and bulk handling systems used for loading/unloading of Railway wagons shall be provided and commissioned by GCTO at its own cost in accordance with the RDSO's approved specifications. This provision shall however not be applicable on the systems/ equipment installed by GCTO which are not to be used for handling Railway wagons (such as conveyor-belts, JCBs, excavators, etc).

9.2.1 GCTO shall ensure that tipplers, bulk handling systems, and mechanized equipment are operated only by the qualified and experienced staff under adequate supervision.

9.2.2 Such equipment shall be regularly maintained and replaced at the end of their codal life by GCTO at its own cost.

9.2.3 In case of any accident/ derailment inside the Terminal or outside the Terminal up to serving station, Railway will provide Accident Relief Train (ART) initially free of cost. Provided further, if the responsibility of accident/ derailment after enquiry is fixed on the GCTO, ART Charges shall be payable by GCTO as prescribed by Railway from time to time. The due Charges will be deducted from the future payments by Railway to GCTO. However, in case no regular payments are being made by Railway to GCTO, on demand from Railway, the GCTO shall pay ART Charges to Railway without any delay.

9.2.4 The accident enquiry as mentioned in para 9.2.3 above shall be conducted jointly by the representatives of Railway and GCTO to be nominated by DRM and GCTO respectively. The accepting authority of Enquiry Report shall be DRM, whose decision shall be final and binding on GCTO.

10. **C&W Maintenance Facilities**

10.1 Normally C&W facilities shall not be constructed at GCTs.

10.2 However, if C&W facilities are operationally required at any GCT as per the extant instructions, only one-time capital cost for setting-up these facilities shall be borne by the GCTO. Operational costs, including staff cost and material cost (for Railway-owned stock), shall however be borne by the Railway.

10.3 For GCTs dealing with POL and other hazardous material, specialized facilities inside the Terminal as well as in Railway yard (if required) shall be developed by the GCTO at its own cost, and shall be maintained by GCTO to ensure that no untoward incident/ accident takes place at such facilities.

11. **Authorized Users**

11.1 GCTO shall inform Railway about the authorized rail users of the GCT before notification, so that they may be incorporated in the TMS module of FOIS.

15.12.21

11.2 If the GCTO desires to add more rail users subsequently, GCTO shall inform Railway at least seven (07) working days in advance, to enable incorporation of such rail users in FOIS.

12. Commodities Permitted

12.1 Unless otherwise specified by Indian Railway, a GCT shall be permitted to book and handle all traffic – including coal and coke, which shall be as per the guidelines of 'preferential traffic schedule' issued by Ministry of Railways from time to time.

13. Engine-on-Load (EOL) Scheme

13.1 All new GCTs shall be set up on 'charging on through distance basis,' as per the instructions contained in Rates Master Circular on 'Freight on Through Distance Basis issued on 24.09.2014 (placed as Annexure 'A'), as modified from time to time.

13.2 All new GCTs charged on through distance basis shall be governed by the Engine-on-Load policy (FM Circular No.05 of 2013 dated 07.03.2013), as modified from time-to-time.

13.2.1 Railway may permit commissioning of a new GCT on non-EOL basis with the approval of DRM, if Engine-on-Load scheme is not operationally feasible.

14. Charging of Commercial Staff

14.1 No cost of commercial staff will be charged from the GCTO w.e.f the date of issue of this policy. However, for existing Terminals (*where PFT/ Private Siding Agreement has already entered into between RA and operator before the issue of this Policy*) where cost of commercial staff has already been deposited by the GCTO, there shall be no refund. Further, dues of commercial staff cost pending, if any, as on the date of issue of this policy shall be payable by GCTO.

15. Provision of Weighbridge

15.1 All GCTs planning to deal with outward cargo (loading) shall have a provision of Electronic In-motion Weighbridge (EIMWB) at a suitable location inside the Terminal. The EIMWB shall comply with OIML (International Organization of Legal Metrology) document (available at https://www.oiml.org/en/files/pdf r/r106-2-e12.pdf) and the latest RDSO specifications.

15.1.1 Provision of EIMWB shall not be essential for GCTs dealing with inward cargo (unloading) only.

15.1.2 If a GCT without an EIMWB plans to start loading, the GCTO shall make arrangement for provision of an EIMWB as per the provisions of the Policy. DRM, in consultation with CFTM of the Railway, may, however permit loading at a GCT (if operationally feasible) – by nominating an alternative Railway weighbridge for weighment of rakes, awaiting installation of EIMWB, for a period of up to six months at a time from the date of start of such loading, duly recording the reasons for the same.

15.12.21

15.2 GCTO shall bear the cost of procurement (inclusive of the requisite warranty and a post-warranty comprehensive Annual Maintenance Contract (AMC) till the end of codal life), installation, and replacement of the EIMWB at the end of its codal life. GCTO shall also bear the cost of weighbridge house, weighbridge siding, and related infrastructure.

15.3 GCTO shall get the weighbridge certified by the Weights & Measures department of the state government, and shall comply with all the applicable statutory and legal requirements.

15.3.1 The weighbridge, after testing and certification by the Weights and Measures department of the state government, shall be sealed by their personnel in presence of GCTO's and Railway's representatives. This seal shall be broken, if required, only in the presence of the personnel of Weights and Measures department and Railway's representative.

15.4 GCTO shall bear the cost of manpower to operate the EIMWB, and the cost for its linking with FOIS.

15.5 RR will be issued on the basis of weighment within a GCT as per the extant instructions provided vide Rates Master Circular/Weighment/2019/0 dated 25.07.2019 and other applicable instructions of Railways (enclosed as Annexure 'B'), as modified from time to time.

15.6 No extra free-time will be provided for weighment at an EIMWB inside a GCT.

15.7 A nominated Senior Section Engineer/Carriage & Wagon (SSE/C&W) shall conduct periodic inspections (once in a fortnight) of the weighbridge to ensure that it is being operated as per the prescribed norms and procedures. In addition, frequent joint inspection by Sr.DME/Carriage &Wagon and Sr.DCM, or by officers nominated by them, shall be conducted and inspection notes issued – preferably once in three months. These inspections shall be conducted to ensure that EIMWBs are being operated as per the prescribed norms and procedures, and shall not necessarily include testing of EIMWBs using test wagons.

15.7.1 DRM or Sr.DME/C&W or Sr.DCM may order surprise inspection or testing of any weighbridge to check for its proper functioning or calibration.

15.8 For the purpose of mandatory testing of EIMWB, test-wagons shall be provided by Railway on payment of Haulage Charges. These Haulage Charges shall be levied for the actual distance travelled or 100 km, whichever is less.

15.8.1 In cases where there is more than one weighbridge located within a GCT, the Haulage Charges as per para 15.8 above shall be levied for the 'first weighbridge,' and shall be levied @25% of the charges for the 'first weighbridge' for other weighbridges inside the Terminal.

15.8.2 For random surprise testing by Railway, test-wagons will be provided for without levying Haulage Charges or any other charges.

15.8.3 Railway shall try to ensure availability of 'test wagon-sets' in the vicinity of all GCTs, so that there is no delay in arranging these wagons for testing.

15-12-21

15.9 If any overloading is detected in the outward traffic the same will have to be unloaded/ re-adjusted at the Terminal itself – for which no extra free-time will be provided.

15.10 Whenever the EIMWB goes out of order, it shall be put right by the GCTO within three days, failing which a penalty of Rs 4,000/- per day or part thereof for the next ten days, and Rs 8,000/- per day or part thereof thereafter, shall be imposed.

15.11 Under exceptional circumstances, if it becomes essential to install the EIMWB of a GCT either partially or wholly on Railway land not licensed to GCTO (on account of operational and technical constraints), permission for the same may be given by the DRM. Location of such an EIMWB shall be decided by Sr.DOM, in consultation with Sr.DCM, Sr.DEN & Sr.DME.

15.11.1 All terms and conditions applicable on EIMWB inside a GCT shall also be applicable on an EIMWB installed by GCTO on such land. However, Railway will be the executing agency for installation, operation, and maintenance of such EIMWBs.

15.11.2 Cost of the comprehensive AMC and manpower to operate such EIMWB shall be borne by the GCTO.

15.11.3 Railway will be free to weigh rakes other than those of the concerned GCT at such EIMWB.

15.12 Railway may permit weight-o-meter/ pre-weighbin system of weighment in GCT on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager, keeping in view the requirement and to avoid any manipulation of weighment data.

15.12.1 Such equipment shall be certified by Weights & Measures department, and should also meet all extant statutory provisions and policy guidelines.

15.12.2 The system should have proper locking/ sealing arrangement to avoid any tampering with the system including software. The 'admin' control should rest with the Railways.

15.12.3 One-to-one correspondence between Weight-o-meter discharge and corresponding wagon shall be maintained by GCTO.

15.12.4 A procedure order for normal operations covering precautions to be taken to ensure that wagons are empty before loading and periodical test weighing of this system shall be maintained by GCTO.

15.12.5 The system should have interface with FOIS to avoid any error in data capture during transmission.

15.13 GCTO may also be permitted to install an alternative means of weighment of wagons, which should have accuracy level at least equal to that of EIMWB and should ensure weighment within the time taken by EIMWB.

15.13.1 GCTO shall submit request for such alternative means of weighment, along with all the necessary documents, which may be permitted by

15.12.21

Railway on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager.

15.13.2 GCTO shall be responsible for getting the proposed means of weighment of wagons certified by Legal Metrology/ Weights & Measures department, and also for ensuring its proper upkeep and maintenance at its own cost.

16. **Installation of FOIS and TMS**

16.1 FOIS and TMS with limited access as prescribed by Indian Railways shall be installed at the GCT – at the cost of GCTO. All RRs will be prepared through TMS. Complete maintenance of FOIS and TMS will be done by Railway at its own cost.

16.1.1 Cost of replacement of FOIS and TMS equipment, at the end of their codal life, shall be borne by the GCTO.

17. **General Conditions**

17.1 Applicant/ GCTO will be solely responsible for – (a) arranging/ acquiring/ ownership/ lease/ licensing of non-Railway land for the development of GCT; (b) all statutory and non-statutory clearances from other government departments and statutory bodies; and (c) payment of all charges, taxes/ GST, surcharges, cess, levies, etc, related to transportation and handling of cargo.

17.2 For GCTs being developed entirely on non-Railway land, the portion of land required for linear connectivity of GCT with the serving Railway station may be acquired by Railway Administration on the specific request of applicant/ GCTO and at the cost of the applicant/GCTO, under the 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013'/ 'The Railway Act, 1989'.

17.2.1 An estimate of the cost of the land, prepared by Railway Administration in consultation with the Land Acquisition Officer, will be presented to the applicant, who shall deposit the amount before any further action is initiated for the acquisition of land. The applicant shall also agree to pay on demand such excess cost, if any, as may be incurred for the acquisition of this land.

17.2.1.1 The applicant shall also agree to compensate Railway if any extra cost is incurred by Railway arising out of such acquisition, even after commissioning of the Terminal.

17.2.2 Ownership of the land so acquired will vest with Railway, and the applicant for the Terminal shall have no right or claim thereto.

17.2.3 The entire cost of Railway infrastructure to be developed on such portion of acquired land will be borne by the GCTO, however the ownership of assets so created on such land will rest with Railway. Railway will reserve the right to grant connectivity to other Gati Shakti Cargo Terminal(s) taking off from the track passing over this land.

15.12.21

17.3 Unless otherwise mentioned in this policy, all 'Commercial and Operating rules' as applicable for a goods-shed for booking, supply and delivery of goods shall be applicable at GCTs.

17.4 The GCTO shall be responsible for clearance of all Railway dues, including demurrage charges, accrued within the GCT.

17.5 The cost of electricity/ diesel consumed by Railway locomotives shall be borne by Railway.

17.6 The GCTO shall provide at his own cost the level-crossings and ROB/ RUB/ LHSs for safe passage of trains as well as road vehicles, as per requirement and prescribed norms.

17.6.1 All level-crossings have to be provided with requisite infrastructure (gate-post, gate-lodge, etc) and have to be manned by GCTO at its own cost.

17.6.1.1 If the level-crossing becomes due for interlocking, the cost of interlocking shall be borne by the GCTO.

17.6.2 Maintenance of level-crossings falling on the track being maintained by Railway shall be done by Railway at its own cost; while maintenance of level-crossings falling on the track being maintained by the GCTO shall be done by GCTO (as illustrated in Section III of Schedule '3').

17.7 Railway shall reserve the right to grant connectivity to another GCT(s) from the portion of track on Railway land as well as from the portion of track which is being maintained (and assets are owned) by Railway. For the sake of clarity, Railway may permit connectivity to another Terminal from the connectivity portion of a Terminal – (i) on Railway land where the assets are owned and maintained by Railway; and (ii) on non-Railway land where the ownership of assets has been transferred to Railway by the GCTO, and the assets are maintained by Railway though the land is owned by the GCTO. This provision shall be applicable on Railway land for all GCTs; and on non-Railway land for all new GCTs, as well as on existing Terminals who decide to migrate to this Policy and transfer the ownership of assets on their land to Railway.

18. Agreement

18.1 An Agreement for GCT shall be signed before the issue of commercial notification and operation of the GCT by Railway. Sr.DCM of the concerned Division shall be the signatory of the Agreement.

18.2 For existing Terminals migrating to this Policy, the period of Supplementary Agreement (to be signed as per the provisions of this Policy) shall be co-terminus with the existing Agreement.

19. Dispute Resolution

19.1 In case of any dispute arising in the interpretation of the Policy, the decision of DRM will be final and binding.

15.12.21

19.2 Conciliation: All disputes and differences of any kind whatsoever arising out of or in connection with the construction and operations of GCT shall be referred by the GCTO to Railway Administration through 'Notice of Dispute.' RA shall, within 30 days after receipt of the 'Notice of Dispute,' notify the name of conciliator(s) to the GCTO. The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of Agreement. If the parties reach agreement on a settlement of the dispute, they shall draw up and sign a written Settlement Agreement duly signed by Railway's representative (Sr.DCM), GCTO and conciliator(s). When the settlement agreement is signed, it shall be final and binding on the parties. The conciliators shall be paid fee as fixed by Ministry of Railways time to time, which shall be shared equally by the parties.

19.2.1 The parties shall not initiate, during the conciliation proceedings, any reference to arbitral or judicial proceedings in respect of a dispute that is the subject matter of the conciliation proceedings.

19.2.2 The conciliation shall be carried out as per 'The Arbitration and Conciliation Act, 1996' and the proceedings shall be terminated as per Section 76 of the above Act.

19.3 Arbitration: If the dispute is not settled through Conciliation (as mentioned in para 19.2), it shall be decided by reference to arbitration. Arbitration shall be carried out as per provisions available for arbitration in Indian Railways General Conditions of Contract 2020 for works contracts, as amended from time to time.

20. Termination of the Agreement

20.1 Subject to the provisions in the Agreement, Railway Administration may terminate the Agreement with a GCTO operating a GCT in the event of any serious irregularity committed by the GCTO. This may include any grave breach of the terms and conditions of the Agreement, any default by GCTO, violation of The Railway Act, 1989, or commission of an unlawful act which is not in-line with Good Industry Practices.

20.2 Before terminating the Agreement, RA shall first issue a Show Cause Notice, informing GCTO to submit representation within 30 days. If no response is received, or if the response of GCTO is not satisfactory, a written Notice of Termination specifying a grace period of 180 days shall be given to the GCTO, by Sr.DCM with the approval of DRM. However, if no reply to the Notice for Termination is received within 180 days of the issue of Notice for Termination, the Agreement with GCTO will stand terminated and the same shall be communicated by Sr.DCM to GCTO. No termination payment shall be made by RA to the GCTO.

20.2.1 If the GCTO submits a reply within 180 days, RA will take further course of action on the merit of the case.

20.3 The GCTO will also have the right to terminate the Agreement by giving a notice of 180 days to the Railway Administration in the event of any difficulty faced by the GCTO in smooth functioning of the Terminal for reasons attributable to

15.12.21

Railway as laid down in this policy, or for any other reason internal to the GCTO. No termination payment shall be asked by Railway from GCTO.

20.4 Any dispute arising out of this Agreement will be resolved through the Dispute Resolution Mechanism as prescribed under Para 19 of the Policy.

15.12.21

Schedule'1'

Approval Process for Gati Shakti Multi-Modal Cargo Terminal being set-up Entirely on Non-Railway Land

1. For granting approvals to the proposals for setting-up GCT(s) entirely on non-Railway land, there will a standing Committee at each Division, comprising of:

Chairperson:	DRM
Convener:	Sr.DOM
Members:	Sr.DCM
	Sr.DEN/Coordination
	Sr.DEE/Traction Distribution
	Sr.DSTE

The members of the above Committees shall be by designation and in absence of the incumbent, the officer looking after or the link officer shall discharge this function.

2. The applicant will be required to submit application to the DRM through on-line mode, along with Application Fee (non-refundable) of Rupees Twenty Thousand (Rs 20,000/-) only – either on-line or through a Demand Draft in favour of Sr.DFM of the concerned Division. The on-line application shall essentially contain the following details:

   2.1 Details of the applicant – Name and designation of the authorized personnel, along with the details mentioned in para 3.1 of the Policy

   2.2 Concept plan, duly indicating the location and sketch of the proposed Terminal and proposed connectivity with the serving station

   2.3 Traffic projection (including commodities, expected volume per year, expected number of rakes per year, and types of stock to be handled)

3. On receipt of the application, the officials of Engineering, Operating and Signalling departments will conduct a joint survey of the location, and will submit a feasibility report to the DRM, within fifteen (15) days.

4. If providing connectivity to the proposed Terminal is technically and operationally feasible (as per joint location survey), In-principle Approval (IPA) will be granted to the applicant with the approval of DRM – within twenty (20) days of the receipt of the application.

   4.1 The feasibility report shall also indicate the additional common-user traffic facilities required/ to be created at the station (on the basis of traffic projection), and inform the applicant for inclusion of the same in Engineering Scale Plan (ESP).

   4.2 If providing connectivity is technically and/or operationally not feasible, reasons for the same will be communicated to the applicant within twenty (20) days. Applicant can re-submit the proposal with suitable modifications without re-submitting the Application Fee.

5. Within four (04) weeks of the receipt of IPA, the applicant will submit details of the project along with Engineering Scale Plan (ESP) of the serving station/ new Block

15-12-21

Hut/ Block station to the DRM. Details of the project shall also be submitted on-line, which shall consist of:

5.1 Details of the ownership of land (if land is not owned by the applicant, lease-deed should be available)

5.2 Location and details of EIMWB (if required)

5.3 Details of the cargo handling mechanism inside the Terminal (manual, hopper, tippler, etc – as the case may be)

5.4 Standard Layout chosen for the Terminal

5.5 Alignment and L-section of connectivity line from take-off point to GCT including location of bridges, Low-height Subways (LHS), Level-crossings (LC), etc.

6. Various standard layouts will be provided by Railways, and the applicant will be free to choose any of these standard layouts as per his requirements. Applicant may also decide to adopt a different layout, for which the diagram will have to be uploaded on the on-line portal along with details of the project. (Standard layouts are provided as Annexure 'C' of this Policy.)

7. The Standing Committee at the Division will examine the proposed ESP and other details. If the ESP is found acceptable, it will be signed by all members of the Committee and forwarded to Headquarters office for approval of Chief Engineer/Planning & Design (CE/P&D), within two (02) weeks of its receipt.

7.1 If any shortcomings are noticed in the ESP, it will be communicated to the applicant within two (02) weeks for necessary corrections/ alterations. All the objections/ corrections will be communicated in a single instance to obviate the need for repeated corrections/ alterations.

8. ESP will require approval of CE/P&D only in the Zonal Headquarters. As soon as the approved ESP is received in Division office, the applicant will be accorded approval to commence the construction (as per the approved ESP) on submission of Security Deposit as per para 10 below.

9. **Departmental Charges –** No departmental charges will be levied on the applicant.

10. **Security Deposit –**The applicant will be required to submit a Security Deposit of Rs Ten (10) lakh only, which shall be refunded on the date of commercial notification of the GCT.

10.1 In case of non-fulfilment of certain conditions, necessary adjustment shall be made from the security deposit (if required), and the remaining amount shall be refunded.

11. Any changes in ESP, post-approval, shall be permitted only under unavoidable technical consideration, and shall require the approval of the CE/P&D of the Zonal Headquarters.

11.1 Any changes in ESP proposed by the applicant shall be processed as per para 7 & 8 of this Schedule.

15.12.21

12. After the ESP has been approved and the applicant has been given approval to commence construction of the Terminal, Railway will process for preparation and approval of Signalling Interlocking Plan (SIP) and relevant technical drawings (in consultation with the applicant). DRM and Sr.DOM (as Chairperson and Convenor of the Committee respectively) will ensure that this process is completed without any delay.

13. The Railway land to be used for providing connectivity to a GCT (on non-Railway land) shall not be licensed to the GCTO. This land shall remain in the possession and control of Railway, and the infrastructure (track, signalling equipment, and OHE) developed on this land, though funded and constructed by the GCTO, shall also be owned by Railway – as per the provisions of para 5.1.2 & 5.1.3 of this Policy.

    13.1 For the existing Terminals located on non-Railway land where Railway land has been licensed for providing connectivity, the existing Private Siding/ Private Freight Terminal Agreement in between the Operator and Railway shall be modified as per the provisions of this Policy.

14. If the applicant fails to commence construction within six (06) months of the grant of approval, or fails to complete the construction within twenty-four (24) months of the grant of approval, Railway reserves the right to put the approval in 'abeyance,' and reserves the right to approve connectivity for other GCT(s) on the same alignment.

    14.1 If the applicant approaches Railway for reviving the approval kept in 'abeyance,' the request will be considered keeping in view the other approvals granted by Railway in the intervening period. The decision on such a case will be communicated within fifteen (15) days of receipt of such request.

15. For GCTs being developed entirely on non-Railway land, Railway will levy Terminal Charges for each rake handled (as per the applicable guidelines), which will be reimbursed to the GCTO.

    15.1 No Terminal Charges shall be levied on cargo for which GCTO himself is the consignor and/or the consignee.

    15.2 No Terminal Access Charges will be levied for rakes of privately-owned wagons when handled at GCTs built entirely on non-Railway land.

15.12.21

Schedule '2'

Procedure for Gati Shakti Multi-Modal Cargo Terminals to be Set-up 'Entirely/ Partially' on Railway land

1. For setting-up new GCT(s) entirely on Railway land, Division(s) will identify spare-able land parcels, including the operational-cum-technical feasibility for setting-up GCT thereon and potential of traffic.

   1.1 On the basis of potential for traffic, Railway may also identify land parcels where GCT may be constructed partially on Railway land and partially on non-Railway land.

      1.1.1 Such land parcels (where GCT may be created partially on Railway land and partially on non-Railway land) may also be identified/ ear-marked on the basis of requests from prospective Operators, after inviting an Expressions-of-Interest.

2. Division will identify/ determine the minimum infrastructural facilities required at the Terminal on the basis of expected traffic.

   2.1 For GCTs to be developed entirely on Railway land, the size of land parcel should be sufficient for creation of the identified infrastructural facilities.

3. Selection of GCTO shall be made on the basis of open tender. In addition to the conditions mentioned in para 3 of this Policy, the eligibility for participating in tenders for GCTs on Railway land (entirely or partially) shall be as under:

   3.1 Applicant shall have at least two years' experience in manufacturing, transportation, or logistics and related business;

   3.2 Net worth of the applicant shall be at least fifty percent (50%) of the estimated cost of construction (as per the minimum infrastructural facilities determined by the Division);

   3.3 For GCTs planned to be developed partially on Railway land and partially on non-Railway land, the bidder should have acquired the right on land (of sufficient size) contiguous to identified land parcel – either through ownership, or through lease, or through consent-letter(s) from actual land-owner(s) duly indicating their willingness to provide land to the bidder in case the contract is awarded to him.

4. While inviting tender, Railway Administration will clearly specify restricted commodities, if any, which will not be permitted to be handles at the GCT.

5. The Tender Committee shall comprise Sr.DOM/Sr.DCM (convenor), Sr.DFM (finance member), and Sr.DEN (third member). DRM/ADRM shall be the Tender Accepting Authority.

6. Earnest Money for participation shall be 10% of the estimated project cost of the Terminal. For the successful bidder, this Earnest Money shall be converted into Performance Guarantee, while the Earnest Money for unsuccessful bidders shall be refunded.

15.12.21

6.1 The Performance Guarantee shall be refunded in full, six months after the commissioning of the Terminal – subject to clearance of all pending dues of Railway by the GCTO.

6.2 If the successful bidder fails to start or complete the construction of GCT within the stipulated time (including the extensions granted by Competent Authority, if any), the Earnest Money shall be forfeited; and the Railway land shall revert back to Railway on as-is-where-is basis.

7. Two-packet single-stage tendering system shall be adopted. In the first packet, bidders will be evaluated on the following criteria:

7.1 Whether the bidder fulfils the minimum eligibility conditions, as stipulated in para 3 above of this Schedule '2';

7.2 Whether the proposed plan (of GCT) fulfils the minimum infrastructural facilities decided by the Division (which shall be clearly defined by the Division while inviting tenders).

8. All the bidders who fulfil the above criteria shall qualify for opening of the second packet – the financial bid.

9. Bidders will be required to quote the percentage of Terminal Charges and Terminal Access Charges which they will claim from the Railway for all the traffic handled at the Terminal. Eligible bidder asking for the minimum share of Terminal Charges and Terminal Access Charges will be awarded the contract.

9.1 In case of two (or more) eligible bidders quoting the same percentage, contract will be awarded to the bidder planning to invest more capital in the project (as per the first packet).

9.2 In case the planned investment is also same for such bidders, decision to award the contract shall be taken through the draw of lots.

10. For GCTs established entirely or partially on Railway land, Railway will levy Terminal Charges and Terminal Access Charges similar to those being levied on Railway goods-sheds. These Terminal Charges and Terminal Access Charges will be shared with the GCTO according to the quoted bid percentage (as mentioned in para 9 above of this Schedule '2').

11. After issue of the Letter of Allotment, the procedure and time-lines – for submission and approval of ESP and other related activities – in accordance with Schedule'1' shall be followed.

12. Successful bidder shall commence construction within three (03) months of the grant of approval of construction, and complete construction within eighteen (18) months of the grant of approval. If the bidder fails to adhere to the prescribed time-lines, one extension may be granted with the approval of DRM, up to a maximum of three months – considering the merits of the case.

12.1 Under exceptional circumstances beyond the control of the bidder, DRM may grant a further extension of up to six months.

15-12-21

12.2 If the bidder fails to complete the construction even after the lapse of such extensions (para 12&12.1 above), the Agreement will be terminated and Performance Guarantee will be forfeited.

12.3 At the time of cancellation of the Agreement, the Railway land, along with the entire infrastructure developed on it by the bidder, shall revert back to Railway on as-is-where-is basis, without payment of any compensation.

13. The Railway land used for providing connectivity to the Terminal shall remain in possession of Railway, along with the entire infrastructure created on it (as per provisions of para 5.1.2 & 5.1.3 of this Policy).

14. Railway land where GCT is developed partially or wholly on railway land (except for Railway land provided for the connectivity to GCT as mentioned in para 13 of Schedule 1 & 2) will be licensed to GCTO – for which modalities of calculating and levying land license fee shall be as per extant rules/Board's circular on land licensing (2005/LML/18/8 dated 10.02.2005 and 08.6.2005, Annexure-E), as amended from time to time.

15. Responsibility for maintaining the track and signalling equipment shall be as per the provisions of para 7 of this Policy. Responsibility of maintaining loading/ unloading wharf(s), roads, drainage, etc, shall rest with the GCTO.

15.1 GCTO shall also be responsible to ensure that the entire infrastructure of Terminal is properly maintained and is duly upgraded/ replaced at the end of codal life, as per Good Industry Practices.

16. For GCTs constructed fully or partially on Railway land, the GCTO shall be expected to give at least the prescribed annual bench-mark of traffic (outward plus inward combined, in NTKM) to Railway, which shall be commensurate with the value of Railway land earmarked for GCT, as under:

Value of land (as per Schedule '4')	**Bench-mark Traffic** (in NTKM)
Up to Rs 10 crore	200 million
More than Rs 10 crore, &up to Rs 25 crore	500 million
More than Rs 25 crore, &up to Rs 50 crore	1,000 million
More than Rs 50 crore, &up to Rs 100 crore	2,000 million
More than Rs 100 crore	4,000 million

16.1 The Bench-mark Traffic shall be applicable from the Financial Year subsequent to the year of commissioning, and shall be revised at the time of each renewal/ extension of Land Licensing Agreement according to the revised value of land. For example, if a GCT has been commissioned during 2023-24, with the value of Railway land being Rs 20 crore – then the Bench-mark from the years 2024-25 onwards shall be 500 million NTKM. This Bench-mark Traffic shall be revised at the time of every renewal/ extension of Land Licensing Agreement.

15.12.21

16.2 If the GCTO achieves or surpasses the Bench-mark Traffic during any Financial Year, an incentive equal to 5% of the Land License Fee Charges (which be levied as per the provisions of para 14 of this Schedule '2') shall be granted for the next year. For the example given in para 16.1 above, if the GCTO achieves Bench-mark Traffic during 2025-26, then an incentive equal to 5% of Land License Fees (as per the provisions of para 14) shall be granted for the year 2026-27.

17. Subject to the provisions of para 14 of this Schedule '2', GCTO will be free to create infrastructure and/or to provide value-added services/ facilities (such as warehousing, processing, packaging, etc) provided that such infrastructure/ value-added services/ facilities, if created, shall be available to all users of the GCT without discrimination of any sort. GCTO will also have the authority for deciding the user charges/ fees for value-added services/ facilities as per market conditions – without any interference from Railway. However, the use of value-added services/ facilities will be optional and no customer will be forced to use those services or to pay for them. Such value-added services/ facilities shall conform to Good Industry Practices.

17.1 GCTO shall not sub-lease/ sub-license/ mortgage Railway land, and shall not create any third-party encumbrance on Railway land.

17.2 For any value-added service/ facility developed on Railway land, GCTO shall ensure that either the complete inward traffic or the complete outward traffic, for each commodity handled, is transported through Indian Railway system. Railway reserves the right to undertake any inspection of the Terminal to safeguard its interests and to direct the GCTO to discontinue such activities if such activities are detrimental to Railway's cargo business, failing which the Agreement may be terminated. For avoidance of doubt, such termination will be treated as default by the GCTO.

17.3 The responsibility of obtaining all statutory and environmental clearances for such value-added services, if required, shall rest solely with the GCTO. Any violation of statutory compliance will invite merit for termination clause of the Agreement on GCTO's default. Any liability/ default created by such violation will be the sole responsibility of the GCTO, and Railway will not be responsible for this.

18. GCTO shall use Railway land for activities related to Railway cargo business only. If the GCTO indulges in any commercial activity not related to Railway cargo business on Railway land or fail to adhere to the provisions of para 17, 17.1, 17.2 & 17.3 of this Schedule '2', the Agreement for GCT may be terminated without any compensation/ termination payment to the GCTO. For avoidance of doubt, such termination will be treated as default by the GCTO. In case of any dispute whether any activity is related to Railway cargo business or not, the decision of the nodal officer (i.e. DRM) shall be final and binding on the GCTO.

19. The GCT located completely or partially on Railway land will remain a common-user facility, and GCTO shall ensure non-discriminatory access for all rail-customers/ potential customers to such Terminals. The GCTO will not prevent any rail-customer/ potential customer from accessing the Terminal (provided the facilities for handling their cargo exists at the terminal). Road access to the GCT will not be blocked by the GCTO.

15-12-24

20. GCTO will have the permission to expand the Terminal further by acquiring/ leasing the adjacent non-Railway land. However, any such acquisition/ leasing of additional land will have to be managed by the GCTO through his own resources. Railway will not charge any Land License Fees for the additional land acquired by the GCTO.

    20.1 In such cases, the levy of Terminal Charges and Terminal Access Charges – and their sharing with the GCTO – will continue as before as per the decided principle.

21. Railway land shall be licensed to the GCTO and the GCT Agreement shall be signed for five (05) years, which shall be renewed/ extended in blocks of five (05) years at a time, up to maximum of 35 years, provided any of the provisions of the Agreement and/or Policy has not been violated by the GCTO. If the Agreement is not renewed, GCTO will be required to hand-over Railway land back to Railway along with the entire infrastructure created on it, on as-is-where-is basis and without any legal or financial liabilities on either side.

22. A joint team (comprising of Sr.DOM, Sr.DCM, Sr.DEN, Sr.DSTE & Sr.DEE/TRD) shall inspect the GCT at least once a year to ensure that there is no breach of Agreement or policy provisions by the GCTO. In addition, inspections may also be conducted by Railway officials as per the provisions of para 17.2 and 18 of Schedule '2' of this Policy. If any breach/ violation on part of the GCTO is detected during these inspections, Railway shall take action as per para 20 of the Policy.

15.12.21

Schedule '3'

I. Ownership and maintenance of assets for Gati Shakti Multi-Modal Cargo Terminals

(as per the provisions of para 5 &7 of the Policy; para 13 of Schedule '1' of the Policy; and para 13, 14, 15 of Schedule '2' of the Policy)

A) For Gati Shakti Cargo Terminals entirely on non-Railway land:

a. New Terminals:

Type/ location of asset	***Ownership and responsibility for maintenance***
Common-user traffic facilities at the station	*Ownership of land* – Railway *Ownership of assets* – Railway *Maintenance* – Railway
Connectivity portion on Railway land (*including the land acquired by Railway on behalf of TO, as per para 16.2 of the Policy*)	*Ownership of land* – Railway *Ownership of assets* – Railway (construction cost borne by GCTO) *Maintenance* – Railway*
Connectivity portion on non-Railway land	*Ownership of land* – GCTO *Ownership of assets* – Railway (construction cost borne by GCTO; ownership transfer to Railway) *Maintenance* – Railway*
Terminal yard, including loading/ unloading lines	*Ownership of land* – GCTO *Ownership of assets* – GCTO *Maintenance* – GCTO

b. Existing Terminals on migration to the new Policy:

Type/ location of asset	***Ownership and responsibility for maintenance***
Common-user traffic facilities at the station	*Ownership of land* – Railway *Ownership of assets* – Railway *Maintenance* – Railway
Connectivity portion on Railway land	*Ownership of land* – Railway *Ownership of assets* – Railway (construction cost borne by GCTO; upgraded by GCTO, and ownership transfer to Railway) *Maintenance* – Railway*
Connectivity portion on non-Railway land	*Ownership of land* – GCTO If ownership of assets transferred to Railway: *Ownership of assets* – Railway (construction cost borne by GCTO; upgraded by GCTO, and ownership transfer to Railway) *Maintenance* – Railway* If ownership of assets not transferred: *Ownership of assets* – GCTO *Maintenance* – GCTO
Terminal yard, including loading/ unloading lines	*Ownership of land* – GCTO *Ownership of assets* – GCTO *Maintenance* – GCTO

Rathi 15-12-21

B) *For Gati Shakti Cargo Terminals Fully or partially on Railway land:*

a. *New Terminals:*

Type/ location of asset	***Ownership and responsibility for maintenance***
Common-user traffic facilities at the station	*Ownership of land* – Railway *Ownership of assets* – Railway *Maintenance* – Railway
Connectivity portion on Railway land	*Ownership of land* – Railway *Ownership of assets* – Railway (construction cost borne by GCTO) *Maintenance* – Railway*
Terminal yard, including loading/ unloading lines	On Railway land: *Ownership of land* – Railway (Land License Fee applicable) *Ownership of assets* – GCTO *Maintenance* – GCTO On non-Railway land: *Ownership of land* – GCTO *Ownership of assets* – GCTO *Maintenance* – GCTO

b. *Existing Terminals (Sidings of PSUs on Railway land, and existing Assisted Sidings) on migration to the new Policy:*

Type/ location of asset	***Ownership and responsibility for maintenance***
Common-user traffic facilities at the station	*Ownership of land* – Railway *Ownership of assets* – Railway *Maintenance* – Railway
Connectivity portion on Railway land	*Ownership of land* – Railway *Ownership of assets* – Railway (construction cost borne by GCTO; upgraded by GCTO, and ownership transfer to Railway) *Maintenance* – Railway*
Terminal yard, including loading/ unloading lines	On Railway land: *Ownership of land* – Railway (Land License Fee/ Land Lease Charges applicable, as per the License/ Lease Agreement prevailing before migration to this new Policy) *Ownership of assets* – GCTO *Maintenance* – GCTO On non-Railway land: *Ownership of land* – GCTO *Ownership of assets* – GCTO *Maintenance* – GCTO

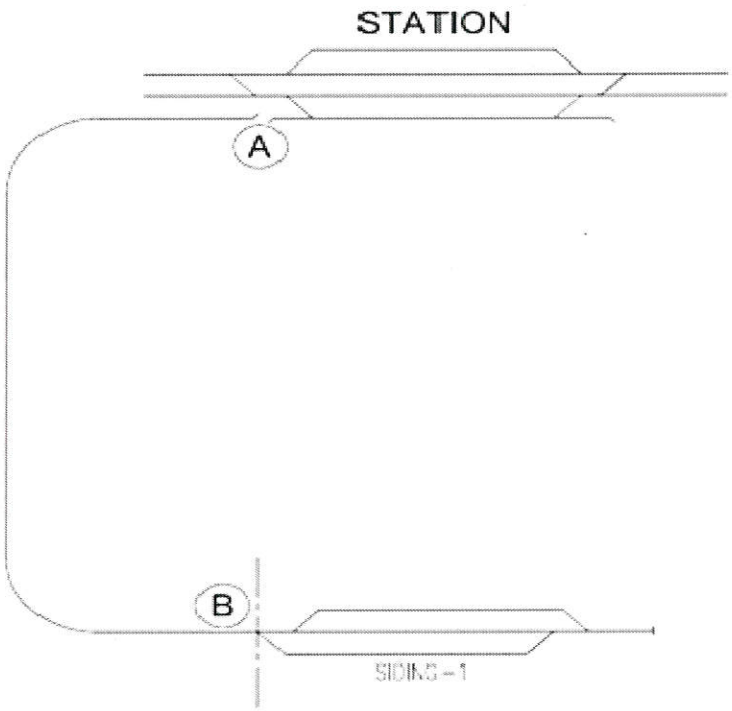
Notes: (1) Railway reserves the right to grant connectivity to other GCT(s) from the connectivity portion, where assets are owned and maintained by Railway (marked with '*' in above tables).

(2) For the sake of clarity, the distribution of responsibility for maintenance is explained in the illustrations provided in Section II of this Schedule.

15.12.21

II. Distribution of the responsibility of maintenance of assets

Illustration-1:



Single Gati Shakti Cargo Terminal taking-off from a serving station

'A' – Take-off point

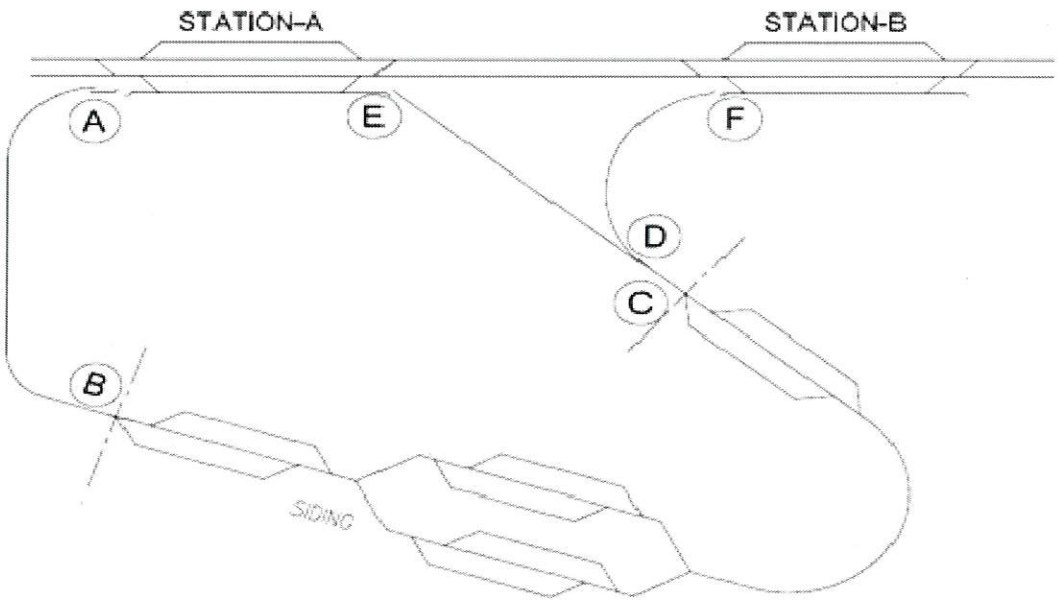
'B' – Starting point of the yard (of Terminal)

section A–B: To be maintained by Railway

beyond B: To be maintained by GCTO

15-12-24

Illustration-2:



Single Gati Shakti Cargo Terminal connected to two stations, with a Y-connection

'A' & 'E' – Take-off points from first station

'F' – Take-off point from second station

'B' – Starting point of the yard (of Terminal)

'C' – End point of the yard (of Terminal)

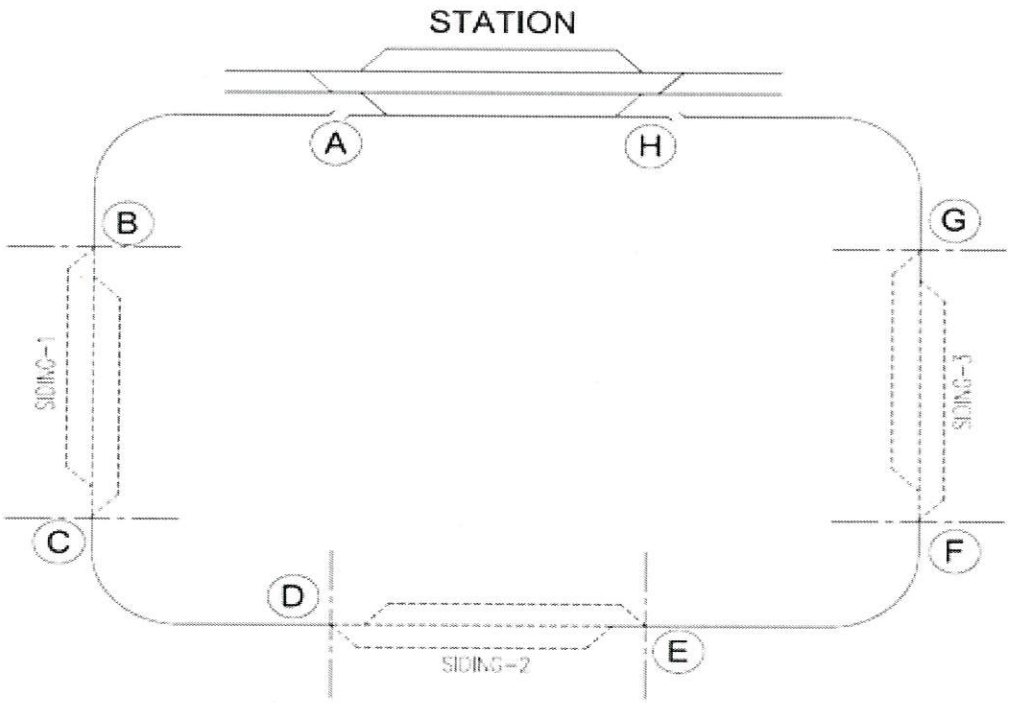
'D–F' – 'Y'-connection

sections A–B, C–D–E, & D–F: To be maintained by Railway

section B–C: To be maintained by GCTO

15.12.24

Illustration-3:



Multiple Gati Shakti Cargo Terminals connected sequentially from a station (or to two stations)

'A–B', 'C–D', 'E–F', & 'G–H' – Track sections providing connectivity

'B–C' – Yard of Siding-1

'D–E' – Yard of Siding-2

'F–G' – Yard of Siding-3

sections A–B, C–D, E–F, &G–H: To be maintained by Railway

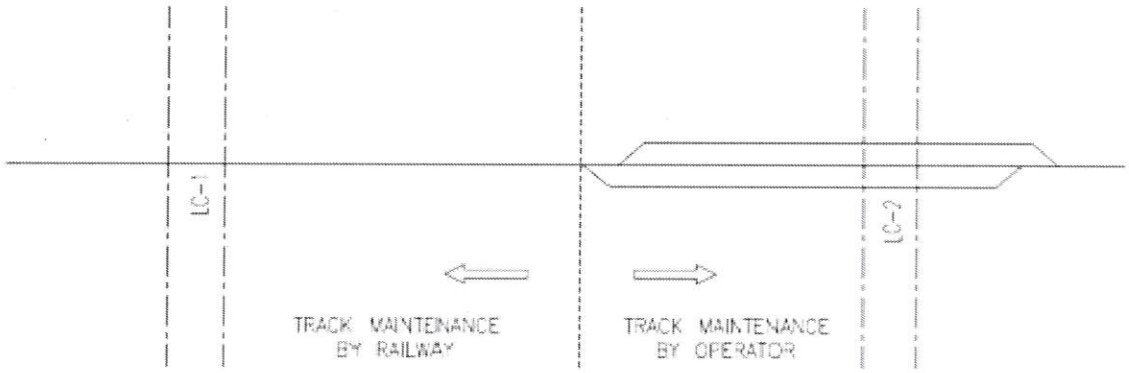
section B–C: To be maintained by first GCTO

section D–E: To be maintained by second GCTO

section F–G: To be maintained by third GCTO

15.12.21

III. Allocation of responsibility for maintenance of level-crossing (as per provisions of para 17.6 of the Policy)



Level Crossing-1 (LC-1): on the track being maintained by Railway

Responsibility for maintenance: with Railway

Responsibility for manning: with GCTO

Level Crossing-2 (LC-2): on the track being maintained by the GCTO

Responsibility for maintenance: with GCTO

Responsibility for manning: with GCTO

15.12.21

Annexure –A

GOVERNMENT OF INDIA/BHARAT SARKAR
MINISTRY OF RAILWAYS/RAIL MANTRALAYA
(RAILWAY BOARD)

No.TC-I/2014/214/3 **New Delhi, dt. 24.09.2014**

General Manager
All Zonal Railways

Sub: System of Charging Freight on Through Distance Basis in case of sidings

Ref: Board's letters/Circulars under reference:

1	No.TC-I/87/214/2 dt.13.03.1987
2	No.TC-I/87/214/2 dt.13.04.1987
3	No.TC-I/87/214/2 dt.01.05.1987
4	No.TC-I/87/214/2 dt.15.05.1987
5	No.TC-I/87/214/14 dt.21.10.1993
6	No.TC-I/87/214/2 dt.01.02.1994
7	No.TC-I/98/214/4 dt.28.04.1999
8	No.TC-I/99/214/11 dt.20.02.2001
9	No.TCR/1644/2002/2 dt.10.03.2003
10	No.TC-I/99/214/11 dt.09.05.2003
11	No.2007/TC-1/302/1Pt.E dt.23.06.2010
12	No.TCR/2043/2008/3 dt.10.08.2009

The guidelines regarding system of charging freight on through distance basis are stipulated in various Board's letters/Rates Circulars as mentioned above. It has been decided to issue a Rates Master Circular on the subject by duly consolidating all guidelines.

Accordingly, the relevant provisions figuring in the above mentioned Board's letters/circulars have been drawn out and consolidated guidelines on the subject matter are enclosed herewith. All other provisions of the above-mentioned Board's letters/Rates Circulars (and as amended from time to time) holds good.

This issues with the concurrence of Finance Dte. of Ministry of Railways.

(Aashima Mehrotra)
Director, Traffic Commercial(Rates)
Railway Board

1

Delhi 15.12.21

No.TC-I/2014/214/3 New Delhi, dt. 24.09.2014

Copy to:

1. **FA&CAO**, All Zonal Railways.
2. Dy.C&AG(Rlys), Room No.222, Rail Bhavan, New Delhi.

(M.K. Dubey)

for **Financial Commissioner/Railways**

No.TC-I/2014/214/3 New Delhi, dt. 24.09.2014

Copy to:

1. **Chief Commercial Manager,** All Zonal Railways
2. **Chief Operations Manager,** All Zonal Railways
3. **Managing Director**, CRIS, Chanakyapuri, New Delhi-21.
4. **Chief Admn. Officer**, FOIS, N. Rly., Camp: CRIS, Chanakyapuri, New Delhi-21.
5. **General Secy.**, IRCA, New Delhi.(with the request to issue correction slip)
6. **Secretary, RRT**, 5, Dr. P.V. Cherian Crescent Road, Egmore, Chennai-600105.
7. **Director General**, National Academy of Indian Railways, Vadodara.
8. **Director, IRITM**, Campus: Hardoi Bye-pass Road, Vill-Kanausi, P.O.-Manaknagar, Lucknow-226011
9. **Chief Commissioner of Railway Safety**, Lucknow.

(Aashima Mehrotra)
Director,Traffic Commercial(Rates)
Railway Board

Copy for information:

CRB, MT, FC, Railway Board
AM(C), AM(T), AM(T&C), AM(IT), Adv(F), Adv./FM, Adv.TT/M, Adv(Infra), Adv(Safety), Adv.(Vig./T), EDTC/R, ED(PG), EDPM, ED(T&C), EDTT(S), EDTT(F), EDFC, ED(S&E), ED(Plg), ED(PPP), ED(PP), DFM, DFC, Railway Board
TC(R), TC(CR), F(C), TT-III, Safety Branches, Railway Board

15.12.14

INDEX

	Topic	Para No.	Page No.
1	Applicability	1.0	4-5
2	Non-applicability	2.0	5
3	Calculation of Freight	3.0	5
4	Methodology for calculation of distance	4.0	6-8
5	Accountal of traffic	5.0	8

Sub: Charging Freight on Through Distance Basis in case of sidings

1.0 Applicability

1.1 The system of charging freight on through distance basis shall be extended to all block rakes going into the siding directly or indirectly with the engine pulling or pushing, provided (a) there is no detention to engines except for change of ends and (b) no separate shunting staff is required exclusively for this purpose.

(refer Board's letters No.TC-I/87/214/14 dt.21.10.1993 and No.TC-I/99/214/11 dt.09.05.2003)

1.2 The system of charging freight on through distance basis is also permitted in case a rake originate from or terminate in the exchange/peripheral yard provided by the siding holder, subject to fulfillment of criteria (a) & (b) of Para 1.1 above. Railway will notify such sidings/yards as 'independent booking points' based on the afore-mentioned criteria.

(refer Board's letter No.TC-I/87/214/2 dt.01.05.1987 and Board's letter No.TC-I/87/214/14 dt.21.10.1993)

1.3 'Block Rake', used herein, is a generic term implying a rake which moves as a train from an originating station to the destination station without any re-marshalling of wagons during the journey except for detaching sick wagons. Block rake will also include a rake loaded from one originating station/point to a combination of two or three destination points or a rake loaded from a combination of two originating points to a single destination.

(refer Board's letters No.TCR/1644/2002/2 dt.10.03.2003 and No.TC-I/99/214/11 dt.09.05.2003)

1.4 So long as a rake originates/terminates from/to an independent booking point, freight charges may be levied on through distance basis irrespective of whether reception/dispatch is done on signals or without signals.

(refer Board's letter No.TC-I/87/214/2 dt.15.05.1987)

1.5 In cases where one or more wagons originally forming a part of a rake charged on through distance basis to independent booking point, get detached and are received at the destination separately in the siding/yard as piecemeal, Siding Charge should not be levied for such wagons.

(refer Board's letter No.TC-I/87/214/14 dt.21.10.1993)

15.12.14

1.6 System of charging freight on through distance is also allowed in following situations:

(a) When empties which are brought to the serving station are dropped at the serving station and the power is used for other work and the empties are subsequently sent into the siding by some other power.

(b) Loads cleared from the siding by one power upto the serving station are stabled at the serving station and the power is used for clearance of some other loads and thereafter another engine comes and clears the stock (brought from the siding) towards destination station.

(refer Board's letter No.TC-I/87/214/2 dt.01.02.1994)

2.0 Non-applicability:

The system of charging freight on through distance basis is not allowed in following situations:

(a) When inward rake coming on electric power upto the serving station are subsequently taken by diesel power into the siding

(b) When outward rake moved by diesel power upto the serving station from the siding are subsequently moved by electric power.

(c) In case of piecemeal traffic, which are other than block rakes.

(refer Board's letters No.TC-I/87/214/2 dt.01.02.1994 and No.TC-I/99/214/11 dt.09.05.2003)

3.0 Calculation of Freight

3.1 Freight for a block rake shall be calculated on through distance basis at either trainload or wagonload class rate, as the case may be. Trainload class rate is granted if trainload class rate is notified for the commodity and the governing conditions are fulfilled.

(refer Board's letter No.TC-I/99/214/11 dt.20.02.2001 and No.TC-I/99/214/11 dt.09.05.2003)

3.2 In case of piecemeal traffic to siding notified as independent booking point, the chargeable freight is the freight for distance from/to the serving station plus Siding Charge computed on the basis of average trip time and All India Shunting/Train Engine Hour Cost.

(refer Board's letters No.TC-I/98/214/4 dt.28.04.1999)

4.0 Methodology for calculation of distance

4.1 The distance will be notified without reference to the serving station. However, while calculating the distance, the distance upto the buffer end/farthest point of the siding/exchange yard/peripheral yard should be taken into account.

(refer Board's letter No.TC-I/87/214/14 dt.21.10.1993)

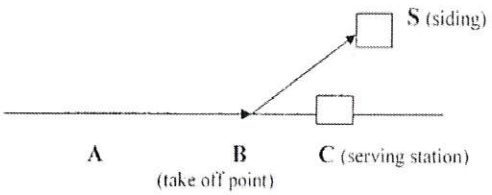
4.2 Where identifiable buffer end is not available, freight charges are to be levied upto the farthest point of the yard/siding.

(refer Board's letter No.TC-I/87/214/2 dt.13.04.1987)

4.3 Chargeable distance would be calculated in terms of Rule 125 of Goods Tariff. However, calculation of chargeable distance from the siding to the take off point or vice versa should be on the basis of actual pattern of movement and not with reference to the serving station concept (refer Illustrations given below). The chargeable distance based on this methodology for such sidings may be notified in the Rates Branch System (RBS) for correct charging of freight.

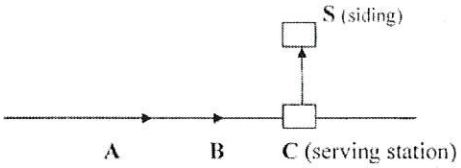
(refer Board's letter TC-I/98/214/4 dt.28.04.1999 and No.TCR/2043/2008/3 dt.10.08.2009)

Illustration No.1



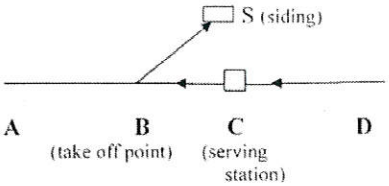
In this case traffic is coming from side A which is a local or junction station. C is the serving station and the B is the take off point lying between A and C. Traffic goes to the siding S without being dealt with at serving station C. In this case, the chargeable distance will be equal to distance upto A plus distances from A to B and from B to S. Distance upto A may be calculated from junction/local distance table and from A to B & B to S may be calculated in consultation with Civil Engineering Department.

Illustration No.2



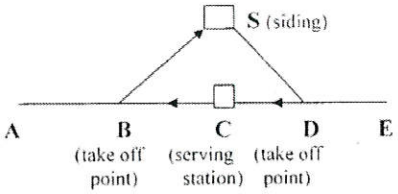
In this case, traffic coming from side A and goes to siding S via the serving station C without being dealt at C. In this case, chargeable distance will be equal to distance upto serving station plus distance from station C to siding S.

Illustration No.3



The traffic coming from side D which is a junction station passes through serving station C and goes to siding via B, the take off point. The chargeable distance will be equal to distance upto C plus distances from C to B and from B to siding S.

Illustration No.4

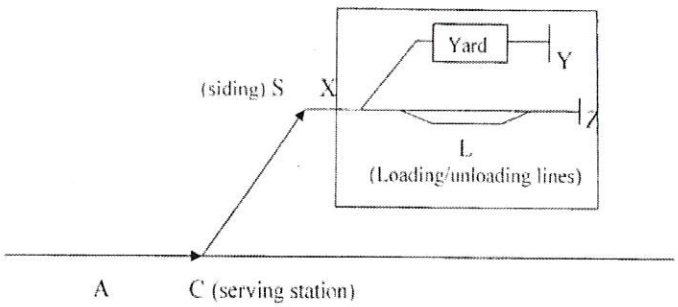


In this case, traffic is coming from station E and B & D are two take off points on both side of the serving station C. However, if due to some problem in DS route for which siding owner is responsible, the traffic goes via C and B to siding S, the chargeable distance will be equal to distance upto E plus distances from E to C, C to B and B to S. However, if the route

DS is closed due to Railway's problem, the chargeable distance will be equal to distance upto E plus distances from E to D and D to siding S.

Illustration No.5

Case: If a rake cannot be placed directly on loading/unloading lines due to restrictions in movement of loco in sidings (for instance, those dealing with POL and container traffic) and the rake is moved to a yard first and then after engine reversal, the rake is pulled back for placement in the siding.



L denotes loading/unloading lines, Y is the buffer end of yard, X is common entry point for both yard & loading/unloading lines and Z is buffer end of siding.

In this case, traffic is coming from side A and goes to siding S via serving station C without being dealt with at C. As the rake cannot be placed directly on loading/unloading lines, the rake coming from serving station is taken to the yard first, then engine is reversed and pulled beyond entry point for placement on loading/unloading lines. Here, the rake had to travel extra distance from the entry point to the yard and back. Here, the chargeable distance will be equal to distance upto serving station C plus distances from C to X and X to Z plus twice the distance between X and Y.

5.0 Accountal of traffic:

Once a siding has been declared as an independent booking point, accountal of both trainload traffic and piecemeal traffic can be done there.

(refer Board's letter No.TC-I/87/214/2 dt.15.05.1987)

*****

Annexure – B

भारत सरकार GOVERNMENT OF INDIA
रेल मंत्रालय MINISTRY OF RAILWAYS
(रेलवे बोर्ड RAILWAY BOARD)

No.TC-I/2021/109/efile/2 (3366987) New Delhi, dt.28.09.2021

General Manager
All Zonal Railways

Sub: Exemption from mandatory weighment(100%) in case of HR/CR Sheet and other steel consignment
Ref: Rates Master Circular/Weighment/2019/0 and amendments thereto

One of the Zonal Railways has requested to permit exemption from mandatory weighment(100%) in case of HR/CR Sheet and other Steel consignment which are weighed on certified Mil-Scale even if they do not bear any marking of Central Excise and/or Customs Deptt. as permitted in case of HR/CR coil.

The matter has been examined and it has been decided to permit exemption from mandatory weighment(100%) in case of HR/CR Sheet and other Steel consignment which are weighed on certified Mil-Scale, by modifying second sub-para of Para 3.2 of Rates Master Circular/Weighment/2019/0, as under:

Existing Guidelines	Revised Guidelines
However, HR Coil and CR coil consignments weighed on certified Mill-scale even if they do not bear any marking of Central Excise and/or Customs Deptt., need not be subject to mandatory 100% weighment at EIMWBs only when they are loaded as a pure rake of HR coil or CR coil or mixed rake of HR coil and CR coil provided that weight of the consignment is stenciled on each coil and it also bears a label with remarks *"Weighed on the Mill Scales certified by the Weights and Measures Department which is accepted for the SRP(Self Removal Procedure) by Central Excise and/or Customs Deptt. and all the statutory purposes"*. The label	However, HR Coil, CR Coil, HR Sheet, CR Sheet and other steel consignment weighed on certified Mill-scale, even if they do not bear any marking of Central Excise and/or Customs Deptt., need not be subject to mandatory (100%) weighment at EIMWBs when they are loaded with above-mentioned commodity as a pure rake or mixed rake, provided that weight of the consignment is stenciled on each coil/sheet/steel consignment and it also bears a label with remarks *"Weighed on the Mill Scales certified by the Weights and Measures Department which is accepted for the SRP(Self Removal Procedure) by Central Excise and/or Customs Deptt. and all the statutory purposes"*. The label should bear the name of company,

1

28/09/2021

15.12.21

should bear the name of company, manufacturing unit, name of weighing station/point, signature and stamp of the person authorized by the company to certify weighment with date. The customer will also provide the wagon-wise details of weight of the each coil loaded in a wagon to the goods clerk	manufacturing unit, name of weighing station/point, signature and stamp of the person authorized by the company to certify weighment with date. The customer will also provide the wagon-wise details of weight of the each coil/sheet/steel consignment loaded in a wagon to the goods clerk

This issues in consultation with Traffic Transportation directorate and with the concurrence of Finance Directorate of Ministry of Railways.

(This disposes off ECoR's letter No.PCCM/225/IWB/XII/1057 dated 03.09.2021)

(Atul Kumar)
Deputy Director, Rates-I
Railway Board
011-23047364

No.TC-I/2021/109/efile/2 (3366987) New Delhi, dt.28.09.2021

Copy to:

1. **Pr. Financial Adviser**, All Zonal Railways
2. **Dy.C&AG(Rlys)**, Room No.222, Rail Bhavan, New Delhi

28/09/2021

for **Member(Finance), Railway Board**

No.TC-I/2021/109/efile/2 (3366987) New Delhi, dt.28.09.2021

Copy to:

1. **Pr. Chief Commercial Manager**, all Zonal Railways
2. **Pr. Chief Operations Manager**, all Zonal Railways
3. **Managing Director**, CRIS, Chanakyapuri, New Delhi-21.
4. **Chief Admn. Officer**, FOIS, Camp: CRIS, Chanakyapuri, New Delhi.
5. **MD, KRCL**, Belapur Bhavan, Sector-11, CBD Belapur, Navi Mumbai-400614.
6. **Director General**, National Academy of Indian Railways, Vadodara.
7. **General Secy.**, IRCA, New Delhi.
8. **Director, IRITM**, Vill-Kanausi, Manaknagar, Lucknow-226011

(Atul Kumar)
Deputy Director, Rates-I
Railway Board

Copy for information:

CRB, M(O&BD), M(Fin.), Railway Board
AM(C), AM(T), AM(R), PED(TT/M), PED(Vig.), PED(Accts), EDTC/R, EDFM, ED(CC), ED(PG), EDTT(S), EDTT(F), ED(Coal), EDFC, EDVT, OSD/MR, Railway Board
TC(R), TC(CR), F(C), TT-III, Railway Board

15.12.21

Government of India (भारत सरकार)
Ministry of Railways (रेल मंत्रालय)
(Railway Board)(रेलवे बोर्ड)

No.TC-I/2020/109/SCR

New Delhi, dt.16.09.2020

General Manager
All Zonal Railways

Sub: Detention Charge and Punitive Charge
Ref: Rates Master Circular/Weighment/2019/0

Please refer to Para 4.3.3(iii) of Rates Master Circular/Weighment/2019/0 regarding Detention Charge and Punitive Charge.

2. The matter has been reviewed and it has been decided to revise the guidelines regarding Detention Charge and Punitive Charge, as given below-

Condition	**Weighment on weighbridge at originating point** (associate weighbridge located at loading point itself or serving station of the siding)	**Weighment on weighbridge at other than originating point** (associate weighbridge/alternate associate weighbridge not located at loading point itself or serving station of siding; en-route weighbridge; weighbridge at destination point)
EXISTING GUIDELINES	Detention Charge @Rs.5000/- for 'each overloaded wagon'	Detention Charge @Rs.5000/- for each overloaded wagon is <u>not</u> leviable.
REVISED GUIDELINES	Detention Charge @Rs.5000/- for overloaded wagon is <u>not</u> leviable.	**No change**
EXISTING GUIDELINES	<u>Punitive charge</u> No punitive charge is leviable if the customer carries out load adjustment at the originating station itself.	<u>Punitive Charge</u> Punitive Charge for overloading should be levied for the entire distance to be travelled by the train hauling the wagon from the originating station to the destination point, irrespective of the point of load adjustment.

16.09.20

16.09.2020

15.12.2

REVISED GUIDELINES	**No change**	Punitive Charge On detection of overloading at other than originating point, if customer carries out load adjustment at such point, Punitive Charge shall be levied for the distance travelled by the train hauling the wagon from the originating station to the load adjustment point.

3. A copy of Notification dated 16th September 2020 regarding "Railways (Punitive charges for overloading of wagon) (Amendment) Rules, 2020" is enclosed. The link of published notification in e-gazette (www.egazette.nic.in) will be provided on www.indianrailways.gov.in in due course.

4. All other extant guidelines will continue to apply unchanged.

This issues in consultation with Traffic Transportation directorate and with the concurrence of Finance directorate of Ministry of Railways.

16.09.20

(Barjesh Dharmani)
Exec. Director, Traffic Commercial (Rates)
Railway Board

No.TC-I/2020/109/SCR
New Delhi, dt.16.09.2020

Copy to:

1. **Pr. Financial Adviser**, all Zonal Railways
2. **Dy.C&AG(Rlys)**, Room No.222, Rail Bhavan, New Delhi.

16.09.2020

for **Member (Finance), Railway Board**

No.TC-I/2020/109/SCR
New Delhi, dt.16.09.2020

Copy to:

1. **Pr. Chief Commercial Manager**, all Zonal Railways
2. **Pr. Chief Operations Manager**, all Zonal Railways
3. **Managing Director, CRIS**, Chanakyapuri, New Delhi-21.
4. **Chief Admn. Officer, FOIS**, Camp: CRIS, Chanakyapuri, New Delhi.
5. **MD, KRCL**, Belapur Bhavan, Sector-11, CBD Belapur, Navi Mumbai-400614.
6. **Director General**, National Academy of Indian Railways, Vadodara.
7. **General Secy., IRCA**, New Delhi.
8. **Director, IRITM**, Vill-Kanausi, Manaknagar, Lucknow-226011

16.09.20

(Barjesh Dharmani)
Exec. Director, Traffic Commercial (Rates)
Railway Board

Copy for information:

CRB, MT, FC, Railway Board
AM(T), AM(C), AM(R), PED(TT/M), PED(Accounts), PED(Vig.), EDFM, ED(CC), ED(PG), EDTT(S), EDTT(F), ED(Coal), EDFC, EDVT, ED(C&IS), OSD/MR, TC(R), TC(CR), TCFM, F(C), Safety Branches, Railway Board

2

15.12.21

[TO BE PUBLISHED IN THE GAZETTE OF INDIA, EXTRAORDINARY, PART-II, SECTION 3, SUB-SECTION (i)]

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

NOTIFICATION

New Delhi, the 16th September, 2020

G.S.R. ….. (E).- In exercise of the powers conferred by sub-section(1) read with clause(d) of sub-section(2) of section 87 of the Railways Act, 1989 (24 of 1989), the Central Government hereby makes the following rules further to amend the Railways (Punitive charges for overloading of wagon) Rules, 2012, namely:-

1. (1) These rules may be called the Railways (Punitive charges for overloading of wagon) (Amendment) Rules, 2020.
   (2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Railways(Punitive charges for overloading of wagon) Rules, 2012, in rule 3, after the proviso, following proviso shall be inserted, namely :-

   "Provided further that on detection of overloading at other than originating point, if customer carries out load adjustment at such point, Punitive charge shall be levied for the distance travelled by the train hauling the wagon from the originating station to the load adjustment point."

[F.No.TC-I/2020/109/SCR]

16.09.20

(Barjesh Dharmani)
Executive Director, Traffic Commercial (Rates)

Note: The principal rules were published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub-Section (i) *vide* number G.S.R.570(E), dated the 17th July, 2012 and subsequently amended *vide* notification numbers G.S.R.898(E), dated the 17th December, 2012, G.S.R.550(E), dated the 10th July, 2015, G.S.R.278(E), dated the 26th March 2018 and G.S.R.1205(E), dated the 14th December 2018.

15.12.21

[भारत के राजपत्र, असाधारण, भाग-II, खंड 3, उप-खंड (i) में प्रकाशनार्थ]

भारत सरकार/Government of India

रेल मंत्रालय/Ministry of railways

(रेलवे बोर्ड/Railway Board)

अधिसूचना

नई दिल्ली, 16 सितम्बर, 2020

सा.का.नि. .....(अ). – केंद्रीय सरकार, रेल अधिनियम, 1989 (1989 का 24) की धारा 87 के उप खंड (2) के खंड (घ) के साथ पठित उप खंड(1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए रेल (वैगनों की अधिक लदाई के लिए दंडात्मक प्रभार) नियम, 2012 में और संशोधन करने के लिए एतद्वारा निम्नलिखित नियम बनाती है, अर्थात :-

1. (1) इन नियमों को रेल (वैगनों की अधिक लदाई के लिए दंडात्मक प्रभार) (संशोधन) नियम, 2020 कहा जाए ।
   (2) ये राजपत्र में इनके प्रकाशन की तिथि से प्रवृत्त माने जाएंगे ।

2. रेल (वैगनों की अधिक लदाई के लिए दंडात्मक प्रभार) नियम, 2012 के नियम 3 में, नियम के बाद निम्नलिखित नियम अंतर्विष्ट किया जाए, अर्थात् –

   "परंतु और यह कि प्रारंभिक स्थल के अलावा अन्य स्थल पर अधिक लदाई का पता लगने पर, यदि ग्राहक ऐसे स्थल पर लोड समायोजन करता है, तो ट्रेन द्वारा वैगन को प्रारंभिक स्टेशन से लोड समायोजन के स्थल तक ढोने की दूरी के लिए दंडात्मक प्रभार लगाया जाएगा ।

(फाइल सं.टी सी-I/2020/109/एससीआर)

16.09.20

(बरजेश धर्माणी),

कार्यपालक निदेशक यात्री विपणन(दर)

टिप्पण : मूल नियम भारत के राजपत्र, असाधारण, भाग-2, खंड 3, उप खंड (i), में सा.का.नि.570(अ), दिनांक 17 जुलाई, 2012 के द्वारा प्रकाशित किए गए थे तथा तत्पश्चात अधिसूचना संख्यांक सा.का.नि. 898(अ) दिनांक 17 दिसंबर, 2012, सा.का.नि. 550(अ) दिनांक 10 जुलाई, 2015, सा.का.नि.278(अ) दिनांक 26 मार्च, 2018 और सा.का.नि.1205(अ) दिनांक 14 दिसंबर, 2018 के द्वारा संशोधित किए गए।

15.12.21

Government of India (भारत सरकार)
Ministry of Railways (रेल मंत्रालय)
(Railway Board)(रेलवे बोर्ड)

No.TC-I/2019/109/3 New Delhi, dt.26.07.2019

General Manager
All Zonal Railways

Sub: Designed Tare Weight of BRN wagons
Ref: (i) Board's letter No.TCR/1394/2017/05 dt.18.01.2018
(ii) Rates Master Circular/Weighment/2019/0

In terms of Board's letter under reference (i), the designed tare weight of BRN wagon is 24.40 tonne. Accordingly, revised ANNEXURE to Rates Master Circular/Weighment/2019/0 is enclosed herewith.

This issues with the concurrence of Finance Dte. of Ministry of Railways.

(Shilpi Bishnoi)
Director, Traffic Commercial (Rates)
Railway Board

No. TC-I/2019/109/3 New Delhi, dt.26.07.2019

Copy to:
1. **Principal Financial Adviser**, all Zonal Railways
2. **Dy.C&AG(Rlys)**, Room No.222, Rail Bhavan, New Delhi.

for **Financial Commissioner(Railways)**

15.12.21

No. TC-I/2019/109/3 New Delhi, dt.26.07.2019

Copy to:

1. **Principal Chief Commercial Manager**, all Zonal Railways
2. **Principal Chief Operations Manager**, all Zonal Railways
3. **Managing Director, CRIS**, Chanakyapuri, New Delhi-21.
4. **Chief Admn. Officer, FOIS**, Camp: CRIS, Chanakyapuri, New Delhi.
5. **MD, KRCL**, Belapur Bhavan, Sector-11, CBD Belapur, Navi Mumbai-400614.
6. **Director General**, National Academy of Indian Railways, Vadodara.
7. **General Secy., IRCA**, New Delhi.
8. **Director, IRITM**, Vill-Kanausi, Manaknagar, Lucknow-226011

(Shilpi Bishnoi)
Director, Traffic Commercial (Rates)
Railway Board

Copy for information:

CRB, MT, FC, Railway Board
AM(T), PED(Comml.)/R&M, PED(TT/M), PED(F), PED(Accounts), PED(Vig.), EDTC(R), ED(CC), ED(PG), EDTT(S), EDTT(F), ED(Coal), EDFC, EDVT, ED(C&IS), OSD/MR, TC(R), TC(CR), F(C), Safety Branches, Railway Board

15.12.21

ANNEXURE

Designed Tare Weight of wagons

Type of wagon	Tare weight (in tonne)	Type of wagon	Tare weight (in tonne)
COVERED		BOBRNHS	25.61
BCN	27.20	BOBRNEL	25.61
BCNA, BCNAHS	24.60	BOBYNHS	25.20
BCX	28.50	**OPEN**	
BCXN	27.01	BOXN	22.48
BCNHL	20.80	BOXNS	19.85
BCCW	23.00	BOXNCR	22.48
BCFC	22.00	BOXNHS	22.51
FLAT		BOXNHSM1	22.53
BRN	**24.40**	BOXNM1	22.53
BRNA	23.54	BOXNHL	20.60
BRNAHS	23.54	BOXNHA	23.17
BFNS	26.71	BOXNLW	20.60
BFNSM22.9	22.00	BOXNLWM1	20.41
BRH	24.38	BOXNR	21.20
BRHC	25.23	BOXNEL	23.10
BRHNEHS	22.60	BOX	26.23
BRHT	25.92	BOXC	25.00
BRS	25.10	BOXR	21.20
BRST	25.10	BOXT	26.23
BFR	20.50	BOY	20.71
HOPPER		BOYN	20.50
BOBR	26.00	BOYEL	20.70
BOBRN	25.61	BOI	22.80
BOBS	26.40	BOST	25.50
BOBSNM1	30.00		
BOBSN	30.00		
BOBX	25.15		
BOB	25.40		
BOBC	18.03		
BOBY	27.04		
BOBYN	25.20		

15.12.21

Government of India (भारत सरकार)

Ministry of Railways (रेल मंत्रालय)

(Railway Board)(रेलवे बोर्ड)

No.TC-I/2019/109/3 New Delhi, dt. 25.07.2019

General Manager
All Zonal Railways

Sub: Weighment of wagons/rake, Exemption from weighment, Designed Tare Weight of wagons, Procedure to deal with overloaded wagon(s) and levy of Detention Charge etc.

Ref: Board's circulars/letters listed below

1	Rates Master Circular/Weighment/2014/0	23	No.TC-I/2011/108/11 dt.19.08.2016
2	Corrigendum dt.26.12.2014	24	No.TC-I/2012/108/20 dt.05.12.2016
3	Corrigendum No.2 dt.10.01.2018	25	No.TC-I/2014/108/4 dt.21.03.2017
4	Corrigendum No.3 dt.21.03.2018	26	No.TC-I/2014/108/4 dt.09.06.2017
5	Corrigendum No.4 dt.18.05.2018	27	No.TC-I/2014/108/4 dt.28.08.2017
6	Corrigendum No.5 dt.01.03.2019	28	No.TC-I/2014/108/4 dt.07.03.2018
7	Corrigendum No.6 dt.09.05.2019	29	No.TC-I/2010/108/4 pt. dt.09.05.2018
8	Addendum dt.17.07.2015	30	No.TC-I/2017/109/3 dt.13.06.2018
9	Addendum No.2 dt.29.09.2015	31	No.TC-I/2014/108/4 dt.06.07.2018
10	Addendum No.3 dt.24.11.2017	32	No.TC-I/2010/108/4Pt. dt.10.07.2018
11	Addendum No.4 dt.23.05.2018	33	No.TC-I/2014/108/4 dt.07.08.2018
12	Addendum No.5 dt.05.06.2018	34	No.TC-I/2016/MISC/2 dt.24.08.2018
13	Rates Circular No.25 of 2016	35	No.TC-I/2010/108/4Pt.07.09.2018
14	Rates Circular No.1 of 2017	36	No.TC-I/2018/109/8 dt.18.09.2018
15	Rates Circular No.20 of 2018	37	No.TC-I/2010/108/4 Pt.12.12.2018
16	Rates Circular No.1 of 2019	38	No.TC-I/2014/108/4 Pt.1 dt.08.01.2019
17	Rates Circular No.13 of 2019	39	No.TC-I/2006/109/6Pt.3 dt.24.01.2019
18	No.TC-I/2010/108/4 dt.16.09.2011	40	No.TC-I/2016/Misc/2 dt.25.01.2019
19	No.TC-I/2015/108/1 dt.02.12.2015	41	No.TC-I/2018/109/3 dt.24.04.2019
20	No.TC-I/2010/108/4(Clarf.) dt.01.02.2016	42	No.TC-I/2014/108/4 Pt.1 dt.29.04.2019
21	No.TC-I/2010/108/4(Clarf.) dt.03.05.2016	43	No.TC-I/2014/108/4Pt.I dt.11.07.2019
22	No.TC-I/2011/108/11 dt.04.05.2016		

Please refer to Board's Circulars and letters under reference regarding weighment of wagons/rake, exemption from weighment, designed tare weight of wagons, procedure to deal with overloaded wagon(s) and levy of Detention Charge etc.

It has been decided to issue comprehensive guidelines on the subject at one place. Accordingly, relevant provisions figuring in the above mentioned Board's letters/circulars and in force as on date have been drawn out and consolidated guidelines on the subject are enclosed herewith.

All concerned may be advised to follow the guidelines scrupulously.

This issues with the concurrence of Finance Dte. of Ministry of Railways.

Shilpi Bishnoi 25.07.19

(Shilpi Bishnoi)
Director, Traffic Commercial (Rates)
Railway Board

1

15-12-24

No. TC-I/2019/109/3 New Delhi, dt. 25.07.2019

Copy to:

1. **Principal Financial Adviser**, all Zonal Railways
2. **Dy.C&AG(Rlys)**, Room No.222, Rail Bhavan, New Delhi.

for **Financial Commissioner(Railways)**

No. TC-I/2019/109/3 New Delhi, dt. 25.07.2019

Copy to:

1. **Principal Chief Commercial Manager**, all Zonal Railways
2. **Principal Chief Operations Manager**, all Zonal Railways
3. **Managing Director, CRIS**, Chanakyapuri, New Delhi-21.
4. **Chief Admn. Officer, FOIS**, Camp: CRIS, Chanakyapuri, New Delhi.
5. **MD, KRCL**, Belapur Bhavan, Sector-11, CBD Belapur, Navi Mumbai-400614.
6. **Director General**, National Academy of Indian Railways, Vadodara.
7. **General Secy., IRCA**, New Delhi.
8. **Director, IRITM**, Vill-Kanausi, Manaknagar, Lucknow-226011

(Shilpi Bishnoi)
Director, Traffic Commercial (Rates)
Railway Board

Copy for information:

CRB, MT, FC, Railway Board
AM(T), PED(Comml.)/R&M, PED(TT/M), PED(F), PED(Accounts), PED(Vig.), EDTC(R), ED(CC), ED(PG), EDTT(S), EDTT(F), ED(Coal), EDFC, EDVT, ED(C&IS), OSD/MR, TC(R), TC(CR), F(C), Safety Branches, Railway Board

INDEX

	Topic	Para No.	Page No.
1.	**Procedure for weighment**	1.0	4-8
	▪ Weighment of rake/wagons and issue of RR	1.1	4-6
	▪ Weighment of traffic which cannot be weighed on the loading Railway's weighbridges due to loading station being close to Zonal inter-change point	1.2	6
	▪ Speed restriction from loading point to first available weighbridge	1.3	6
	▪ Weighment of container trains	1.4	7
	▪ Weighment of traffic loaded at ports	1.5	7
	▪ Weighment of Molasses, edible oils, Caustic soda and Coal Tar	1.6	7-8
2.	**Discrepancies found on weighment/re-weighment**	2.0	8
3.	**Exemption from weighment**	3.0	8-11
	▪ Commodities loaded in standard bags of uniform size	3.1	8-9
	▪ Containers carrying standard bags of uniform size	3.1.1	9
	▪ HR Coil and other steel consignments	3.2	9-10
	▪ Containerized Import traffic	3.3	10-11
	▪ Petroleum/Metallurgical coke	3.4	11
	▪ Chuni and De-oiled cake	3.5	11
4.	**Designed Tare Weight of wagons, Procedure to deal with wagon(s) found overloaded after weighment and levy of Detention Charge etc.**	4.0	11-15
	▪ Designed Tare weight of wagons	4.1(a)	11
	▪ Guidelines regarding levy of Detention Charge etc.	4.3	12-13
	▪ Computation of Engine Haulage Charge and Wagon Detention Charge in case of colliery sidings located far away from the weighment point	4.5	13-14
	▪ Guidelines in case of container traffic	4.6	14
	• Rules regarding Punitive Charge for overloading	4.7	15
5.	**Integration of weighbridge with FOIS – Procedure to capture weighment details in TMS/FOIS and modification thereof after load adjustment of overloaded wagon**	5.0	15-16
	ANNEXURE		
	Designed tare weight of wagons		17

Sub: Weighment of wagons/rake, Exemption from weighment, Designed Tare Weight of wagons, Procedure to deal with overloaded wagon(s) and levy of Detention Charge etc.

1.0 PROCEDURE FOR WEIGHMENT

1.1 WEIGHMENT OF RAKE/WAGONS AND ISSUE OF RR

1.1.1 All traffic loaded from any terminals are required to be weighed at weighbridges invariably. PCCM of Zonal Railways will monitor strict compliance of extant instructions regarding weighment of wagons.

1.1.2 PCOM of each Railway will notify the Associate weighbridge(s) at which rakes loaded at each loading point for each stream are required to be weighed and advise the same to all Zonal Railways and Board's office. Approval of the PCOM of the concerned Zonal Railway should be taken if the Associate weighbridge lies in other Zonal Railway. Weighbridges which have been planned or are being planned, but are yet to be installed may also be notified. Weighment of loading done at stations served by these weighbridges till these become operational, will be done at an alternate weighbridge only if it is operationally not inconvenient as certified by PCOM of the Railway.

1.1.3 PCOM of each Railway will also notify Alternate Associate Weighbridge where weighment will be done if the Associate weighbridge is defective and advise the same to all Zonal Railways and Board's office. Approval of the PCOM of the concerned Zonal Railway should be taken if the Alternate Associate weighbridge lies in other Zonal Railway. Weighbridges which have been planned or are being planned, but are yet to be installed may also be notified.

1.1.4 A reliable means of communication should be set up between the Associate and Alternate Associate weighbridges and the corresponding loading point for communicating results of the weighment to the loading point.

1.1.5 Means of communication mentioned above could be a FAX to begin with. Eventually, it has to be upgraded to inter-system communication between the weighbridge and the TMS module of FOIS. FOIS will provide TMS terminal at every weighbridge location. Railway should advise the commissioning of communication system at the weighbridge station, immediately after its commissioning. However, if FOIS terminal is provided at the weighbridge station but interface between weighbridge and TMS is not developed, weighbridge staff should enter the weighment of wagons/rake manually in the TMS module of FOIS provided at weighbridge station.

1.1.6 FOIS will develop an interface between the weighbridge and TMS so that the weighment information is directly transmitted from weighbridge to the TMS system.

1.1.7 Loading point will prepare Vehicle Guidance(VG) in duplicate duly indicating the wagon No., CC, Tare, Consignor, Consignee etc. and will hand over to the guard. This will be ensured by Station Supervisor/Goods Supervisor of the concerned loading point.

1.1.8 The guards of the train will hand over one copy of Vehicle Guidance(VG) to weighbridge clerk at weighment point. The weighbridge clerk will weigh the wagons duly indicating all the records of CC, Tare etc. The result of the weighment should be communicated to the loading point.

1.1.9 Weighment information from the Associate weighbridge location will be furnished to the loading point immediately.

1.1.10 **Issue of RR:** RR should be prepared in terms of modified Paras 1451(c) and 1451(d) of IRCM (Vol. II), which are given as under:

"1451(c): There should be no undue delay in the issue of Railway Receipts to consignors. Railway Receipts should normally be made over to the consignor within 24 hours from loading of the consignment. Concerned DCM/Sr. DCM of the loading points may however permit issuance of Railway Receipt not later than 48 hours from the time of completion of loading of goods to ensure that Railway Receipt is prepared on actual weighment details. If it is not possible to make over Railway Receipt within the above period as per actual weighment details, Railway Receipt should be prepared on the basis of Sender's Weight."

"1451(d): However, in case of continuous Bank Holidays, force majeure conditions etc., DRM may allow further extension of time for issue of RR up to the next working day of the bank through a written authority."

1.1.11 In case of weighment points where FOIS terminal is not provided or out of order, feeding of data of weighment of rakes in nearby FOIS terminals, preferably on same division, should be ensured.

1.1.12 An endorsement will be made in the RR indicating whether it has been prepared on the basis of sender's weight or actual weighment.

1.1.13 Punitive charges for overloading, if any, should be realized at the originating point itself and it should be mentioned in RR that rake has been weighed and all the charges including punitive charges collected. There should be indication in FOIS against this train that it has been weighed. Re-weighment of such wagons/rakes at en-route/destination should normally not be done.

1.1.14 Since the information regarding weighment of the rake will be available in FOIS, the divisional control will ensure that all those rakes, which have not been weighed earlier, are positively weighed. Similarly, the rakes, which have been weighed earlier, should be reweighed only under special instructions of an authority not lower than DRM or under the instructions from officers of Vigilance department (SAG and above).

1.1.15 There may be cases where despite the weighbridge being functional, it is not possible to communicate the actual weighment details due to defective/failed communication network. In such cases, the concerned Railway will continue to issue RR on sender's weight and take necessary remedial measure. All concerned may be advised to ensure that the details of weighment, including those done at en-route weighbridge and re-weighment done under special instructions, shall be entered in TMS module of FOIS. Based on these weighment details, outstanding, if any, shall be recovered.

1.1.16 PCCM of Zonal Railway should monitor the cases of issue of RR on sender's weight. DRMs, PCCMs, PCMEs and GMs should monitor defective weighbridges and put them right at the earliest.

1.1.17 If there are any loading points from which loaded rakes cannot be weighed at any weighbridge, the concerned Railway will advise Railway Board accordingly and continue to issue RR on sender's weight.

1.1.18 Weighment of rakes/wagons at Associate Weighbridge/Alternate Associate Weighbridge shall be treated as weighment at forwarding station for all purpose.

1.2 Weighment of traffic which cannot be weighed on the loading Railway's weighbridges due to loading station being close to Zonal inter-change point

1.2.1 Streams of traffic, which cannot be weighed on the loading Railway's in-motion weighbridges even after commissioning of planned/proposed in-motion weighbridges due to loading stations being close to the zonal inter-change point, should be weighed on the adjoining Railway's first in-motion weighbridge after the interchange point.

1.2.2 For this, a separate joint circular may be issued signed by the CFTM, CRSE and CTE of both Railways concerned, covering all such streams of traffic. It will be the responsibility of GM of the loading Railway to get this joint circular issued.

1.3 Speed restriction from loading point to first available weighbridge

1.3.1 In case a rake is not weighed on a weighbridge after loading due to defective weighbridge or any other reason, it should be weighed at the next available weighbridge.

1.3.2 The rake will be moved at normal speed from loading point to first available weighbridge. In case a rake is not weighed on the first available weighbridge after loading due to defective weighbridge or any other reason and it is weighed at next available weighbridge, then speed restriction of 40kmph or less as decided by the Railway concerned is to be followed from first weighbridge point to next available weighbridge where weighment is done.

1.4 Weighment of container trains

1.4.1 Weighment of container rake is mandatory. The procedure of weighment given in Para 1.1 above are also applicable for container trains. Zonal Railways are advised that the extant instructions to weigh container trains may be followed scrupulously.

1.4.2 Zonal Railways shall notify the weighbridge associated with every loading point for weighment of container trains and lay down the procedure order for realization of Haulage Charge and Punitive Charge for overloading, if any.

1.5 Weighment of traffic loaded at ports

All traffic loaded from any terminals including ports are required to be weighed at weighbridges invariably. Railways should ensure that the instructions to weigh all traffic loaded at ports are being followed scrupulously. If not, the Railway should furnish the reasons for not weighing outward traffic from ports and the action plan for installation of weighbridges and weighment of such traffic.

1.6 Weighment of Molasses, edible oils, Caustic Soda and Coal Tar

1.6.1 The weighment of Molasses, edible oils, Caustic Soda and Coal Tar should be done through dip measurement method. For this following guidelines may be followed:

1.6.2 The density (specific gravity) of molasses is standardized as **1.5.** SCR to prepare calibration chart for all the wagons being used for loading of molasses and circulate the same to all Zonal Railways.

1.6.3 The density (specific gravity) of edible oils is standardized as **0.925.** The calibration chart available for FO/TDO (POL product) is to be used for edible oils also to determine the actual weight of the consignment.

1.6.4 The standardized specific gravity of Caustic Soda lye should be taken as **1.53.** SCR to prepare calibration chart for all the wagons being used for loading of Caustic Soda Lye and circulate the same to all Zonal Railways.

1.6.5 The standardized specific gravity of Coal Tar should be taken as **1.20. SER** shall prepare calibration chart for all the wagons being used for loading of Coal Tar at 25°c subject to a maximum of PCC for the wagon and circulate the same to all Zonal Railways.

1.6.6 Dip measurement should be done only when wagons are in stationary condition.

1.6.7 Zonal Railways should obtain an undertaking from the customer at the time of loading that density(specific gravity) of Molasses, edible oil, Caustic Soda and Coal Tar being loaded is not more than what has been prescribed above.

1.6.8 Zonal Railways will periodically check the densities of Molasses, edible oils and Caustic Soda and Coal Tar loaded in tank wagons. Such periodicity should not be more than three months. If the density is found higher than those mentioned above, Board should be apprised immediately.

2.0 DISCREPANCIES FOUND ON WEIGHMENT/RE-WEIGHMENT

2.1 Differences between the invoiced weight of a wagon (RR issued on sender's weight basis) and the weight of first weighment may be neglected if the difference does not exceed 1(one) percent of the gross weight and in such cases invoiced weight will continue to be chargeable weight. If the weight of first weighment is more than invoiced weight and difference exceeds the limit as mentioned above, the weight of first weighment at weighbridge will be the chargeable weight and necessary Punitive Charge, if applicable shall be realized as per extant rule. If the weight of first weighment is less than the invoiced weight, the invoiced weight will be the chargeable weight.

2.2 Difference between the weight of second weighment of consignment in a wagon at en-route/destination and the weight of first weighment at forwarding/en-route, may be neglected if the difference does not exceed 2(two) percent of the gross weight and in such cases weight of first weighment will continue to be chargeable weight. If the variation between weight of second weighment and weight of first weighment is more than 2(two) percent, the weight of second weighment will be the chargeable weight *(irrespective of the fact that weight of second weighment is less or more than the weight of first weighment)* subject to minimum of Permissible Carrying Capacity of the concerned wagon and necessary Punitive Charge, if applicable, shall be realized as per extant rules.

2.3 In case of second weighment, where both invoiced weight and weight of first weighment are available, the chargeable weight determined at the time of first weighment in terms of Para 2.1 above, will be taken into account for the comparison with results of second weighment.

2.4 In case of three or more sets of weighment details are available, the chargeable weight determined at the time of last but one weighment in terms of Para 2.1 and/or Para 2.2 above, will be taken into account for the comparison with results of last re-weighment.

3.0 EXEMPTION FROM WEIGHMENT

3.1 Commodities loaded in standard bags of uniform size

(a) All consignments loaded in standard bags of uniform size is exempted from mandatory weighment at the weighbridges with a proviso that at least 5% of rakes should be subjected to weighment. This implies that wagons loaded with commodities like cement, food grains, fertilizers, sugar etc. (in standard bags of uniform size) are exempted from weighment. The term 'standard bags of uniform size' denotes all bags of standard size bags which are filled uniformly. While booking such consignment, the customer will give a written undertaking in the forwarding note stating that the bags are standard bags

of uniform size filled with uniform weight of commodity. However, the consignment loaded in non-standard bags or in loose conditions should continue to be subjected to 100%weighment, as per extant guidelines.

(b) Random surprise checks should be conducted by Vigilance and Commercial Departments for rakes of bagged consignments. Orders for such checks should be given by Vigilance Officer in JAG grade and higher and by Commercial Officers in SAG and higher in addition to DRMs and GMs.

(c) In case of dispute regarding Punitive Charge for overloading in respect of consignments loaded in standard sized bags, the number of bags in the wagons detected to be overloaded may be counted and the average weight of a bag determined by weighing a few bags on random basis at the destination point in the presence of the representatives of the consignor/consignee and two gazetted Railway Officers(out of which one should be from Commercial/Operating Department and the second should be randomly selected from any other department). Punitive Charge already raised may be revised based on the estimated payload determined in this manner with the approval of Sr. DCM of the Division of the destination point.

3.1.1 Container rake loaded with containers carrying standard bags of uniform size

Dispensation from mandatory (100%) weighment may be permitted in the case of container rake loaded with containers carrying 'standard bags of uniform size'. While booking, the operator will give a written undertaking in the forwarding note that the 'bags in the containers are standard bags of uniform size filled with uniform weight of commodity'. It may be ensured that no commodity in any form other than standard bags of uniform size is loaded in the rake. Random surprise weighment at EIMWBs may be conducted by Vigilance and/or Commercial Departments for container rakes of bagged consignment. Orders for such checks should be given by Vigilance Officer in SAG grade and higher and by Commercial Officers in SAG and higher, in addition to DRMs and GMs.

3.2 HR Coil and other Steel Consignments

HR Coil and other Steel Consignments which have been pre-weighed on certified mill-scales prior to getting loaded in Railway wagons and bear marking of Central Excise and/or Customs Department need not be subject to mandatory 100% weighment at EIMWBs. However, 5% of wagons loaded with such consignments may be weighed by way of sample checks.

However, HR Coil and CR coil consignments weighed on certified Mill-scale even if they do not bear any marking of Central Excise and/or Customs Deptt., need not be subject to mandatory 100% weighment at EIMWBs only when they are loaded as a pure rake of HR coil or CR coil or mixed rake of HR coil and CR coil provided that weight of the consignment is stenciled on each coil and it also bears a label with remarks *"Weighed on the Mill Scales certified by the Weights and Measures Department which is accepted for the SRP(Self Removal Procedure) by Central Excise and/or Customs Deptt.*

and all the statutory purposes". The label should bear the name of company, manufacturing unit, name of weighing station/point, signature and stamp of the person authorized by the company to certify weighment with date. The customer will also provide the wagon-wise details of weight of the each coil loaded in a wagon to the goods clerk.

Goods clerk shall verify the weighment data submitted at the time of loading with the data submitted to the Central Excise and/or Customs Deptt. every month. Such verification shall be done for atleast 10% of the wagons loaded in a month. In case of any discrepancy in a wagon, then weight of entire rake will be taken into consideration for levying Punitive Charge as per extant guidelines. The punitive charge regimen will be the same that is applicable on a rake found overloaded after weighment at originating point but has not undergone load adjustment at the originating point itself. If overloading is detected, it shall lead to immediate withdrawal of exemption from weighment and rakes shall be subjected to weighment at EIMWB as per norms.

3.3 Containerized Import traffic

Exemption from mandatory(100%) weighment in case of containerized Import traffic is permitted to following container train operators(CTOs) subject to the fulfillment of conditions given below-

Name of CTOs

- Container Corporation of India Ltd.
- Gateway Rail Freight Ltd.
- Distribution Logistics Infrastructure Pvt. Ltd.
- Adani Logistics Ltd.
- International Cargo Terminals & Infrastructure Pvt. Ltd
- Hind Terminals Pvt. Ltd.
- India Infrastructure & Logistics Pvt. Ltd.
- Pristine Mega Logistics Park Pvt. Ltd.

Conditions

(1) CTOs shall submit electronically, through Electronic Data Interchange (EDI), the train summary as well as the associated Sub Manifest Transshipment Permit (SMTP) in case of Import traffic. SMTPs (in XML format) shall separately be obtained directly by FOIS from Customs through EDI. Mapping of the containers as mentioned in SMTPs with the containers loaded in the relevant rake shall be done by FOIS. In case SMTP details are not captured through EDI and goods clerk feeds them manually, the rake should be weighed by the Railway.

(2) TMS shall prepare Railway Receipt (RR)/charge only as per weighment details received from Customs through EDI so as to rule out the technical possibility of any modification in weighment details of each container when received in TMS.

(3) FOIS/CRIS shall monitor preparation of RR in case of containerized import traffic of above CTOs and furnish its feedback.

3.4 Petroleum/Metallurgical coke

Dispensation from mandatory(100%) weighment of wagon/rake loaded with Petroleum Coke and/or Metallurgical Coke may be permitted with a proviso that at least 5% of rakes should be subjected to weighment. While permitting this exemption, it may be ensured that no commodity in any form other than these commodities is loaded in the wagon/rake. However, on request of consignor, Zonal Railways may permit weighment of Petroleum Coke and/or Metallurgical Coke by levying Detention Charge @ Demurrage (*for detention of rake for additional time used, if any*) and Shunting Charge (*for usage of Railway loco, if any*) for such weighment. This permission may be given with the personal approval of PCCM and PCOM, with due consideration to operational feasibility, among other factors.

3.5 Chuni and De-oiled Cake (DOC)

Chuni and De-oiled Cake (DOC) when loaded in covered wagons/rake may be exempted from mandatory (100%) weighment. While permitting this exemption, it may be ensured that no commodity in any form other than these commodities is loaded in the wagons/rake. Further, if Zonal Railway feels that any commodity needs exemption from mandatory (100%) weighment, they may conduct loadability trials and furnish their report/recommendation for consideration of Board.

4.0 DESIGNED TARE WEIGHT OF WAGONS, PROCEDURE TO DEAL WITH WAGON(S) FOUND OVERLOADED AFTER WEIGHMENT AND LEVY OF DETENTION CHARGE ETC.

4.1 (a) **Design Tare Weight** – Designed tare weight of the wagons should be taken as the benchmark for reckoning of overloading in any wagon. Details of designed tare weight of different types of wagon are given in the Annexure.

(b) Zonal Railways should prepare detailed operating procedure to ensure that whenever wagons are found to be abnormally overloaded beyond permitted limits at the originating point, load adjustment of such wagons is done at the originating point itself. However, if load adjustment is not feasible at originating point due to operational constraints, railway administration may permit load adjustment at nearby suitable location. The wagons shall be carried at a restricted speed upto such point where excess quantity may be unloaded or alternatively wagons are detached.

4.2 Detailed procedure should be issued by the General Manager of Zonal Railways for dealing with overloaded wagons found on rakes that are weighed en-route. For example, such wagons may be carried at a restricted speed upto a point where excess quantity may be unloaded or alternatively wagon detached. As overloading in wagon(s) affects safety, Zonal Railways are advised to take all necessary remedial measures to obviate instances of overloading.

4.3 Guidelines regarding levy of Detention Charge etc.

Condition	Weighment on weighbridge at originating point (associate weighbridge located at loading point itself or serving station of the siding)	Weighment on weighbridge at other than originating point (associate weighbridge/alternate associate weighbridge not located at loading point itself or serving station of siding; en-route weighbridge; weighbridge at destination point)
(i) No overloading	If a rake is detained for weighment and eventually no overloading is detected, no Detention Charge should be levied. Punitive Charge is also not leviable.	
(ii) Marginal overloading	If weighment reveals marginal overloading (not requiring detachment of wagon/wagons or load adjustment), Punitive Charge as applicable will be levied and no Detention Charge will accrue.	
(iii) Gross overloading *(continued)*	In cases of gross overloading (where load adjustment/detachment has to be resorted to), the applicable charges are detailed below:	
	Detention Charge – Detention Charge are not waivable and shall be levied as follows:	
	1.Detention Charge @Rs.5000/- for 'each overloaded wagon' plus	1.Detention Charge @Rs.5000/- for overloaded wagon is not leviable.
	2.Charges for the detention of the rake **Situation(a)- when load adjustment is carried out at weighment point itself** 'Charges for detention of the rake' shall be levied from the time of completion of weighment to the time of completion of load adjustment/detachment. It will be calculated at the prevailing rate of Demurrage Charge on entire group of wagons in the rake. **Situation(b)- when load adjustment is carried out at nearby location due to operational constraints at weighment point** 'Charges for detention of the rake' shall be levied for actual transit time (from weighment point to load adjustment point) or two hours, whichever is less, plus the duration of load adjustment (i.e. from the time of placement of rake for load adjustment to the time of completion of load adjustment/detachment). Charges for detention of the rake will be calculated at the prevailing rate of Demurrage Charge on entire group of wagons in the rake.	

Condition	Weighment on weighbridge at originating point	Weighment on weighbridge at other than originating point
Gross overloading	Punitive Charge No punitive charge is leviable if the customer carries out load adjustment at the originating station itself.	Punitive Charge Punitive Charge for overloading should be levied for the entire distance to be travelled by the train hauling the wagon from the originating station to the destination point, irrespective of the point of load adjustment.
	Punitive Charge The wagons that had undergone load adjustment should be randomly re-weighed. The identification of rakes for random weighment should be done by PCCM in consultation with PCOM. If overloading is detected in the wagon(s) that had undergone load-adjustment, Punitive Charge of one lakh rupees per wagon shall be levied.	
	Shunting Charge If railway locomotive is utilized for load adjustment of overloaded wagons, Shunting Charge will be levied as per extant guidelines.	
	Wharfage Charge Wharfage Charge is leviable at off-loading points for the usage of Railway's wharf as per extant guidelines.	
	Charges for unloading If overloaded goods are unloaded by Railways during load adjustment, charges for such unloading should also be recovered.	

4.4 If party request for dispatch of offloaded consignment, such off loaded consignment is to be treated as fresh consignment and freight will be charged for such dispatch.

4.5 **Computation of Engine Haulage Charge and Wagon Detention Charge in case of colliery sidings located far away from the weighment point where overloaded wagon(s) have to be sent back to the collieries for adjustment after weighment:**

(i) Railway should make maximum efforts for adjustment of overloaded wagon at the weighment point itself or at a subsequent point and Detention Charge may be levied as per extant rules.

(ii) In case where it is inevitable to send back detached overloaded wagon(s) to the loading/adjustment point for adjustment of load in wagon and the remaining rake is moved to destination then the following methodology will be adopted for calculation of Engine Haulage Charge and Wagon Detention Charge:

13

Engine Haulage Charge: If Railway loco is utilized for sending back the overloaded wagon/wagons to the loading/adjustment point for load adjustment, Engine Haulage Charge will be levied for the actual time required in hauling such wagons from weighment point to the loading/adjustment point. In case Railway loco is specifically brought from other station, then Engine Haulage Charge will be levied for the entire time period for bringing the Railway loco from that station to the loading/adjustment point. Engine Haulage Charge will be calculated on the basis of cost per Engine Hour and time period as mentioned above subject to a minimum of one hour.

Wagon Detention Charge: It will be levied on the entire rake from the time of completion of first weighment to the time of release of balance rake for onward journey after detachment of overloaded wagons. In addition, Detention Charge will also be levied on detached overloaded wagons from the time of detachment to the completion of load adjustment/final weighment. The Wagon Detention Charge is not waivable.

4.6 **Guidelines in case of container traffic**

(i) In case of container traffic, Punitive Charge for overloading will be levied as per extant rules notified in Gazette Notification from time to time. For this purpose, notified PCC of container wagons as notified from time to time will be taken into account.

(ii) In case of containers, Haulage Charge is levied per container basis whereas weighment will be per wagon basis carrying one or more containers. Also it will not be possible to weigh each and every container during weighment en-route. Therefore, for the purpose of calculation of punitive charge, the excess weight detected after weighment will be uniformly distributed on all the containers loaded on the wagon.

(iii) In case, when Punitive Charges are to be levied at the highest Class rate, the highest Class as mentioned in Goods Tariff may be taken into account for calculation. Presently, the highest Class to be reckoned for the purpose of charging punitive charges for overloading is Class 200.

(iv) In case, when Punitive Charge is leviable at the freight rate applicable to that commodity, freight applicable to that commodity for the purpose of levying Punitive Charges for overloading will be calculated as under:-

(a) For containers loaded with commodity other than notified commodity, freight applicable to that commodity will be calculated as - "Freight Rate/tonne = Haulage Rate per TEU for 'above 31T'/31tonne"

(b) For containers loaded with notified commodity (for which Haulage Charge is levied on the basis of Container Class Rate), freight rate applicable to that commodity will be the Container Class Rate applicable to that commodity. However, in case of wagon loaded with containers consisting of different notified commodities, Punitive Charge for overloading will be levied on the basis of highest Container Class Rate of the commodity which is loaded on that wagon.

Further, if a wagon is loaded with the container which contains notified commodities and other container contains commodity other than notified, then Punitive Charge for overloading will be levied on the basis of Container Class Rate of the notified commodity.

4.7 Rules regarding Punitive Charge for overloading

(a) List of gazette notification

Railways (Punitive Charges for overloading of wagon) Rules and amendments thereof notified from time to time vide Gazette Notifications are listed below. Link of the same are available on e-Gazette and also on IR website.

- GSR 570(E) dated.17th July, 2012
- GSR 898(E) dated17th December, 2012
- G.S.R.550(E) dated 10th July, 2015
- G.S.R.278(E) dated 26th March, 2018
- G.S.R.1205(E) dated 14th December, 2018

(b) Extant provisions regarding collection

Extant provisions regarding collection of Punitive Charge/railway dues as stipulated in Railways Act 1989 and Indian Railway Commercial Manual are reproduced below:

Railways Act 1989

"73 Punitive charge for overloading a wagon - Where a person loads goods in a wagon beyond its permissible carrying capacity as exhibited under sub-section (2) or sub-section (3), or notified under subsection (4), of section 72, a railway administration may, in addition to the freight and other charges, recover from the consignor, the consignee or the endorsee, as the case may be, charges by way of penalty at such rates, as may be prescribed, before the delivery of the goods...."

IRCM Vol-II

"1820. Recovery of railway dues before delivery of goods- Before delivery of goods, it should be seen that all railway dues and other charges have been paid."

5.0 Integration of weighbridge with FOIS – Procedure to capture weighment details in TMS/FOIS and modification thereof after load adjustment of overloaded wagon

Presently, where weighbridge are not linked with FOIS, wagon-wise weighment details are manually fed by Goods clerk in TMS/FOIS on the basis of weighment sheet generated from weighbridge. After load adjustment, if any, the weighment data is modified based on the load adjustment memo submitted by the customer.

In the case of integration of weighbridge with FOIS, following procedure shall be followed –

1. The weighment details of wagon(s) recorded by weighbridge shall be captured and digitally transferred in TMS/FOIS without any manual intervention.

2. In case overloading is detected at originating station/weighbridge location and if customer carries out load adjustment at originating station itself as per extant policy, before preparation of RR –

   i) the Weighment Sheet generated at weighbridge shall continue to be made available to customer for purpose of carrying out load adjustment and preparation of load adjustment memo.

   ii) A provision shall be made in TMS to enable the TMS user/Goods clerk to modify the 'net weight of wagon after load adjustment' in the TMS/FOIS on basis of 'load adjustment memo'. A separate field provided in TMS/FOIS for entry of modified weight will be distinct from the 'weighment details captured automatically from weighbridge'. RRs shall be prepared on basis of modified weighment details fed by TMS user, if any. Load adjustment memo number, date of weighment and weighbridge location shall also be captured in TMS/FOIS for all such cases of load adjustment.

   iii) Both the weighment details, one received from weighbridge and that entered post load adjustment by TMS user, shall remain available and visible in TMS/FOIS.

   iv) Original weighment details received from weighbridge, modified weighment details, 'Load adjustment memo' and concerned RRs shall be tagged to each other in TMS, and shall remain available for checks in form of MIS reports.

   v) FOIS shall generate MIS report for such RRs with viewing rights to TMS users.

   vi) Load Adjustment Memo and Weighment Sheet shall be attached with the copy of RR retained at originating station for record.

3. All other terms and condition shall remain unchanged.

4. Checks will be conducted to ensure that integration of weighbridge is working satisfactorily during joint inspection of weighbridge by Sr. Scale/JA grade officer of the division as per extant procedure, and modification therein from time to time.

ANNEXURE

Designed Tare Weight of wagons

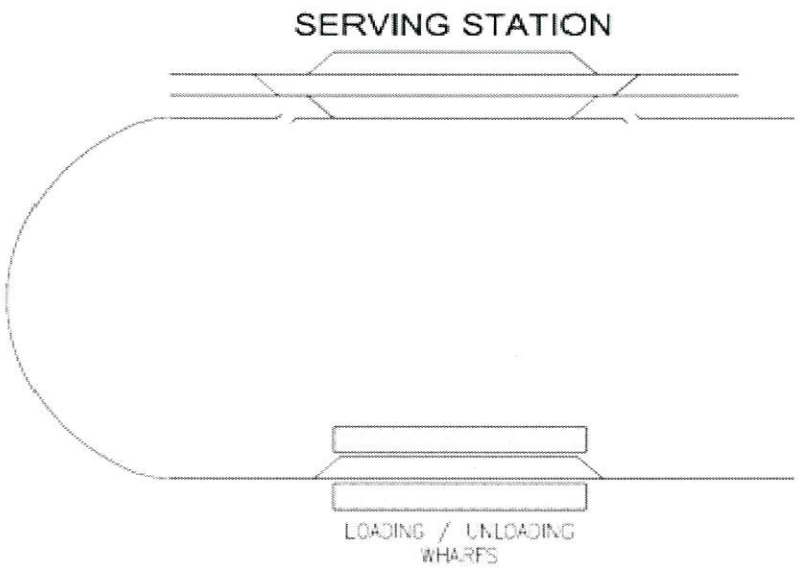
Type of wagon	Tare weight (in tonne)	Type of wagon	Tare weight (in tonne)
COVERED		**OPEN**	
BCN	27.20	BOBRNHS	25.61
BCNA, BCNAHS	24.60	BOBRNEL	25.61
BCX	28.50	BOBYNHS	25.20
BCXN	27.01	BOXN	22.48
BCNHL	20.80	BOXNS	19.85
BCCW	23.00	BOXNCR	22.48
BCFC	22.00	BOXNHS	22.51
FLAT		BOXNHSM1	22.53
BRN	20.32	BOXNM1	22.53
BRNA	23.54	BOXNHL	20.60
BRNAHS	23.54	BOXNHA	23.17
BFNS	26.71	BOXNLW	20.60
BFNSM22.9	22.00	BOXNLWM1	20.41
BRH	24.38	BOXNR	21.20
BRHC	25.23	BOXNEL	23.10
BRHNEHS	22.60	BOX	26.23
BRHT	25.92	BOXC	25.00
BRS	25.10	BOXR	21.20
BRST	25.10	BOXT	26.23
BFR	20.50	BOY	20.71
HOPPER		BOYN	20.50
BOBR	26.00	BOYEL	20.70
BOBRN	25.61	BOI	22.80
BOBS	26.40	BOST	25.50
BOBSNM1	30.00		
BOBSN	30.00		
BOBX	25.15		
BOB	25.40		
BOBC	18.03		
BOBY	27.04		
BOBYN	25.20		

Annexure – C

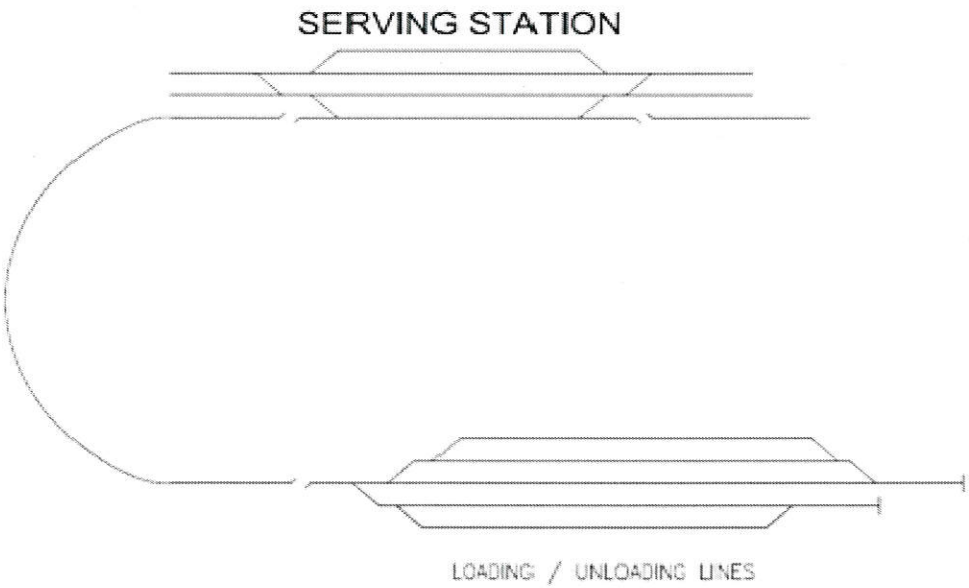
Standard layouts for Gati Shakti Cargo Terminals for auto approval

(as per provisions of para 6 of Schedule '1' of the Policy)

Layout – 1:

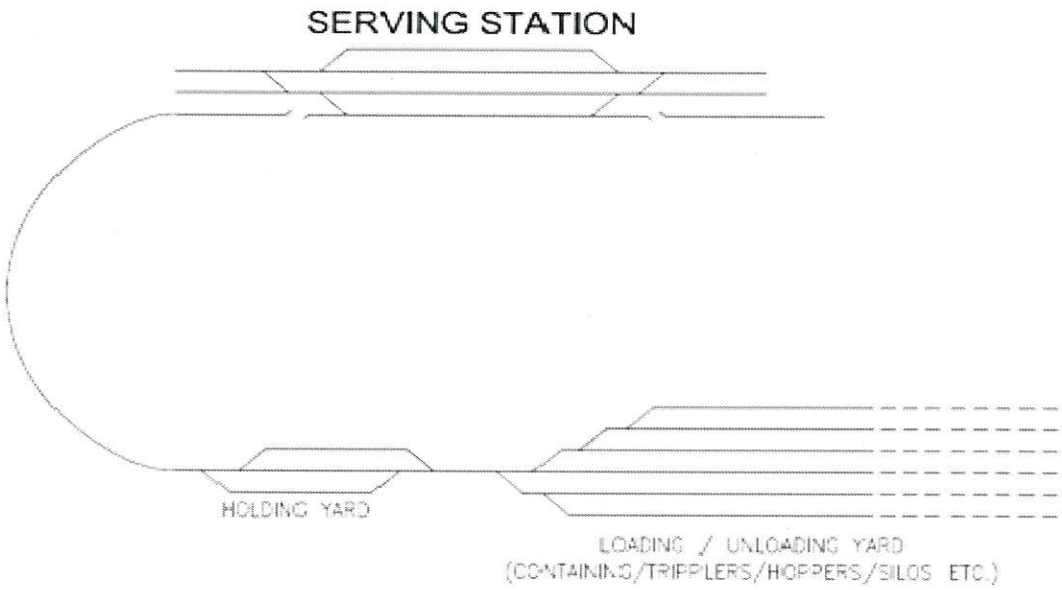


Layout – 2:

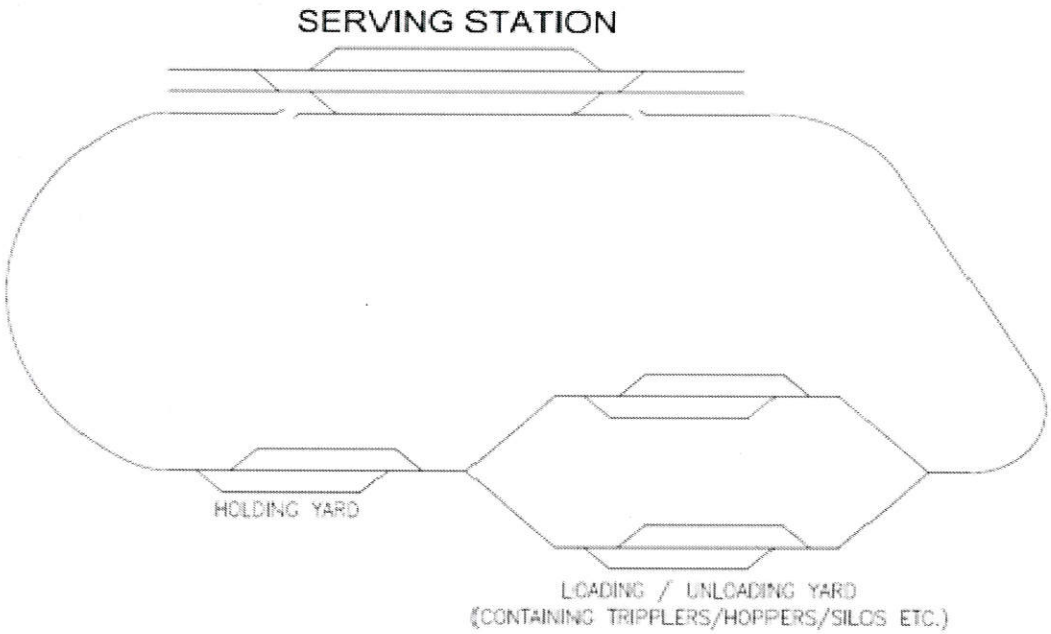


15.12.21

Layout – 3:

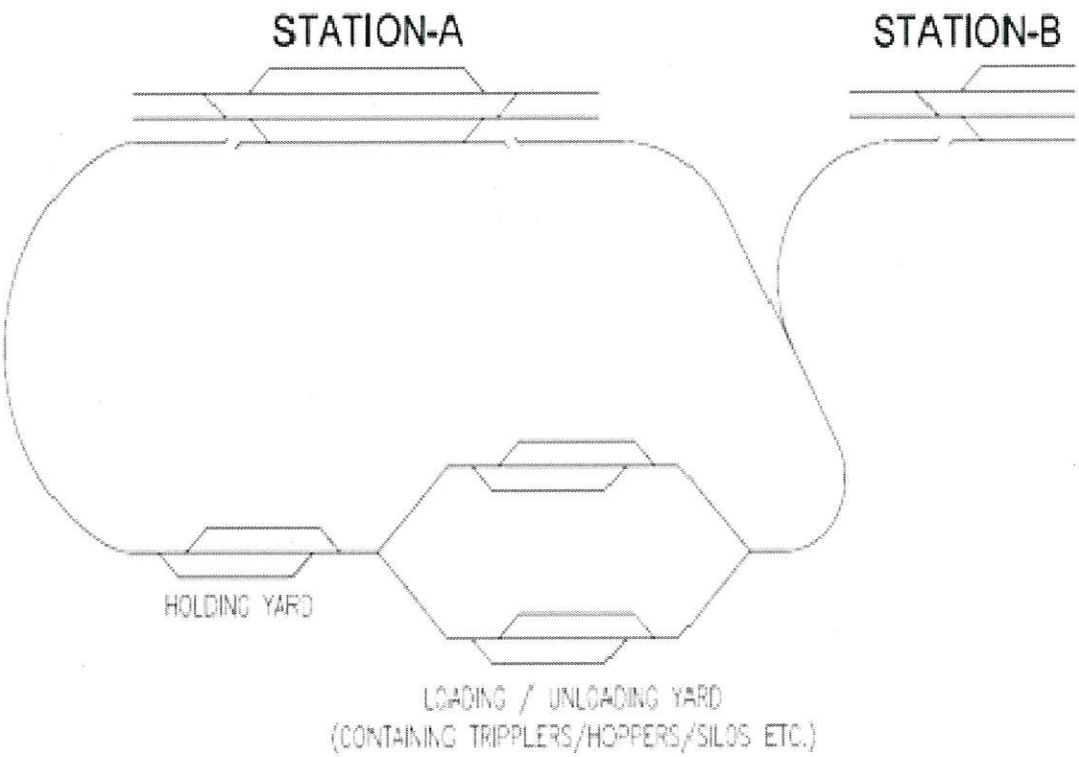


Layout – 4:



15.12.21

Layout – 5:



15-12-21

Annexure - D

Track standards for Gati Shakti Cargo Terminals (para 6.3.6 of the Policy)

1. *For Terminals up to 10 km in length (max axle-load 22.9 Tonne):*
   Rail – 52 kg, 90 UTS
   Sleeper density – 1,540 per km (Normal PSC Sleepers)
   Ballast cushion – 300 mm (150 mm clean)
   MPS for loaded wagons – 60 kmph

2. *For Terminals more than 10 km in length (max axle-load 22.9 Tonne):*
   Rail – 60 kg, 90 UTS
   Sleeper density – 1,540 per km (Normal PSC, RDSO T-2496 Sleepers)
   Ballast cushion – 300 mm (150 mm clean)
   MPS for loaded wagons –75 kmph

3. *For Terminals handling (or planned to handle) 25 Tonne axle-load:*
   Rail – 60 kg, 90 UTS
   Sleeper density – 1,540 per km (Normal PSC, RDSO T-2496 Sleepers)
   Ballast cushion – 300 mm (150 mm clean)
   MPS for loaded wagons (25T axle-load) –45 kmph

15.12.21

Annexure – E

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD

No.2005/LML/18/8 New Delhi, 8 06.05

The General Managers,
All Indian Railways & Productions Units.

Subject: **Policy on licensing of railway land for commercial plots etc (Master Circular).**

Ref:- **Board's letter of even number dated 10.02.05**

In partial modification of Board's letter referred to above, Para 3 may be read as under:-

3. Rates of licence fee

Licence fee of plots will continue to be fixed as a percentage of the land value, determined as per the procedure detailed in para-5 below. For period prior to 1.4.1995, the license fee will be governed in terms of Board's letter No.83/W2/LM/18/87 dated 17.9.1985. For subsequent periods, the percentage would be as under:-

Item No.	Types of Plots	Annual Licence Fee as a Percentage of Land Value(from 1.4.95 to 31.3.04 in terms of Boards letter dated 29.8.95)	Annual Licence Fee as a Percentage of Land Value(from 1.4.04 onwards in terms of Board's letter dated 24.3.04)
(a)	Railway related activities such as City Booking offices, Out Agencies etc.	6%	6%
(b)	Ordinary Commercial Plots – without structures	6%	6%
(c)	Ordinary Commercial Plots – with temporary structures for stacking/storing (i) Covered area (ii) Open area	7 ½% for the whole area	(i) 7 ½% (ii) 6 %
(d)	Steel Yards / Coal Dumps. Bulk Oil Installations etc.	10%	7 ½%
(e)	Land used to lay private sidings	6%	6%
(f)	Shops / Retail Depots etc.	20%	10%

15.12.21

Other terms and conditions remain unchanged.

This issues with the concurrence of finance directorate of Ministry of Railways.

(Desh Ratan Gupta)
Director(Land and Amenities)
Railway Board.

No. 2005/LML/18/8 New Delhi, Dated 8 -06-05.

Copy forwarded for information to (i) FA&CAO, all Indian Railways and Production Units.

(ii)Deputy Comptroller and Auditor General of India (Railways) (with 46 spares).

For Financial Commissioner / Railways

Copy to EDTC®, EDF(C), F(C) and F(X)I Branches , Railway Board.

15.12-21

Unique No- 2005/LML/

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2005/LML/18/8 New Delhi, dt. 10.01.2005

The General Managers,
All Indian Railways & Productions Units

Sub: Policy on licensing of railway land for commercial plots etc.(Master Circular)

Ref: Board's letter No. 83/WII/LM/18/87dt. 29.8.1995

Policy guidelines for commercial licensing of Railway land last issued vide Board's letter No.83/W2/LM/18/87 dated 29.8.1995 in super-session of the earlier policy directives, have been amended from time to time. With a view to bring all such policy instructions under one umbrella, it has been decided to issue a Master Circular combining all the instructions issued so far on the subject. Henceforth, Railways should quote only the present letter for any further reference.

2.0 General

2.1 Leasing of land is not permitted except in cases where it is specifically approved by the Railway Board. Lands for the purpose of commercial use should be given on licensing basis only. In this connection, Board's letter No. 82/W2/LM/18/116 dt. 22.11.1982 may please be referred to.

2.2 Temporary licensing of railway land to private individuals for the purpose of setting up shops, commercial offices, vending stalls, clinics etc. not connected with the Railway working was stopped in terms of Board's letter No. 80/W2/18/0/A dt. 7.6.1984. This ban will continue. In exceptional cases, where such licensing may have to be done with the prior approval of the Board, licence fee must be fixed by resorting to public auction/open tenders for getting the maximum revenue.

2.3 Licensing of ordinary commercial plots connected with Railway working, as indicated in para-3 below will be done with the personal approval of General Manager in consultation with FA&CAO. The periodical review may, however, be approved by DRM on the recommendation of Committee of Divisional Heads of Engineering, Commercial and Finance Departments.

2.4 Licenses of existing licencees, not connected with the Railway working as mentioned in Para 3 (f) below may, however, be renewed from time to time so

-1-

15.12.21

5.0 ... not an ... licensing

long as the land is not required by Railway for its own purpose but on new terms and conditions indicated in this letter.

2.5 In each case of licensing, proper agreement must be executed between the Railway Administration and the licencees before the licencee is given possession of the land/plot. This must be strictly followed and for any violation of these instructions, the official handing over land before the execution of agreement, shall be held personally responsible by the Railway Administration.

3. Rates of licence fee

3.1 Licence fee of plots will continue to be fixed as a percentage of the land value, determined as per the procedure detailed in para-5 below. The percentage applicable w.e.f 1.4.04 to various types of plots will be as under:

Item No.	Types of Plots	Annual Licence Fee as a Percentage of Land Value
(a)	Railway related activities such as City Booking offices, Out Agencies etc.	6%
(b)	Ordinary Commercial Plots – without structures	6%
(c)	Ordinary Commercial Plots – with temporary structures for stacking/storing (i) Covered area (ii) Open area	 (i) 7 ½% (ii) 6 %
(d)	Steel Yards / Coal Dumps. Bulk Oil Installations etc.	7 ½%
(e)	Land used to lay private sidings	6%
(f)	Shops / Retail Depots etc.	10%

4.0 Formation of a Standing Committee

4.1 A Standing Committee of three HODs will be set up at the Headquarters of each Zonal Railway and other Railway Units. The Standing Committee consisting of CE, CCM and FA&CAO shall examine fresh cases connected with railway working as indicated in Para 3 (a) to (e) and submit its recommendations to G.M. for approval.

4.2 The periodical review will, however, be done by DRM on the recommendations of Divisional Heads of Engineering., Commercial and Finance Departments. The Committee will review annually whether the traffic commitments by the licensees of the commercial plots have actually materialised

15.12.24

or not and in case of any deviation, initiate suitable corrective action including de-licensing and vacation as necessary.

5.0 Fixing of land value

5.1 A market value would however, be required to be taken to serve as a base value for working out rental fee payable. This shall be fixed on the basis of the land value of the surrounding area as on 1.1.1985, as determined from the Revenue Authorities and/or from the following:

(a): Evaluation of Town Planning Department;
(b): Actuals as per PWD and CPWD transactions;
(c): Actual Transactions, as per documents filed in the Office of the Sub-Registrar;
(d) Value of land as assessed by professional evaluators of the State and Central Governments;

5.2 **The land value as worked out shall be increased every year on the 1st of** April, starting from 1.4.1986, at the rate of 10% over the previous year's land value to arrive at the land value for the following year based on which the annual licence, fee shall be fixed. **From 1.4.2004 onwards, the land value shall be increased at the rate of 7% every year over the previous year's value.**

5.3 However, for fresh cases of licensing of plots, for any purpose(s) defined in Para 3.1 (a) to (e) above, the licence fee shall be fixed after obtaining the current value of land. In very rare cases where it is not possible to obtain the current cost (reasons for which should be brought on record), the updated cost based on 1.1.1985 land price should be adopted.

However, for the Metropolitan towns of Mumbai, Kolkata, Delhi, and Chennai if the HODs' Committee feel that the land rates are widely varying within the City, two or more rates can be utilised for that city. Using this method, arrears of collection of license fee on this account should not be allowed to accumulate.

6.0 Minimum licence fee

6.1 The minimum licence fee in respect of plots covered under this letter should be Rs. 1000/- per annum. For the purpose of determining the minimum license fee, the maximum size of a plot shall be taken as 100 sq. metres. For instance, in case licensing of a plot measuring 250 sq. metres is involved, the minimum license fee chargeable shall be relevant to three plots of 100 sq.m metres each and will work out to Rs. 3000 per annum.

7.0 Revision of licence fee

7.1 As the notional land value will increase by 7% over the previous year's land value as mentioned in Para 5.2 above, the licence fee will automatically go up by 7% over the previous year's fee from the first of April every year. Suitable provisions, with the Schedule of payment due, may be incorporated in the Agreement.

15.12.21

7.2 The termination/renewal date of the Agreement should always be the end of the Financial year so that there is no confusion and a better watch is kept on renewals.

8.0 Powers of licensing and renewal

8.1 Fresh cases of licensing of plots connected with Railway working and mentioned at (a) to (e) of Para 3 above will be approved by GM, on recommendation of the HOD's Committee. As regards plots mentioned at (f) of Para 3, viz. shops, retail oil depots etc., as already stated, the existing ban on fresh licensing for purposes unconnected with Railway working, will continue. Renewal of licences of railway land not connected with Railway working given under para 3 (f) can be done at G.M's level with Finance concurrence.

9.0 Security Deposit and Liquidated Damages

9.1 Instructions contained in para 1025, 1026 and 1027 of the Indian Railways Code for the Engineering Department (1999 Edition) should continue to be strictly followed and any violation of these instructions should be viewed seriously.

10.0 Settlement of pending case:

10.1 The revised instructions would become effective with effect from 1.4.2004. It has also been decided to withdraw the retrospective effect of orders dated 29-8-1995. Thus, the orders of August 1995 would be made applicable for the period 1995-96 onwards and not for the earlier period i.e. from 1-4-1986 to 31-3-1995. Any recovery already effected for the period between 1-4-1986 to 31-3-1995 need not be refunded in cash but should be adjusted against future payments due from the concerned party. Arrears of land licence fee may be recovered in easy instalments.

10.2 In cases pending in Courts of Law, the Law Officer of the Railway should be consulted before arriving at a settlement.

11.0 Having included their provisions in the master circular, the earlier circulars on the subject Nos.

i 83/W2/LM/18/87 dt. 24.3.04

ii 83/W2/LM/18/87 dt. 29.8.95

iii 83/W2/LM/18/87 (Vol. II) dt. 14.3.01

iv 83/LML/18/87 (Vol.II) dt. 5.11.01

v 83/W2/LM/18/87 (Vol.II) dt. 28.4.04

15.12.21

vi 01/LML/18/58 dated 23.9.02, stand withdrawn.

This issues with the concurrence of the Finance Directorate of the Ministry of Railways.

Please acknowledge receipt.

(DESH RATAN GUPTA)
Director (Land & Amenities)
Railway Board.

No. **2005/LML/18/8** New Delhi, Dated 10-01-05.

Copy forwarded for information to (i) FA&CAO, all Indian Railways and Production Units.

(ii)Deputy Comptroller and Auditor General of India (Railways) (with 46 spares).

For Financial Commissioner / Railways

Copy to EDTC®, EDF©, F© and F(X) I Branches , Railway Board.

15.12.21

ANNEXURE P/8V

भारत सरकार GOVERNMENT OF INDIA
रेल मंत्रालय MINISTRY OF RAILWAYS
(रेलवे बोर्ड RAILWAY BOARD)

No. 2021/TC(FM)/18/17

Rail Bhavan, New Delhi, dated 05.01.2022

Pr. Chief Operations Manager,
Eastern Railway, Fairlie Place
Kolkata

Sub:- Commissioning of Private Siding of Maithon Power Ltd. at Thaparnagar/Mugma, Asansol Division, Eastern Railway

Ref: - PCOM/ER's letter no. TW/535/439/Pt. II dated 15.12.2021 and CTPM/ER's letter no. TW/535/439/Pt. II dated 16.12.2021

Railway Board is in receipt of the letters under reference, vide which Railway has sought clarification on Private Siding Policy regarding modification in DPRs of ongoing proposals where DPR was approved prior to issuance of FM Circular no. 11 of 2016.

In this regard, it may please be noted that a Master circular on 'Gati Shakti Multi-Modal Cargo Terminal (GCT) policy has been issued vide letter No. 2021/TC(FM)/18/23 dated 15.12.2021. As per Para 1.1 of this new GCT policy, all new as well as under-construction / under-approval Cargo Terminals (approved / proposed under the 'Private Siding' or ' Private Freight Terminal' policies) shall be covered by the GCT policy.

It may further be noted that the GCT policy has no provision of Detailed Project Report (DPR). Further action regarding notification and commissioning of the Terminal may be taken as per the provisions of paras 10.1, 11 & 11.1 of 'Schedule-1' of the policy.

(Yasir Rizvi)
Dy. Director Freight Marketing
Railway Board

Eastern Railway

No. C.490/575/BG. Kolkata, dated 25th Jan., 2022.

Divisional Railway Manager,
Eastern Railway,
Asansol.

Sub : Commissioning of MPL Siding.

Ref : (ii) Your letter No.G.DRM/ASN/MPL/2021
Dated 3rd Dec., 2021.

(iii) MPL's letter No.MPL/FY-22/21-11/015 dtd 26.11.2021.

****

Representation of MPL Authorities may be dealt with as per Gati Shakti Multi Modal Cargo Terminal (GCT) Policy dated 15.12.2021. In this regard, Railway Board's letter as well as HQ's Finance observations are enclosed for taking further necessary action.

Enclo.: 1. Rly. B's letter No.2021/TC(FM)/18/17
dated 05.01.2022..
2. Remarks of HQ's Finance.

(S. Biswas)
Chief Trans. Planning Manager.

Copy to : CEO/MPL – To approach the Division on this issue.

(S. Biswas) 1/2022
Chief Trans. Planning Manager.

भारत सरकार **GOVERNMENT OF INDIA**
रेल मंत्रालय **MINISTRY OF RAILWAYS**
(रेलवे बोर्ड **RAILWAY BOARD)**

रेल भवन ,नई दिल्ली –110001

No. 2021/TC(FM)/18/23 –Part (I) Rail Bhavan, New Delhi-110 001, Dated 07.07.2022

The General Managers,

1. Central Railway, Mumbai
2. Eastern Railway, Kolkata
3. East Central Railway, Hajipur
4. East Coast Railway, Bhubaneshwar
5. Northern Railway, New Delhi
6. North Central Railway, Prayagraj
7. North Eastern Railway, Gorakhpur
8. Northeast Frontier Railway, Maligaon
9. North Western Railway, Jaipur
10. Southern Railway, Chennai
11. South Central Railway, Secunderabad
12. South Eastern Railway, Kolkata
13. South East Central Railway, Bilaspur
14. South Western Railway, Hubli
15. Western Railway, Mumbai
16. West Central Railway, Jabalpur

Sub: **Standard Agreements for Gati Shakti Multi-Modal Cargo Terminals (GCTs)**

Ref: (i) Master Circular on "Gati Shakti Multi-Modal Cargo Terminal-2021" issued vide letter no. 2021/TC(FM)/18/23 dated 15.12.2021
(ii) Railway Board's letter no. 2021/TC(FM)/18/23 –Part (3) dated 07.03.2022.

The policy guidelines on "**Gati Shakti Multi-Modal Cargo Terminal (GCT)**" were issued under GCT Master Circular 2021 vide Railway Board's letter No. 2021/TC(FM)/18/23 dated 15.12.2021. As per provision contained in Para 18.1 of GCT Master Circular, an agreement for GCT shall be signed before the issue of commercial notification and operation of the GCT by Railway.

In this connection, standard agreement copies viz. **(i)** For GCT on Private Land and **(ii)** For GCT - entirely / partially on Railway Land, have been enclosed, duly vetted by legal directorate.

Accordingly, Zonal Railways may take immediate action for signing of Agreements in respect of GCTs that were initially notified on the basis of comprehensive notifications in terms of guidelines quoted vide Railway Board letter mentioned under ref-(ii) above.

Further, following instructions must be ensured while signing of Agreement-

(i) It may be ensured whosoever executes the present Agreement for an on behalf of the President of India is authorized to do so and his name and designation is correctly mentioned in the opening Para as well as in the Signature Clause at the time of actual execution of the same.

(ii) It may also be ensured that whosoever executes the present Agreement for an on behalf of the Second Party is authorized to do so and his name and designation is correctly mentioned in the opening Para as well as in the Signature Clause at the time of actual execution of the same.

07/07/2022

(iii) In addition to this, the name and full address of the witnesses representing to the parties should also be mentioned in the Signature Clause at the time of execution of the document under reference.

(iv) Blank spaces in the draft agreement, if any, should be filled with appropriate / proper wordings according to their requirements before actual execution of the same.

The Standard Agreements enclosed herewith are issued with the approval of Rates, Traffic Transportation, Mechanical Engineering, Civil Engineering, Land & Amenities and Legal Directorates and with the concurrence of Finance Directorate of the Ministry of Railways.

Please acknowledge receipt of this letter.

Enclosure/As Above

Ashutosh Mishra
Joint Director Freight Marketing

No. 2021/TC(FM)/18/23 –Part (I) New Delhi, Dated 07.07.2022

Copy forwarded for information to :

1. The PFAs, All Indian Railways.
2. The Deputy Comptroller & Auditor General of India (Railways), Rail Bhawan.

07/07/2022

For Member (Finance)/Railway Board

No. 2021/TC(FM)/18/23 –Part (I) New Delhi, Dated 07.07.2022

1. The Principal Chief Operations Managers, All Indian Railways.
2. The Principal Chief Commercial Managers, All Indian Railways.
3. The Chief Traffic Planning Manager, All Indian Railways.
4. The Principal Chief Engineers, All Indian Railways.
5. The Chief Commercial Managers (FM), All Indian Railways.
6. Director General, RDSO, Manak Nagar, Lucknow.
7. Director, Indian Railways Institute of Transport Management (IRITM), Manak Nagar, Lucknow.
8. Director General, National Academy of Indian Railways, Vadodara.
9. The Managing Director/Chief Commercial Manager, Konkan Railway Corporation Ltd., Belapur Bhawan, Plot No. 6, Sector-11, CBD Belapur, Navi Mumbai – 400014.
10. Managing Director, CRIS, Chanakyapuri, Near National Rail Museum, New Delhi.
11. Managing Director, DFCCIL, Pragati Maidan, New Delhi

Ashutosh Mishra
Joint Director Freight Marketing

No. 2021/TC(FM)/18/23 –Part (I) . New Delhi, Dated 07.07.2022

1. Copy for kind information to:
2. OSD/MR and EDPG/MR for kind information of Hon'ble MR.
3. Chairman & CEO, Member (O&BD), Member (Finance), Member (Infra.), Member (T&RS), DG(RPF), and Secretary Railway Board, New Delhi.
4. AM(Traffic), AM(C), Adv (Infra), Adv. (Vig.), EDTC(Rates), EDTT(M), EDTT(S), EDTT(F), ED(Plg.) EDT(PPP), EDV(T), EDF(C), DTT(Coord), OSD/Chairman & CEO, OSD/Member (O&BD), Co-Chairman/TMIR, Chairman and Convener/AGE and DTC(R)/ Railway Board, New Delhi.

Model Agreement for 'Gati-Shakti Rail Multi-modal Cargo Terminal' built entirely on private land'

_____Railway

This **Agreement** is made and executed at ……..on this ……. Day of ……., 20…….

BY AND BETWEEN

THE PRESIDENT OF INDIA acting through (incorporate name and designation of the officer authorized under Article 299(1) of the Constitution) having its office at ……. (hereinafter referred to as "**The Railway Administration**" which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the One Part;

AND

……. [hereinafter referred to as **("Applicant or GCTO")*** which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the Other Part.

WHEREAS The Applicant is desirous of having a Cargo Terminal laid by the Railway Administration at _____ from the _____station yard of the _____ _ Railway taking off from Kilometer No. _____ between_____ station and_____ station of the Railway as shown in red and green on the plan bearing CE's No. _____ hereto annexed for the purpose of carrying on the Applicant's business in the Applicant's premises situated at _____ _ District _____

AND WHEREAS the Railway Administration is willing to lay the said cargo terminal for the said Applicant upon and subject to the terms and conditions hereinafter set forth.

NOW, Therefore, this Agreement witnesseth as follows:

1. **Interpretation**: In these presents, unless the context otherwise requires, the following Words and Expressions have the meaning and shall be interpreted as specified, namely-

Words importing the singular number include the plural number and vice versa.

"Person" includes a firm or other association or body of individuals and a Company or other Corporate Body.

"Railway Administration" means and includes the General Manager for the time being of (name of Zonal Railway) Railway and any officer of the (name of Zonal Railway) Railway authorized by any such General Manager to deal with any matters, with which these presents are concerned.

"Applicant" means the person named as party hereto of the other part and includes in the case of a firm or other association or body of individuals, the individual person or persons for the time being and from time to time constituting the association or body and, In the case of a company, corporation or body corporate the Successor in business of interest, such company, corporation or body corporate for the time being.

07/07/2022

"Works" means the premises belonging to or occupied or used by the Applicant which are connected with the (name of the Zonal Railway) Railway system by the terminal herein before mentioned,

"Undertaking" includes all land, railway lines, works, buildings, engines, rolling stock and other movable or immovable property now or at any time hereafter forming part of or pertaining to the (name of the Zonal Railway) Railway system as now or hereafter constituted and all engines and rolling stock (whether belonging to the _____ Railway system or not) passing over such system.

"Cargo Terminal" Includes the Railway track connecting the Applicant's works with the Railway system, as hereinafter agreed to be constructed by the Railway Administration and all branches and extensions thereof which may hereafter be constructed by the Applicant or by the Railway Administration at the Applicant's request and all sleepers, ballast, embankments, bridges, tunnels, signals interlocking and tele-communication equipment gates, buildings and other constructions, erections, works and movable property constructed / erected / made/ provided or used in connection with the said track and also all land whereon or on part whereof the said track and connected things aforesaid are constructed / erected / made / provided or used including land acquired for the purpose thereof as hereinafter provided and land belonging to the Railway Administration and land belonging to or occupied or used by the Applicant.

The Cargo Terminal shall cover only that portion of track network on which Railway rolling stock will ply. The network utilized by the Company/Party for their internal use shall not form part of the Cargo Terminal defined herein."

"Sub-grade Work" includes the construction of embankments, the making of cuttings and the carrying out of other earth work, the construction of bridges (exclusive of girder works), buildings, platforms, tunnels, culverts, drains and openings and laying out of ballast and all other works necessary to permit the laying and construction of railway track of the terminal and generally all works which have to be abandoned, if the terminal be closed.

"Permanent Way Materials" includes girders, rails, sleepers, fastenings, points and crossings, fencings, signaling, interlocking and telecommunication equipment and over-head structure and any other things connected therewith for electric traction and other machinery (except station machinery) and equipments necessary for working the terminal.

"Legal Representative" means any person who is competent to give the Railway Administration a valid discharge in respect of any money or property which may be payable or deliverable to the Applicant and shall include the executor and administrator of a deceased person, a succession certificate holder, the surviving or continuing partners or members in the case of a firm, association or body of individuals, the certificated guardian if a minor's property, the committee of lunatic, the assignee or receiver of an insolvent's estate, the liquidator of a Company, a receiver and any person legally appointed to represent the estate of the Applicant.

* **Note**: Forms Of Description Of The Applicant –

(Where a single person is the Applicant) "and A.B. (insert full name) of (insert address and occupation)"

(Where two or more persons are Joint Applicants), "and A.B. (insert full name) of (insert address and occupation) and C.D.: (insert full name) of (insert address and occupation)".

07/07/2022

(Where a single person trading under a different fee name is the Applicant) "and A.B. (Insert full name) of (insert address and occupation) carrying an business under the name or style of (insert name) at (if the business is carried on at a different address from the address already Inserted then insert such additional address)."

(Where a partnership firm is the Applicant and the names of the partner known), "and A.B. (Full name) and C.D. (full name) carrying on business partnership as (insert nature of business) under the style or firm of (insert name or style of the firm and address).

(Where a partnership firm is the applicant and the names of partners are not known), "and A &Co. (insert name or style of the firm) a partnership firm carrying on business at (insert address) as (insert nature of business)."
(Where an incorporated Company is the Applicant), "A.B. &CO. Ltd. a company incorporated in (Insert country of incorporation (e.g. India, England or elsewhere, as the case may be) and having its registered office at (insert address)" (in the case of a company incorporated elsewhere than in India address) "and its principal office in India at (insert address)".

(Where the Applicant is a joint family governed by the Mitakshara School of Hindu Law), "A.B. (insert full name) for self and as Karta or managing member of the Joint family, governed by the Mitakshara School of Hindu Law, carrying on business under the name or style of (insert name under which the joint family business is carried on) at (Insert address) and C.D.E.F.G.H. etc. (insert full name) being the other adult members of the said Joint family.

2. **<u>Agreement To Construct Gati Shakti Multi-Modal Cargo Terminal</u> (GCT) :**

Subject to the terms and conditions hereinafter contained, the Railway Administration shall at the cost and expense of the Applicant in all respects, construct fully on the land of the Applicant of the said Cargo Terminal, from _____ (length of terminal) Kilometers on _____ (name of portion) Branch as shown in red and green on the plan annexed hereto (bearing CE's No. _____) connecting the Applicant's work known as _____ situated at or near _____ in the District of with the system at or near _____ on _____ Railway.

3. **Capital Cost of GCT**

3.1 The Gati Shakti Cargo Terminal Operator (GCTO) shall bear the entire capital cost of new GCT from the take-off point onwards, as marked on the Engineering Scale Plan (ESP) at the serving station.

3.1.1 For the linear connectivity portion of GCT passing through the Railway land, including the land to be acquired by Railway for this purpose under para 17.2 of the Master Circular on Gati Shakti Multi-modal Cargo Terminal Policy dated 15.12.2021 (**hereinafter referred to as the policy**), GCTO shall provide only the minimum essential infrastructure of track, OHE and signalling equipment at the cost of GCTO (other assets not related to track, signalling, or OHE, if required, shall be constructed by Railway at its own cost). In case of any dispute, the decision of DRM shall be final in this regard.

3.1.2 The ownership of infrastructure including the track, signalling equipment and OHE created on Railway land under para 5.1.1 of the policy shall belong to Railway, even though the capital cost for these shall be borne by the GCTO.

07/07/2022

3.2 The capital cost for all common-user traffic facilities at the serving station (as marked on the ESP), including Signalling & Telecommunication works, modification and up-gradation to existing interlocking/ OHE, or electrification in future within the station limit up to take-off point, shall be borne by the Railway.

3.3 Maintenance and operation of assets created under para 5.2 of the policy (common-user traffic facilities) at the serving station including staff costs, shall be the responsibility of the Railway.

3.4 The capital expenditure required for augmenting or up-grading the facilities and infrastructure on the connectivity portion from take-off point onwards towards Terminal and within the premises of Terminal shall be borne by the GCTO.

3.5 The connectivity to GCTs shall normally take-off from the existing serving station. However, in case when it is operationally not feasible to provide a connection from an existing serving station, provision of a Block Hut/ Block station (between two existing stations) with required points & crossings may be considered, provided it is operationally feasible. This will be done on the request of GCTO.

3.5.1 In such cases, the entire capital cost of the new Block Hut/ Block station and related infrastructure shall be borne by the GCTO. However, this work will be executed by Railway, and ownership of the same shall remain with the Railway.

3.5.2 However, for new GCTs planned to load one million Tonne or more (outward traffic) per annum, the capital cost of new Block Hut/ Block station will be repaid to the GCTO by Railway.

3.5.2.1 The repayment of capital cost of the new Block Hut/ Block station will be made by Railway through 10% rebate on the outward traffic loaded at the Terminal, till such time the capital cost has been repaid to the GCTO. This 10% rebate shall be granted on the normal tariff rate (NTR) of the commodity.

3.5.2.2 The repayment of capital cost as mentioned in para 3.5.2.1 above will be done only if the Terminal achieves the target of loading one million Tonne per annum within two Calendar Years of commissioning (excluding the year of commissioning). For example, if a GCT commissioned during calendar year 2022 achieves one million Tonne loading during calendar year 2024, then the repayment of capital cost of new Block Hut/ Block station (through 10% rebate on outward traffic) shall start from 01st April 2025.

3.5.2.3 This repayment shall be made for the investment made by the GCTO on behalf of Railways. As such, this repayment through freight rebate shall be admissible over and above all other rebates that the GCTO may become eligible for in future.

3.5.2.4 This provision of repayment shall be applicable only for GCTs for which Agreement between RA and GCTO has not been entered into till the date of issue of this Policy. **Further, existing terminals migrating to GCT Policy shall not be eligible for this repayment.**

4. **<u>Sub-Grade Work</u>** :

The sub-grade work, culverts & bridges, drains, pitching & protection work and ballast supply shall be carried out at the cost and expense of the Applicant either by his own agency or by the Railway Administration on his request. When the works or part of them are carried out by the Applicant, the work shall conform to the Railway Administration's drawings and

07/07/2022

specifications and shall be executed under the supervision of Engineering staff of the Railway Administration or under the supervision of Approved Consultant.

5. **Security of Assets**

5.1 The responsibility of security of railway assets over Railway land shall be of Railways. However, the responsibility of security of railway assets outside Railway Land or on land licensed to GCTO shall be of GCTO.

5.1.1 In case of theft of any railway asset on non-Railway land, the maintenance of which is with Railway, the restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

5.1.2 In case of theft of OHE including OHE on non-Railway land, restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

6. **Maintenance of Assets**

6.1 Maintenance of assets on Railway land, including Track and Signalling Equipment installed on Railway land under para 5.1.1 of the policy, shall be done by Railway at its own cost.

6.2 Maintenance of OHE from the take-off point onward including inside the Terminal shall be done by Railway at its own cost – as this involves safety of men and equipment, and can also impact rail operations outside the Terminal boundary.

6.3 In addition to above, the maintenance of assets (track, bridges, signalling equipment, etc) on non-Railway land ***outside the Terminal***, may also be done by Railway at its own cost if the GCTO transfers the ownership of these assets to Railway (the ownership of land on which such assets are created shall however continue to be with GCTO). Provided further, this provision shall be applicable only to those GCTs where freight tariff is charged on 'through distance basis.'

6.3.1 In case maintenance of assets, including Track and Signalling Equipment, is being handed over to Railways on migration to this policy by GCTO, the GCTO will ensure that the standards of track and signalling infrastructure being transferred to Railway is in accordance with the prescribed standards for GCTs, as decided by Railways (as per Annexure 'D' of the policy). If any up-gradation/ replacement/ renewal of any infrastructure is required, the GCTO shall bear the cost for the same.

6.3.2 In case of damages to the assets due to accident, etc, the replacement shall be done by Railway. However, if the responsibility of accident, after Enquiry (joint enquiry by representatives of Railway as well as GCTO), is fixed on the GCTO – the GCTO shall have to bear the cost of all the replacements. The decision of the Nodal Officer, i.e. DRM, in this regard shall be final.

6.3.3 In case the damage to assets is due to an external cause (floods, breaches, terrorist activity, etc), the cost of restoration shall be borne by the GCTO.

6.3.4 If the GCTO does not agree to transfer the ownership of assets (track, bridges, signalling equipment, OHE, etc) to Railway or freight tariff is not chargeable 'on through distance basis'; the maintenance of these assets – except OHE – shall continue to be the responsibility of GCTO.

6.3.4.1 Railway shall be entitled to conduct periodic inspections of such GCTs being maintained by the GCTO, for which Inspection Charges will be levied as per the prescribed norms.

07/07/2022

6.3.4.2 GCTO may also get the maintenance done through Railway for such Terminals, in which case Maintenance Charges shall also be levied as per the prescribed norms.

6.3.5 The maintenance of GCT yard, including loading/ unloading lines, shall be the sole responsibility of GCTO. Distribution of the responsibility of track has been explained in Schedule '3' of the policy.

6.3.6 At such GCTs, Railway shall maintain the signalling equipment till the line-clear/ receipt-despatch arrangement with serving station(s), at its own cost. Maintenance of signalling equipment internal to the Terminal shall be the sole responsibility of the GCTO.

6.4 The cost of all subsequent up-gradations (on account of change of technology, standards, etc) shall be borne by the GCTO.

6.5 Maintenance of all the infrastructure and equipment inside the GCT which are not to be accessed by Railways' rolling-stock, and maintenance of infrastructure required for loading/ unloading (tipplers, hoppers, etc) shall be the responsibility of GCTO.

7. Cost of Electrification

7.1 In case of new GCT, the entire cost of electrification of the Terminal and the connectivity portion between take off point and GCT, shall be borne by the GCTO.

7.2 While undertaking electrification of main line and serving station by Railways, the electrification of the existing GCT(s) including the rail-line connecting the Terminal(s) shall be undertaken at the Railway's cost.

8. Handling of Wagons in GCTs:

8.1 If any damage and deficiencies is caused to railway wagons due to the fault of the GCTO, the damage and deficiency charges shall be raised by Railway and paid by the GCTO as per the extant rules of Railways.

8.2 All tipplers and bulk handling systems used for loading/unloading of Railway wagons shall be provided and commissioned by GCTO at its own cost in accordance with the RDSO's approved specifications. This provision shall however not be applicable on the systems/ equipment installed by GCTO which are not to be used for handling Railway wagons (such as conveyor-belts, JCBs, excavators, etc).

8.2.1 GCTO shall ensure that tipplers, bulk handling systems, and mechanized equipment are operated only by the qualified and experienced staff under adequate supervision.

8.2.2 Such equipment shall be regularly maintained and replaced at the end of their codal life by GCTO at its own cost.

8.2.3 In case of any accident/ derailment inside the Terminal or outside the Terminal up to serving station, Railway will provide Accident Relief Train (ART) initially free of cost. Provided further, if the responsibility of accident/ derailment after enquiry is fixed on the GCTO, ART Charges shall be payable by GCTO as prescribed by Railway from time to time. The due Charges will be deducted from the future payments by Railway to GCTO. However, in case no regular payments are being made by Railway to GCTO, on demand from Railway, the GCTO shall pay ART Charges to Railway without any delay.

8.2.4 The accident enquiry as mentioned in para 9.2.3 above shall be conducted jointly by the representatives of Railway and GCTO to be nominated by DRM and

07/07/2022

GCTO respectively. The accepting authority of Enquiry Report shall be DRM, whose decision shall be final and binding on GCTO.

9. **C&W Maintenance Facilities**

9.1 Normally C&W facilities shall not be constructed at GCTs.

9.2 However, if C&W facilities are operationally required at any GCT as per the extant instructions, only one-time capital cost for setting-up these facilities shall be borne by the GCTO. Operational costs, including staff cost and material cost (for Railway-owned stock), shall however be borne by the Railway.

9.3 For GCTs dealing with POL and other hazardous material, specialized facilities inside the Terminal as well as in Railway yard (if required) shall be developed by the GCTO at its own cost, and shall be maintained by GCTO to ensure that no untoward incident/ accident takes place at such facilities.

10. **Authorized Users**

10.1 GCTO shall inform Railway about the authorized rail users of the GCT before notification, so that they may be incorporated in the TMS module of FOIS.

10.2 If the GCTO desires to add more rail users subsequently, GCTO shall inform Railway at least seven (07) working days in advance, to enable incorporation of such rail users in FOIS.

11. **Commodities Permitted**

11.1 Unless otherwise specified by Indian Railway, a GCT shall be permitted to book and handle all traffic – including coal and coke, which shall be as per the guidelines of 'preferential traffic schedule' issued by Ministry of Railways from time to time.

12. **Engine-on-Load (EOL) Scheme**

12.1 All new GCTs shall be set up on 'charging on through distance basis,' as per the instructions contained in Rates Master Circular on 'Freight on Through Distance Basis issued on 24.09.2014 (Annexure 'A' of the policy), as modified from time to time.

12.2 All new GCTs charged on through distance basis shall be governed by the Engine-on-Load policy (FM Circular No.05 of 2013 dated 07.03.2013), as modified from time-to-time.

12.2.1 Railway may permit commissioning of a new GCT on non-EOL basis with the approval of DRM, if Engine-on-Load scheme is not operationally feasible.

13. **Charging of Commercial Staff**

13.1 No cost of commercial staff will be charged from the GCTO w.e.f the date of issue of this policy. However, for existing Terminals (*where PFT/ Private Siding Agreement has already entered into between RA and operator before the issue of this Policy*) where cost of commercial staff has already been deposited by the GCTO, there shall be no refund. Further, dues of commercial staff cost pending, if any, as on the date of issue of this policy shall be payable by GCTO.

14. **Provision of Weighbridge**

14.1 All GCTs planning to deal with outward cargo (loading) shall have a provision of Electronic In-motion Weighbridge (EIMWB) at a suitable location inside the Terminal. The EIMWB shall comply with OIML (International Organization of Legal Metrology)

07/07/2022

document (available at https://www.oiml.org/en/files/pdf_r/ r106-2-e12.pdf) and the latest RDSO specifications.

14.1.1 Provision of EIMWB shall not be essential for GCTs dealing with inward cargo (unloading) only.

14.1.2 If a GCT without an EIMWB plans to start loading, the GCTO shall make arrangement for provision of an EIMWB as per the provisions of the Policy. DRM, in consultation with CFTM of the Railway, may, however permit loading at a GCT (if operationally feasible) – by nominating an alternative Railway weighbridge for weighment of rakes, awaiting installation of EIMWB, for a period of up to six months at a time from the date of start of such loading, duly recording the reasons for the same.

14.2 GCTO shall bear the cost of procurement (inclusive of the requisite warranty and a post-warranty comprehensive Annual Maintenance Contract (AMC) till the end of codal life), installation, and replacement of the EIMWB at the end of its codal life. GCTO shall also bear the cost of weighbridge house, weighbridge siding, and related infrastructure.

14.3 GCTO shall get the weighbridge certified by the Weights & Measures department of the state government, and shall comply with all the applicable statutory and legal requirements.

14.3.1 The weighbridge, after testing and certification by the Weights and Measures department of the state government, shall be sealed by their personnel in presence of GCTO's and Railway's representatives. This seal shall be broken, if required, only in the presence of the personnel of Weights and Measures department and Railway's representative.

14.4 GCTO shall bear the cost of manpower to operate the EIMWB, and the cost for its linking with FOIS.

14.5 RR will be issued on the basis of weighment within a GCT as per the extant instructions provided vide Rates Master Circular/Weighment/2019/0 dated 25.07.2019 and other applicable instructions of Railways (Annexure 'B' of the policy), as modified from time to time.

14.6 No extra free-time will be provided for weighment at an EIMWB inside a GCT.

14.7 Railway Administration reserves the right to conduct periodic and/or surprise inspections of the operation, functioning and calibration of EIMWB.

14.8 For the purpose of mandatory testing of EIMWB, test-wagons shall be provided by Railway on payment of Haulage Charges. These Haulage Charges shall be levied for the actual distance travelled or 100 km, whichever is less.

14.8.1 In cases where there is more than one weighbridge located within a GCT, the Haulage Charges as per para 14.8 above shall be levied for the 'first weighbridge,' and shall be levied @25% of the charges for the 'first weighbridge' for other weighbridges inside the Terminal.

14.8.2 For random surprise testing by Railway, test-wagons will be provided for without levying Haulage Charges or any other charges.

14.8.3 Railway shall try to ensure availability of 'test wagon-sets' in the vicinity of all GCTs, so that there is no delay in arranging these wagons for testing.

14.9 If any overloading is detected in the outward traffic the same will have to be unloaded/ re-adjusted at the Terminal itself – for which no extra free-time will be provided.

14.10 Whenever the EIMWB goes out of order, it shall be put right by the GCTO within three days, failing which a penalty of Rs 4,000/- per day or part thereof for the next ten days, and Rs 8,000/- per day or part thereof thereafter, shall be imposed.

14.11 Under exceptional circumstances, if it becomes essential to install the EIMWB of a GCT either partially or wholly on Railway land not licensed to GCTO (on account of operational and technical constraints), permission for the same may be given by the

07/07/2022

DRM. Location of such an EIMWB shall be decided by Sr.DOM, in consultation with Sr.DCM, Sr.DEN & Sr.DME.

14.11.1 All terms and conditions applicable on EIMWB inside a GCT shall also be applicable on an EIMWB installed by GCTO on such land. However, Railway will be the executing agency for installation, operation, and maintenance of such EIMWBs.

14.11.2 Cost of the comprehensive AMC and manpower to operate such EIMWB shall be borne by the GCTO.

14.11.3 Railway will be free to weigh rakes other than those of the concerned GCT at such EIMWB.

14.12 Railway may permit weight-o-meter/ pre-weighbin system of weighment in GCT on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager, keeping in view the requirement and to avoid any manipulation of weighment data.

14.12.1 Such equipment shall be certified by Weights & Measures department, and should also meet all extant statutory provisions and policy guidelines.

14.12.2 The system should have proper locking/ sealing arrangement to avoid any tampering with the system including software. The 'admin' control should rest with the Railways.

14.12.3 One-to-one correspondence between Weight-o-meter discharge and corresponding wagon shall be maintained by GCTO.

14.12.4 A procedure order for normal operations covering precautions to be taken to ensure that wagons are empty before loading and periodical test weighing of this system shall be maintained by GCTO.

14.12.5 The system should have interface with FOIS to avoid any error in data capture during transmission.

14.13 GCTO may also be permitted to install an alternative means of weighment of wagons, which should have accuracy level at least equal to that of EIMWB and should ensure weighment within the time taken by EIMWB.

14.13.1 GCTO shall submit request for such alternative means of weighment, along with all the necessary documents, which may be permitted by Railway on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager.

14.13.2 GCTO shall be responsible for getting the proposed means of weighment of wagons certified by Legal Metrology/ Weights & Measures department, and also for ensuring its proper upkeep and maintenance at its own cost.

15. Installation of FOIS and TMS

15.1 FOIS and TMS with limited access as prescribed by Indian Railways shall be installed at the GCT – at the cost of GCTO. All RRs will be prepared through TMS. Complete maintenance of FOIS and TMS will be done by Railway at its own cost.

15.1.1 Cost of replacement of FOIS and TMS equipment, at the end of their codal life, shall be borne by the GCTO.

16. General Conditions

16.1 Applicant/ GCTO will be solely responsible for – (a) arranging/ acquiring/ ownership/ lease/ licensing of non-Railway land for the development of GCT; (b) all statutory and non-statutory clearances from other government departments and statutory bodies; and (c) payment of all charges, taxes/ GST, surcharges, cess, levies, etc, related to transportation and handling of cargo.

16.2 For GCTs being developed entirely on non-Railway land, the portion of land required for linear connectivity of GCT with the serving Railway station may be acquired by Railway Administration on the specific request of applicant/ GCTO and at the cost of

07/07/2022

the applicant/GCTO, under the 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013'/ 'The Railway Act, 1989'.

16.2.1 An estimate of the cost of the land, prepared by Railway Administration in consultation with the Land Acquisition Officer, will be presented to the applicant, who shall deposit the amount before any further action is initiated for the acquisition of land. The applicant shall also agree to pay on demand such excess cost, if any, as may be incurred for the acquisition of this land.

16.2.1.1 The applicant shall also agree to compensate Railway if any extra cost is incurred by Railway arising out of such acquisition, even after commissioning of the Terminal.

16.2.2 Ownership of the land so acquired will vest with Railway, and the applicant for the Terminal shall have no right or claim thereto.

16.2.3 The entire cost of Railway infrastructure to be developed on such portion of acquired land will be borne by the GCTO, however the ownership of assets so created on such land will rest with Railway. Railway will reserve the right to grant connectivity to other Gati Shakti Cargo Terminal(s) taking off from the track passing over this land.

16.3 Unless otherwise mentioned in this policy, all 'Commercial and Operating rules' as applicable for a goods-shed for booking, supply and delivery of goods shall be applicable at GCTs.

16.4 The GCTO shall be responsible for clearance of all Railway dues, including demurrage charges, accrued within the GCT. For the sake of clarity, it is explicitly mentioned that demurrage charges will be borne by the GCTO for demurrage occurring on its own private land or occurring on railway land licensed to the GCTO.

16.5 The cost of electricity/ diesel consumed by Railway locomotives shall be borne by Railway.

16.6 The GCTO shall provide at his own cost the level-crossings and ROB/ RUB/ LHSs for safe passage of trains as well as road vehicles, as per requirement and prescribed norms.

16.6.1 All level-crossings have to be provided with requisite infrastructure (gate-post, gate-lodge, etc) and have to be manned by GCTO at its own cost.

16.6.1.1 If the level-crossing becomes due for interlocking, the cost of interlocking shall be borne by the GCTO.

16.6.2 Maintenance of level-crossings falling on the track being maintained by Railway shall be done by Railway at its own cost; while maintenance of level-crossings falling on the track being maintained by the GCTO shall be done by GCTO (as illustrated in Section III of Schedule '3').

16.7 Railway shall reserve the right to grant connectivity to another GCT(s) from the portion of track on Railway land as well as from the portion of track which is being maintained (and assets are owned) by Railway. For the sake of clarity, Railway may permit connectivity to another Terminal from the connectivity portion of a Terminal – (i) on Railway land where the assets are owned and maintained by Railway; and (ii) on non-Railway land where the ownership of assets has been transferred to Railway by the GCTO, and the assets are maintained by Railway though the land is owned by the GCTO. This provision shall be applicable on non-Railway land for all new GCTs, as well as on existing Terminals who decide to migrate to this Policy and transfer the ownership of assets on their land to Railway.

16.8 The Railway land to be used for providing connectivity to a GCT (on non-Railway land) shall not be licensed to the GCTO. This land shall remain in the possession and control of Railway, and the infrastructure (track, signalling equipment, and OHE) developed on this land, though funded and constructed by the GCTO, shall also be owned by Railway – as per the provisions of para 5.1.2 & 5.1.3 of the Policy.

07/07/2022

16.9 For GCTs developed entirely on non-Railway land, Railway will levy Terminal Charges for each rake handled (as per the applicable guidelines), which will be reimbursed to the GCTO.

16.10 No Terminal Charges shall be levied on cargo for which GCTO himself is the consignor and/or the consignee.

16.11 No Terminal Access Charges will be levied for rakes of privately-owned wagons when handled at GCTs built entirely on non-Railway land.

17. Dispute Resolution

17.1 In case of any dispute arising in the interpretation of the Policy, the decision of DRM will be final and binding.

17.2 Conciliation: All disputes and differences of any kind whatsoever arising out of or in connection with the construction and operations of GCT shall be referred by the GCTO to Railway Administration through 'Notice of Dispute.' RA shall, within 30 days after receipt of the 'Notice of Dispute,' notify the name of conciliator(s) to the GCTO. The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of Agreement. If the parties reach agreement on a settlement of the dispute, they shall draw up and sign a written Settlement Agreement duly signed by Railway's representative (Sr.DCM), GCTO and conciliator(s). When the settlement agreement is signed, it shall be final and binding on the parties. The conciliators shall be paid fee as fixed by Ministry of Railways time to time, which shall be shared equally by the parties. For other issues related with Conciliation, terms and conditions defined under Indian Railways General Conditions of Contract 2020 may be followed.

17.2.1 The parties shall not initiate, during the conciliation proceedings, any reference to arbitral or judicial proceedings in respect of a dispute that is the subject matter of the conciliation proceedings.

17.2.2 The conciliation shall be carried out as per "The Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof" and the proceedings shall be terminated as per Section 76 of the above Act.

17.3 Arbitration: If the dispute is not settled through Conciliation (as mentioned in para 17.2), it shall be decided by reference to arbitration. Arbitration shall be carried out as per provisions available for arbitration in Indian Railways General Conditions of Contract 2020 for works contracts, as amended from time to time.

17.4 Governing Law & Jurisdiction: This Agreement is governed by and shall be construed in accordance with the laws of India. In case of any dispute and difference arises, the Court of the place, where Land License Agreement has been made, shall only have the jurisdiction to try such litigation.

18. Termination of the Agreement

18.1 Subject to the provisions in the Agreement, Railway Administration may terminate the Agreement with a GCTO operating a GCT in the event of any serious irregularity committed by the GCTO. This may include any grave breach of the terms and conditions of the Agreement, any default by GCTO, violation of The Railway Act,

07/07/2022

1989, or commission of an unlawful act which is not in-line with Good Industry Practices.

18.2 Before terminating the Agreement, RA shall first issue a Show Cause Notice, informing GCTO to submit representation within 30 days. If no response is received, or if the response of GCTO is not satisfactory, a written Notice of Termination specifying a grace period of 180 days shall be given to the GCTO, by Sr.DCM with the approval of DRM. However, if no reply to the Notice for Termination is received within 180 days of the issue of Notice for Termination, the Agreement with GCTO will stand terminated and the same shall be communicated by Sr.DCM to GCTO. No termination payment shall be made by RA to the GCTO.

18.2.1 If the GCTO submits a reply within 180 days, RA will take further course of action on the merit of the case.

18.3 The GCTO will also have the right to terminate the Agreement by giving a notice of 180 days to the Railway Administration in the event of any difficulty faced by the GCTO in smooth functioning of the Terminal for reasons attributable to Railway as laid down in this policy, or for any other reason internal to the GCTO. No termination payment shall be asked by Railway from GCTO.

18.4 Any dispute arising out of this Agreement will be resolved through the Dispute Resolution Mechanism as prescribed under Para 17 above.

19. ***Power To Stop Traffic And To Terminate Agreement In Certain Events:***

The Railway Administration shall have the absolute right to refuse at any time to allow their rolling stock to go on or be used upon the Terminal or any part or extension thereof and shall also be entitled to determine this Agreement at any time after the happening of any of the following events:

19.1 In the event of the Applicant failing to deposit within the time fixed for the purpose any sum of sums required to be deposited under the provision of these presents or according to any direction of the Railway Administration.

19.2 In the event of the Applicant failing to pay any other sums payable to the Railway Administration under this Agreement or any other changes payable to the Railway administration in respect of the terminal or the use thereof within one month after the due date of payment or in the event of a due date not being specified then within one month after service of a written-demand for payment.

19.3 In the events of the Applicant failing to comply with any requisition of the Railway Administration to remove or repair any defect which in the opinion of the Railway administration may endanger the working and safety of the terminal within such time as shall be fixed by the Railways Administration for the purpose.

19.4 In the events of the Applicant ceasing for a consecutive period of 3 (three) months to use the terminal or any part for extension thereof for the Applicant's own traffic in connection with the Applicant's Works.

19.5 In the event of the Applicant contravening the provision of Clause 15 hereof.

19.6 In the event of the Applicant failing to observe or perform any other obligation on his part herein contained.

19.7 In the event of the terminal becoming dangerous or defective by reason of any act of God or other act or circumstances for which the Railway Administration is not responsible.

19.8 In the event of any branch line, terminal or part or extension thereof, connecting the terminal or any part or extension thereof with the Railway system, becoming dangerous or defective for any reason whatsoever and whether such branch line, terminal part or extension shall belong to the Applicant or to any third person.

07/07/2022

19.9 *In the event of any branch line, terminal or any part or extension thereof connecting the terminal or any part or extension thereof with the Railway system, being closed by the Railway Administration under any powers which the Railway Administration may possess whether by status or by Agreement with third persons or closed by order of the Government of India or any State Government.*

The Applicant shall have no claim whatsoever against the Railway Administration in respect of any refusal by the Railway Administration to allow their rolling stock to go on or be used upon the terminal or any connected Terminal or branch line in any of the aforesaid events.

Provided always that on the happening of any of the events mentioned in sub-Clauses 21.1, 21.2, 21.4, 21.5, 21.6, the Railway Administration shall not exercise the power conferred upon it by this Clause unless 14 (Fourteen) days' previous notice has been given in writing requiring the Applicant to comply with the demand or requisition as the case may be, of the Railway Administration and the Applicant has failed to comply with the Same within the time specified in such notice.

No notice shall be required to be given in the cases specified in the other sub-clauses of this clause.

20. ***Termination of Agreement on Death. Insolvency etc. :***

This agreement may be determined by the Railway Administration without prior notice at any time after the happening of any of the following events:

20.1 *In the event of the death of the Applicant, if he is an individual person.*
20.2 *In the event of a partition of the Joint family properties, if the Applicant is a Joint family governed by the Mitakshara School if Hindu Law.*
20.3 *In the event of dissolution of partners either by act of parties or by order of Court, if the Applicant is a firm or other association or body of individuals.*
20.4 *In the event of dissolution of partners either by act of parties or by order of Court, if the Applicant is a firm or other association or body of individuals.*
20.5 *In the event of Applicant becoming insolvent or going into liquidation either voluntarily or under an order of a competent Court.*
20.6 *In the event of the Applicant's interest in the works becoming wholly or partially vested in some other person.*
20.7 *In the event of the Applicant contravening the provision of Clause 21 hereof.*

21. ***Agreement To Bind Applicant Until Terminated By The Railway Administration***

21.1 *Until terminated by the Railway Administration or unless and until the person or persons in whom the entire rights and interests of the Applicant have vested and with wham the Railway Administration has agreed to enter into a Cargo Terminal Agreement has executed and registered such Agreement in the same form as these presents or in such other form as the Railway Administration may require as provided in Clause 21 hereof, this Agreement shall be binding upon the Applicant and the successors in title or interest of the Applicant in the Applicant's work*

(i) Provided that the Applicant may by giving 6 (six) months' notice to the Railway Administration, discontinue the use of the terminal. In such event, the Applicant shall not be liable for the payment of maintenance and other charges under the Agreement for the period subsequent to the date of expiry of the said notice, but nevertheless all other obligatians under the Agreement shall binding on him.

(ii) Provided further that the Railway Administration has the right without assigning any reason to terminate this Agreement on 6 (six) months' notice.

07/07/2022

22. ***Right To Charge Interest On Money Due Hereunder To The Railway Administration:***
Notwithstanding anything contained in the foregoing Clauses of this Agreement, the Railway Administration shall have the right to charge and recover from the Applicant interest at such rates, as may be fixed by the Railway Administration from time to time on any or all sums payable by the Applicant under the terms thereof, if such sums are not paid within one month from the due date and if no such date is fixed, within one month from the date on which a written demand is made by the railway Administration.

23. ***Right Of Deduction Of Money Due To The Railway Administration***

The Railway Administration shall have the right to deduct from any amount which may become payable by the Railway Administration to the Applicant or to the legal representative of the Applicant any money due from the Applicant to the Railway Administration under these presents or for freight, haulage or other charges or otherwise in connection with the construction, maintenance or working of the terminal.

24. ***Service Of Notices On Applicant:***
The Applicant shall maintain a proper office to which all letters, notices, demands and other communications intended for the Applicant may be sent and every notice, demand or other communication which shall be delivered at or sent by Registered Post to such office shall for all purposes whatsoever be deemed to have been validly and effectively delivered to the Applicant.

25. ***Exercise Of Powers :***
Subject as otherwise provided in this agreement, all notices to be given on behalf of the President of India and all other actions to be taken on his behalf may be given or taken on his behalf by the Railway Administration; the agreement signing authority or his authorized representative.

26. ***Alteration / Variation Of The Agreement:***
Except as hereby provided any verbal or written arrangement or abandoning, varying or supplementing this Agreement or any of the terms hereof shall be deemed conditional and shall not be binding on the railway administration unless and until the same is endorsed on this agreement or incorporated in a formal instrument and signed by the parties hereto and till then the Railway administration shall have the right to repudiate such arrangement.

27. ***Applicant Not To Transfer Rights ;***

27.1 The Applicant shall not be entitled to assign or transfer or subject or permit to be used or enjoyed by any other person in any manner whatsoever any of the rights or benefits conferred upon the Applicant by these presents and any purported assignment transfer or subletting or permission shall be void and of no effect. Provided also that in the event of any other person being permitted by the Railway Administration to use the terminal on the Applicant's request or otherwise, the Applicant shall remain responsible to the Railway Administration for all the charges and obligations under this Agreement.

27.2 Provided, however, that if the Applicant shall desire to transfer the Applicant's Works to any person or if the applicant being a Company shall go into liquidation and such intended transferee or the liquidator of the Company shall desire the use and benefit of the terminal than subject to the under mentioned conditions being complied with the Railway Administration may at its discretion on the written request of the Applicant and of the intended transferee or liquidator made prior to the transfer or within one month after the commencement of the liquidation as the case may be and after production by the transferee of the registered Deed of Transfer of the Applicant's Works pr after proof by the liquidator of this intension to carry on the Company's business for the purpose of

07/07/2022

the liquidation proceedings, allow the transferee or liquidator the use and benefit of the terminal. The conditions above mentioned are the following:

(i) That the liquidator shall be approved by the Railway Administration, but such approval will not unreasonably withheld.

(ii) That the liquidator shall duly sign and register a Cargo Terminal Agreement in the same form as these presents so far as then applicable or in such other form as the Railway Administration may then require.

(iii) That the applicant, Railway Administration and transferee shall duly execute an agreement of assignment as may be prescribed by the Railway Administration.

28. ***Cost of Execution Of Agreement:***
All expenses in drawing up the Agreement and the cost of stamping and registration shall be borne by the TO/Applicant. "Money receipt obtained from the Registration Office should be handed over to the Railways for collection of registered agreement which shall remain in the custody of Railways. Any charges, if levied for collection of registered agreement, shall also be borne by the Applicant.

29. **Agreement period**

The period of Agreement for operation of Gati-shakti Rail Cargo Terminals shall be for a maximum period of 35 years, which can be renewed further according to the rules and procedures applicable at the time of renewal.

30. **Agreement In Force From :**
The agreement shall be deemed to have come into force on and from……..

31. **Head Notes :**
The head notes herein are for the convenience of reference only and shall not affect the construction of these presents.

In WITNESS WHEREOF, the parties to these presents have set and subscribed their respective hands and seals hereunto on the day and year first above written.

For and on behalf of
THE PRESIDENT OF INDIA (First Party)
SIGNED, SEALED AND DELIVERED BY

Name : ……
Designation …….. (Sr. Divl. Commercial Manager)
Address : …….
(Authorized Signatory)

……..(Second Party)
(SIGNED, SEALED AND DELIVERED by

07/07/2022

Name : .....
Designation :.....
Address : .....

In the present of Witness

1.

2.

Dated the ____ Day of ~ ___ 20_

Cargo Terminal Agreement-
Reg. No.: _____ For _____ Terminal
At Kilometre: _____ Between Stations _____ and _____

07/07/2022

Model Agreement for Gati Shakti Multi-modal Cargo Terminal (fully/partially) on Railway Land

_____Railway
'Gati-Shakti Rail Multi-modal Cargo Terminal' Agreement

This **Agreement** is made and executed at ……..on this ……. Day of ……., 20…….

BY AND BETWEEN

THE PRESIDENT OF INDIA acting through (incorporate name and designation of the officer authorized under Article 299(1) of the Constitution) having its office at ……. (hereinafter referred to as "**The Railway Administration**" which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the One Part;

AND

……. [hereinafter referred to as **("Applicant or GCTO")*** which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the Other Part.

WHEREAS The Applicant is desirous of having a Cargo Terminal laid by the Railway Administration at _____ from the _____station yard of the _____ Railway taking off from ;Kilometer No. _____ between_____ station and_____ station of the Railway as shown in red and green on the plan bearing CE's No. _____ hereto annexed for the purpose of carrying on the Applicant's business in the Applicant's premises situated at _____ _ District _____

AND WHEREAS the Railway Administration is willing to lay the said cargo terminal for the said Applicant upon and subject to the terms and conditions hereinafter set forth.

NOW, Therefore, this Agreement witnesseth as follows:

1. **Interpretation**: In these presents, unless the context otherwise requires, the following Words and Expressions have the meaning and shall be interpreted as specified, namely-

Words importing the singular number include the plural number and vice versa.

"Person" includes a firm or other association or body of individuals and a Company or other Corporate Body.

"The Railway Administration" means and includes the General Manager for the time being of (name of Zonal Railway) Railway and any officer of the (name of Zonal Railway) Railway authorized by any such General Manager to deal with any matters, with which these presents are concerned.

"The Applicant" means the person named as party hereto of the other part and includes in the case of a firm or other association or body of individuals, the individual person or persons for the time being and from time to time constituting the association or body and, In the case of a company, corporation or body corporate the Successor in business of interest, such company, corporation or body corporate for the time being.

07/07/2022

"Works" means the premises belonging to or occupied or used by the Applicant which are connected with the (name of the Zonal Railway) Railway system by the terminal herein before mentioned,

"Undertaking" includes all land, railway lines, works, buildings, engines, rolling stock and other movable or immovable property now or at any time hereafter forming part of or pertaining to the (name of the Zonal Railway) Railway system as now or hereafter constituted and all engines and rolling stock (whether belonging to the _____ Railway system or not) passing over such system.

"Terminal" Includes the Railway track connecting the Applicant's works with the Railway system, as hereinafter agreed to be constructed by the Railway Administration and all branches and extensions thereof which may hereafter be constructed by the Applicant or by the Railway Administration at the Applicant's request and all sleepers, ballast, embankments, bridges, tunnels, signals interlocking and tele-communication equipment gates, buildings and other constructions, erections, works and movable property constructed / erected / made/ provided or used in connection with the said track and also all land whereon or on part whereof the said track and connected things aforesaid are constructed / erected / made / provided or used including land acquired for the purpose thereof as hereinafter provided and land belonging to the Railway Administration and land belonging to or occupied or used by the Applicant.

The Cargo Terminal shall cover only that portion of track network on which Railway rolling stock will ply. The network utilized by the Company/Party for their internal use shall not form part of the Cargo Terminal defined herein."

"Sub-grade Work" includes the construction of embankments, the making of cuttings and the carrying out of other earth work, the construction of bridges (exclusive of girder works), buildings, platforms, tunnels, culverts, drains and openings and laying out of ballast and all other works necessary to permit the laying and construction of railway track of the terminal and generally all works which have to be abandoned, if the terminal be closed.

"Permanent Way Materials" includes girders, rails, sleepers, fastenings, points and crossings, fencings, signaling, interlocking and telecommunication equipment and over-head structure and any other things connected therewith for electric traction and other machinery (except station machinery) and equipments necessary for working the terminal.

"Legal Representative" means any person who is competent to give the Railway Administration a valid discharge in respect of any money or property which may be payable or deliverable to the Applicant and shall include the executor and administrator of a deceased person, a succession certificate holder, the surviving or continuing partners or members in the case of a firm, association or body of individuals, the certificated guardian if a minor's property, the committee of lunatic, the assignee or receiver of an insolvent's estate, the liquidator of a Company, a receiver and any person legally appointed to represent the estate of the Applicant.

Meaning of other key terms not mentioned above, shall be same as given in para 2 (Definitions) of the Gati Shakti Multi-modal Cargo Terminal Policy issued vide Freight Marketing Master Circular/2021 dated 15.12.2021.

* **Note**: Forms Of Description Of The Applicant –

07/07/2022

(Where a single person is the Applicant) "and A.B. (insert full name) of (insert address and occupation)"

(Where two or more persons are Joint Applicants), "and A.B. (insert full name) of (insert address and occupation) and C.D.: (insert full name) of (insert address and occupation)".

(Where a single person trading under a different fee name is the Applicant) "and A.B. (Insert full name) of (insert address and occupation) carrying an business under the name or style of (insert name) at (if the business is carried on at a different address from the address already Inserted then insert such additional address)."

(Where a partnership firm is the Applicant and the names of the partner known), "and A.B. (Full name) and C.D. (full name) carrying on business partnership as (insert nature of business) under the style or firm of (insert name or style of the firm and address).

(Where a partnership firm is the applicant and the names of partners are not known), "and A &Co. (insert name or style of the firm) a partnership firm carrying on business at (insert address) as (insert nature of business)."
(Where an incorporated Company is the Applicant), "A.B. &CO. Ltd. a company incorporated in (Insert country of incorporation (e.g. India, England or elsewhere, as the case may be) and having its registered office at (insert address)" (in the case of a company incorporated elsewhere than in India address) "and its principal office in India at (insert address)".

(Where the Applicant is a joint family governed by the Mitakshara School of Hindu Law), "A.B. (insert full name) for self and as Karta or managing member of the Joint family, governed by the Mitakshara School of Hindu Law, carrying on business under the name or style of (insert name under which the joint family business is carried on) at (Insert address) and C.D.E.F.G.H. etc. (insert full name) being the other adult members of the said Joint family.

2. **Agreement To Construct Gati Shakti Multi-Modal Cargo Terminal (GCT) :**

Subject to the terms and conditions hereinafter contained, the Railway Administration shall at the cost and expense of the Applicant in all respects, construct partly or fully on the land of the Railway Administration and partly or fully on the land of the Applicant of the said Cargo Terminal, from _____ (length of terminal) Kilometers on _____ (name of portion) Branch as shown in red and green on the plan annexed hereto (bearing CE's No. _____) connecting the Applicant's work known as _____ situated at or near _____ in the District of with the system at or near _____ on _____ Railway.

3. Railway land where GCT is developed partially or wholly on railway land (except for Railway land provided for the connectivity to GCT as mentioned in para 13 of Schedule 1 & 2 of the Gati Shakti Multi-modal Cargo Terminal Policy issued vide Freight Marketing Master Circular/2021 dated 15.12.2021) will be licensed to GCTO – for which modalities of calculating and levying land license fee shall be as per extant rules/Board's circular on land licensing (2005/LML/18/8 dated 10.02.2005 and 08.6.2005), as amended from time to time.

3.1 A separate Land Licensing Agreement shall be executed between the Railway administration and the GCTO as per Annexure

4. **Capital Cost of GCT**

07/07/2022

4.1 The GCTO shall bear the entire capital cost of new GCT from the take-off point onwards, as marked on the Engineering Scale Plan (ESP) at the serving station.

4.1.1 For the linear connectivity portion of GCT passing through the Railway land, GCTO shall provide only the minimum essential infrastructure of track, OHE and signalling equipment at the cost of GCTO (other assets not related to track, signalling, or OHE, if required, shall be constructed by Railway at its own cost). In case of any dispute, the decision of DRM shall be final in this regard.

4.1.2 The ownership of infrastructure including the track, signalling equipment and OHE created on Railway land under para 5.1.1 of Master Circular on Gati Shakti Multi-modal Cargo Terminal Policy dated 15.12.2021 (**hereinafter referred to as the policy**) shall belong to Railway, even though the capital cost for these shall be borne by the GCTO.

4.2 The capital cost for all common-user traffic facilities at the serving station (as marked on the ESP), including Signalling & Telecommunication works, modification and up-gradation to existing interlocking/ OHE, or electrification in future within the station limit up to take-off point, shall be borne by the Railway.

4.3 Maintenance and operation of assets created under para 5.2 of the policy (common-user traffic facilities) at the serving station including staff costs, shall be the responsibility of the Railway.

4.4 The capital expenditure required for augmenting or up-grading the facilities and infrastructure on the connectivity portion from take-off point onwards towards Terminal and within the premises of Terminal shall be borne by the GCTO.

4.5 The connectivity to GCTs shall normally take-off from the existing serving station. However, in case when it is operationally not feasible to provide a connection from an existing serving station, provision of a Block Hut/ Block station (between two existing stations) with required points & crossings may be considered, provided it is operationally feasible. This will be done on the request of GCTO.

4.5.1 In such cases, the entire capital cost of the new Block Hut/ Block station and related infrastructure shall be borne by the GCTO. However, this work will be executed by Railway, and ownership of the same shall remain with the Railway.

4.5.2 However, for new GCTs planned to load one million Tonne or more (outward traffic) per annum, the capital cost of new Block Hut/ Block station will be repaid to the GCTO by Railway.

4.5.2.1 The repayment of capital cost of the new Block Hut/ Block station will be made by Railway through 10% rebate on the outward traffic loaded at the Terminal, till such time the capital cost has been repaid to the GCTO. This 10% rebate shall be granted on the normal tariff rate (NTR) of the commodity.

4.5.2.2 The repayment of capital cost as mentioned in para 4.5.2.1 above will be done only if the Terminal achieves the target of loading one million Tonne per annum within two Calendar Years of commissioning (excluding the year of commissioning). For example, if a GCT commissioned during calendar year 2022 achieves one million Tonne loading during calendar year 2024, then the repayment of capital cost of new Block Hut/ Block station (through 10% rebate on outward traffic) shall start from 01st April 2025.

07/07/2022

4.5.2.3 This repayment shall be made for the investment made by the GCTO on behalf of Railways. As such, this repayment through freight rebate shall be admissible over and above all other rebates that the GCTO may become eligible for in future.

4.5.2.4 This provision of repayment shall be applicable only for GCTs for which Agreement between RA and GCTO has not been entered into till the date of issue of this Policy.

5. **Sub-Grade Work** :

The sub-grade work, culverts & bridges, drains, pitching & protection work and ballast supply shall be carried out at the cost and expense of the Applicant either by his own agency or by the Railway Administration on his request. When the works or part of them are carried out by the Applicant, the work shall conform to the Railway Administration's drawings and specifications and shall be executed under the supervision of Engineering staff of the Railway Administration or under the supervision of Approved Consultant.

6. **Security of Assets**

6.1 The responsibility of security of railway assets over Railway land shall be of Railways. However, the responsibility of security of railway assets outside Railway Land or on land licensed to GCTO shall be of GCTO.

6.1.1 In case of theft of any railway asset on non-Railway land or railway land licensed to GCTO, the maintenance of which is with Railway, the restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

6.1.2 In case of theft of OHE including OHE on non-Railway land or railway land licensed to GCTO, restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

7. **Maintenance of Assets**

7.1 Maintenance of assets on Railway land (excluding the Railway land licensed to GCTO), including Track and Signalling Equipment installed on Railway land under para 5.1.1 of the policy, shall be done by Railway at its own cost.

7.2 Maintenance of OHE from the take-off point onward including inside the Terminal shall be done by Railway at its own cost – as this involves safety of men and equipment, and can also impact rail operations outside the Terminal boundary.

7.3 In addition to above, the maintenance of assets (track, bridges, signalling equipment, etc) on non-Railway land including the land licensed to GCTO, ***outside the Terminal***, may also be done by Railway at its own cost if the GCTO transfers the ownership of these assets to Railway (the ownership of land on which such assets are created shall however continue to be with GCTO). Provided further, this provision shall be applicable only to those GCTs where freight tariff is charged on 'through distance basis.'

7.3.1 In case maintenance of assets, including Track and Signalling Equipment, is being handed over to Railways on migration to this policy by GCTO, the GCTO will ensure that the standards of track and signalling infrastructure being transferred to Railway is in accordance with the prescribed standards for GCTs, as decided by Railways (Annexure 'D' of the policy). If any up-gradation/ replacement/ renewal of any infrastructure is required, the GCTO shall bear the cost for the same.

07/07/2022

7.3.2 In case of damages to the assets due to accident, etc, the replacement shall be done by Railway. However, if the responsibility of accident, after Enquiry (joint enquiry by representatives of Railway as well as GCTO), is fixed on the GCTO – the GCTO shall have to bear the cost of all the replacements. The decision of the Nodal Officer, i.e. DRM, in this regard shall be final.

7.3.3 In case the damage to assets is due to an external cause (floods, breaches, terrorist activity, etc), the cost of restoration shall be borne by the GCTO.

7.3.4 If the GCTO does not agree to transfer the ownership of assets (track, bridges, signalling equipment, OHE, etc) to Railway or freight tariff is not chargeable 'on through distance basis'; the maintenance of these assets – except OHE – shall continue to be the responsibility of GCTO.

7.3.4.1 Railway shall be entitled to conduct periodic inspections of such GCTs being maintained by the GCTO, for which Inspection Charges will be levied as per the prescribed norms.

7.3.4.2 GCTO may also get the maintenance done through Railway for such Terminals, in which case Maintenance Charges shall also be levied as per the prescribed norms.

7.3.5 The maintenance of GCT yard, including loading/ unloading lines, shall be the sole responsibility of GCTO. Distribution of the responsibility of track has been explained in Schedule '3'.

7.3.6 At such GCTs, Railway shall maintain the signalling equipment till the line-clear/ receipt-despatch arrangement with serving station(s), at its own cost. Maintenance of signalling equipment internal to the Terminal shall be the sole responsibility of the GCTO.

7.4 The cost of all subsequent up-gradations (on account of change of technology, standards, etc) shall be borne by the GCTO.

7.5 Maintenance of all the infrastructure and equipment inside the GCT which are not to be accessed by Railways' rolling-stock, and maintenance of infrastructure required for loading/ unloading (tipplers, hoppers, etc) shall be the responsibility of GCTO.

8. Cost of Electrification

8.1 In case of new GCT, the entire cost of electrification of the Terminal and the connectivity portion between take off point and GCT, shall be borne by the GCTO.

8.2 While undertaking electrification of main line and serving station by Railways, the electrification of the existing GCT(s) including the rail-line connecting the Terminal(s) shall be undertaken at the Railway's cost.

9. Handling of Wagons in GCTs:

9.1 If any damage and deficiencies is caused to railway wagons due to the fault of the GCTO, the damage and deficiency charges shall be raised by Railway and paid by the GCTO as per the extant rules of Railways.

9.2 All tipplers and bulk handling systems used for loading/unloading of Railway wagons shall be provided and commissioned by GCTO at its own cost in accordance with the RDSO's approved specifications. This provision shall however not be applicable on the systems/ equipment installed by GCTO which are not to be used for handling Railway wagons (such as conveyor-belts, JCBs, excavators, etc).

07/07/2022

9.2.1 GCTO shall ensure that tipplers, bulk handling systems, and mechanized equipment are operated only by the qualified and experienced staff under adequate supervision.

9.2.2 Such equipment shall be regularly maintained and replaced at the end of their codal life by GCTO at its own cost.

9.2.3 In case of any accident/ derailment inside the Terminal or outside the Terminal up to serving station, Railway will provide Accident Relief Train (ART) initially free of cost. Provided further, if the responsibility of accident/ derailment after enquiry is fixed on the GCTO, ART Charges shall be payable by GCTO as prescribed by Railway from time to time. The due Charges will be deducted from the future payments by Railway to GCTO. However, in case no regular payments are being made by Railway to GCTO, on demand from Railway, the GCTO shall pay ART Charges to Railway without any delay.

9.2.4 The accident enquiry as mentioned in para 9.2.3 above shall be conducted jointly by the representatives of Railway and GCTO to be nominated by DRM and GCTO respectively. The accepting authority of Enquiry Report shall be DRM, whose decision shall be final and binding on GCTO.

10. C&W Maintenance Facilities

10.1 Normally C&W facilities shall not be constructed at GCTs.

10.2 However, if C&W facilities are operationally required at any GCT as per the extant instructions, only one-time capital cost for setting-up these facilities shall be borne by the GCTO. Operational costs, including staff cost and material cost (for Railway-owned stock), shall however be borne by the Railway.

10.3 For GCTs dealing with POL and other hazardous material, specialized facilities inside the Terminal as well as in Railway yard (if required) shall be developed by the GCTO at its own cost, and shall be maintained by GCTO to ensure that no untoward incident/ accident takes place at such facilities.

11. Authorized Users

11.1 GCTO shall inform Railway about the authorized rail users of the GCT before notification, so that they may be incorporated in the TMS module of FOIS.

11.2 If the GCTO desires to add more rail users subsequently, GCTO shall inform Railway at least seven (07) working days in advance, to enable incorporation of such rail users in FOIS.

12. Commodities Permitted

12.1 Unless otherwise specified by Indian Railway, a GCT shall be permitted to book and handle all traffic – including coal and coke, which shall be as per the guidelines of 'preferential traffic schedule' issued by Ministry of Railways from time to time.

13. Engine-on-Load (EOL) Scheme

13.1 All new GCTs shall be set up on 'charging on through distance basis,' as per the instructions contained in Rates Master Circular on 'Freight on Through Distance Basis issued on 24.09.2014 (Annexure 'A' of the policy), as modified from time to time.

13.2 All new GCTs charged on through distance basis shall be governed by the Engine-on-Load policy (FM Circular No.05 of 2013 dated 07.03.2013), as modified from time-to-time.

07/07/2022

13.2.1 Railway may permit commissioning of a new GCT on non-EOL basis with the approval of DRM, if Engine-on-Load scheme is not operationally feasible.

14. Charging of Commercial Staff

14.1 No cost of commercial staff will be charged from the GCTO w.e.f the date of issue of this policy. However, for existing Terminals (*where PFT/ Private Siding Agreement has already entered into between RA and operator before the issue of this Policy*) where cost of commercial staff has already been deposited by the GCTO, there shall be no refund. Further, dues of commercial staff cost pending, if any, as on the date of issue of this policy shall be payable by GCTO.

15. Provision of Weighbridge

15.1 All GCTs planning to deal with outward cargo (loading) shall have a provision of Electronic In-motion Weighbridge (EIMWB) at a suitable location inside the Terminal. The EIMWB shall comply with OIML (International Organization of Legal Metrology) document (available at https://www.oiml.org/en/files/pdf_r/ r106-2-e12.pdf) and the latest RDSO specifications.

15.1.1 Provision of EIMWB shall not be essential for GCTs dealing with inward cargo (unloading) only.

15.1.2 If a GCT without an EIMWB plans to start loading, the GCTO shall make arrangement for provision of an EIMWB as per the provisions of the Policy. DRM, in consultation with CFTM of the Railway, may, however permit loading at a GCT (if operationally feasible) – by nominating an alternative Railway weighbridge for weighment of rakes, awaiting installation of EIMWB, for a period of up to six months at a time from the date of start of such loading, duly recording the reasons for the same.

15.2 GCTO shall bear the cost of procurement (inclusive of the requisite warranty and a post-warranty comprehensive Annual Maintenance Contract (AMC) till the end of codal life), installation, and replacement of the EIMWB at the end of its codal life. GCTO shall also bear the cost of weighbridge house, weighbridge siding, and related infrastructure.

15.3 GCTO shall get the weighbridge certified by the Weights & Measures department of the state government, and shall comply with all the applicable statutory and legal requirements.

15.3.1 The weighbridge, after testing and certification by the Weights and Measures department of the state government, shall be sealed by their personnel in presence of GCTO's and Railway's representatives. This seal shall be broken, if required, only in the presence of the personnel of Weights and Measures department and Railway's representative.

15.4 GCTO shall bear the cost of manpower to operate the EIMWB, and the cost for its linking with FOIS.

15.5 RR will be issued on the basis of weighment within a GCT as per the extant instructions provided vide Rates Master Circular/Weighment/2019/0 dated 25.07.2019 and other applicable instructions of Railways (Annexure 'B' of the policy), as modified from time to time.

15.6 No extra free-time will be provided for weighment at an EIMWB inside a GCT.

15.7 Railway Administration reserves the right to conduct periodic and/or surprise inspections of the operation, functioning and calibration of EIMWB.

15.8 For the purpose of mandatory testing of EIMWB, test-wagons shall be provided by Railway on payment of Haulage Charges. These Haulage Charges shall be levied for the actual distance travelled or 100 km, whichever is less.

07/07/2022

15.8.1 In cases where there is more than one weighbridge located within a GCT, the Haulage Charges as per para 15.8 above shall be levied for the 'first weighbridge,' and shall be levied @25% of the charges for the 'first weighbridge' for other weighbridges inside the Terminal.

15.8.2 For random surprise testing by Railway, test-wagons will be provided for without levying Haulage Charges or any other charges.

15.8.3 Railway shall try to ensure availability of 'test wagon-sets' in the vicinity of all GCTs, so that there is no delay in arranging these wagons for testing.

15.9 If any overloading is detected in the outward traffic the same will have to be unloaded/ re-adjusted at the Terminal itself – for which no extra free-time will be provided.

15.10 Whenever the EIMWB goes out of order, it shall be put right by the GCTO within three days, failing which a penalty of Rs 4,000/- per day or part thereof for the next ten days, and Rs 8,000/- per day or part thereof thereafter, shall be imposed.

15.11 Under exceptional circumstances, if it becomes essential to install the EIMWB of a GCT either partially or wholly on Railway land not licensed to GCTO (on account of operational and technical constraints), permission for the same may be given by the DRM. Location of such an EIMWB shall be decided by Sr.DOM, in consultation with Sr.DCM, Sr.DEN & Sr.DME.

15.11.1 All terms and conditions applicable on EIMWB inside a GCT shall also be applicable on an EIMWB installed by GCTO on such land. However, Railway will be the executing agency for installation, operation, and maintenance of such EIMWBs.

15.11.2 Cost of the comprehensive AMC and manpower to operate such EIMWB shall be borne by the GCTO.

15.11.3 Railway will be free to weigh rakes other than those of the concerned GCT at such EIMWB.

15.12 Railway may permit weight-o-meter/ pre-weighbin system of weighment in GCT on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager, keeping in view the requirement and to avoid any manipulation of weighment data.

15.12.1 Such equipment shall be certified by Weights & Measures department, and should also meet all extant statutory provisions and policy guidelines.

15.12.2 The system should have proper locking/ sealing arrangement to avoid any tampering with the system including software. The 'admin' control should rest with the Railways.

15.12.3 One-to-one correspondence between Weight-o-meter discharge and corresponding wagon shall be maintained by GCTO.

15.12.4 A procedure order for normal operations covering precautions to be taken to ensure that wagons are empty before loading and periodical test weighing of this system shall be maintained by GCTO.

15.12.5 The system should have interface with FOIS to avoid any error in data capture during transmission.

15.13 GCTO may also be permitted to install an alternative means of weighment of wagons, which should have accuracy level at least equal to that of EIMWB and should ensure weighment within the time taken by EIMWB.

15.13.1 GCTO shall submit request for such alternative means of weighment, along with all the necessary documents, which may be permitted by Railway on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager.

15.13.2 GCTO shall be responsible for getting the proposed means of weighment of wagons certified by Legal Metrology/ Weights & Measures department, and also for ensuring its proper upkeep and maintenance at its own cost.

07/07/2022

16. **Installation of FOIS and TMS**

16.1 FOIS and TMS with limited access as prescribed by Indian Railways shall be installed at the GCT – at the cost of GCTO. All RRs will be prepared through TMS. Complete maintenance of FOIS and TMS will be done by Railway at its own cost.

16.1.1 Cost of replacement of FOIS and TMS equipment, at the end of their codal life, shall be borne by the GCTO.

17. **General Conditions**

17.1 Applicant/ GCTO will be solely responsible for – (a) arranging/ acquiring/ownership/ lease/licensing of non-Railway land for the development of GCT; (b) all statutory and non-statutory clearances from other government departments and statutory bodies; and (c) payment of all charges, taxes/GST, surcharges, cess, levies, etc, related to transportation and handling of cargo.

17.2 Unless otherwise mentioned in this policy, all 'Commercial and Operating rules' as applicable for a goods-shed for booking, supply and delivery of goods shall be applicable at GCTs.

17.3 The GCTO shall be responsible for clearance of all Railway dues, including demurrage charges & land license fee, accrued within the GCT. For the sake of clarity, it is explicitly mentioned that demurrage charges will be borne by the GCTO for demurrage occurring on its own private land or occurring on railway land licensed to the GCTO.

17.4 The cost of electricity/ diesel consumed by Railway locomotives shall be borne by Railway.

17.5 The GCTO shall provide at his own cost the level-crossings and ROB/ RUB/ LHSs for safe passage of trains as well as road vehicles, as per requirement and prescribed norms.

17.5.1 All level-crossings have to be provided with requisite infrastructure (gate-post, gate-lodge, etc) and have to be manned by GCTO at its own cost.

17.5.1.1 If the level-crossing becomes due for interlocking, the cost of interlocking shall be borne by the GCTO.

17.5.2 Maintenance of level-crossings falling on the track being maintained by Railway shall be done by Railway at its own cost; while maintenance of level-crossings falling on the track being maintained by the GCTO shall be done by GCTO (as illustrated in Section III of Schedule '3' of the policy).

17.6 Railway shall reserve the right to grant connectivity to another GCT(s) from the portion of track on Railway land as well as from the portion of track which is being maintained (and assets are owned) by Railway. For the sake of clarity, Railway may permit connectivity to another Terminal from the connectivity portion of a Terminal – (i) on Railway land where the assets are owned and maintained by Railway; and (ii) on non-Railway land where the ownership of assets has been transferred to Railway by the GCTO, and the assets are maintained by Railway though the land is owned by the GCTO. This provision shall be applicable on Railway land for all GCTs; and on non-Railway land for all new GCTs, as well as on existing Terminals who decide to migrate to this Policy and transfer the ownership of assets on their land to Railway.

17.7 For GCTs established entirely or partially on Railway land, Railway will levy Terminal Charges and Terminal Access Charges similar to those being levied on Railway goods-sheds. These Terminal Charges and Terminal Access Charges will be shared with the GCTO according to the quoted bid percentage (as mentioned in para 9 above of this Schedule '2').

07/07/2022

17.8 At the time of cancellation / termination / expiry of the Agreement, the Railway land, along with the entire infrastructure developed on it by the bidder, shall revert back to Railway on as-is-where-is basis, without payment of any compensation.

17.9 The Railway land used for providing connectivity to the Terminal shall remain in possession of Railway, along with the entire infrastructure created on it (as per provisions of para 5.1.2 & 5.1.3 of the Policy).

17.10 Railway land where GCT is developed partially or wholly on railway land (except for Railway land provided for the connectivity to GCT as mentioned in para 13 of Schedule 1 & 2) will be licensed to GCTO – for which modalities of calculating and levying land license fee shall be as per extant rules/Board's circular on land licensing (2005/LML/18/8 dated 10.02.2005 and 08.6.2005, Annexure-E of the policy), as amended from time to time.

17.11 Responsibility for maintaining the track and signalling equipment shall be as per the provisions of para 7 of this Policy. Responsibility of maintaining loading/ unloading wharf(s), roads, drainage, etc, shall rest with the GCTO.

17.12 GCTO shall also be responsible to ensure that the entire infrastructure of Terminal is properly maintained and is duly upgraded/ replaced at the end of codal life, as per Good Industry Practices.

17.13 For GCTs constructed fully or partially on Railway land, the GCTO shall be expected to give at least the prescribed annual bench-mark of traffic (outward plus inward combined, in NTKM) to Railway, which shall be commensurate with the value of Railway land earmarked for GCT, as under:-

Value of land	Bench-mark Traffic (in NTKM)
Up to Rs 10 crore	200 million
More than Rs 10 crore, & up to Rs 25 crore	500 million
More than Rs 25 crore, & up to Rs 50 crore	1,000 million
More than Rs 50 crore, & up to Rs 100 crore	2,000 million
More than Rs 100 crore	4,000 million

17.13.1 The Bench-mark Traffic shall be applicable from the Financial Year subsequent to the year of commissioning, and shall be revised at the time of each renewal/ extension of Land Licensing Agreement according to the revised value of land. For example, if a GCT has been commissioned during 2023-24, with the value of Railway land being Rs 20 crore – then the Bench-mark from the years 2024-25 onwards shall be 500 million NTKM. This Bench-mark Traffic shall be revised at the time of every renewal/ extension of Land Licensing Agreement.

17.13.2 If the GCTO achieves or surpasses the Bench-mark Traffic during any Financial Year, an incentive equal to 5% of the Land License Fee (which be levied as per the provisions of para 17.10 above) shall be granted for the next year provided that previous Land License Fee have been paid and there is no outstanding dues in this regard. For the example given in para 17.13.1 above, if the GCTO achieves Bench-mark Traffic during 2025-26, then an incentive equal to 5% of Land License Fees (as per the provisions of para 17.10) shall be granted for the year 2026-27.

07/07/2022

17.14 Subject to the provisions of para 17.10 above, GCTO will be free to create infrastructure and/or to provide value-added services/ facilities (such as warehousing, processing, packaging, etc. provided that such infrastructure/ value-added services/ facilities, if created, shall be available to all users of the GCT without discrimination of any sort. GCTO will also have the authority for deciding the user charges/ fees for value-added services/ facilities as per market conditions – without any interference from Railway. However, the use of value-added services/ facilities will be optional and no customer will be forced to use those services or to pay for them. Such value-added services/ facilities shall conform to Good Industry Practices.

17.14.1 GCTO shall not sub-lease/ sub-license/ mortgage Railway land, and shall not create any third-party encumbrance on Railway land.

17.14.2 For any value-added service/ facility developed on Railway land, GCTO shall ensure that either the complete inward traffic or the complete outward traffic, for each commodity handled, is transported through Indian Railway system. Railway reserves the right to undertake any inspection of the Terminal to safeguard its interests and to direct the GCTO to discontinue such activities if such activities are detrimental to Railway's cargo business, failing which the Agreement may be terminated. For avoidance of doubt, such termination will be treated as default by the GCTO.

17.14.3 The responsibility of obtaining all statutory and environmental clearances for such value-added services, if required, shall rest solely with the GCTO. Any violation of statutory compliance will invite merit for termination clause of the Agreement on GCTO's default. Any liability/ default created by such violation will be the sole responsibility of the GCTO, and Railway will not be responsible for this.

17.15 GCTO shall use Railway land for activities related to Railway cargo business only. If the GCTO indulges in any commercial activity not related to Railway cargo business on Railway land or fail to adhere to the provisions of para 17.14, 17.14.1, 17.14.2 & 17.14.3 above, the Agreement for GCT may be terminated without any compensation/ termination payment to the GCTO. For avoidance of doubt, such termination will be treated as default by the GCTO. In case of any dispute whether any activity is related to Railway cargo business or not, the decision of the nodal officer (i.e. DRM) shall be final and binding on the GCTO.

17.16 The GCT located completely or partially on Railway land will remain a common-user facility, and GCTO shall ensure non-discriminatory access for all rail-customers/ potential customers to such Terminals. The GCTO will not prevent any rail-customer/ potential customer from accessing the Terminal (provided the facilities for handling their cargo exists at the terminal). Road access to the GCT will not be blocked by the GCTO.

17.17 GCTO will have the permission to expand the Terminal further by acquiring/ leasing the adjacent non-Railway land. However, any such acquisition/ leasing of additional land will have to be managed by the GCTO through his own resources. Railway will not charge any Land License Fees for the additional land acquired by the GCTO.

17.17.1 In such cases, the levy of Terminal Charges and Terminal Access Charges – and their sharing with the GCTO – will continue as before as per the decided principle.

17.18 A joint team (comprising of Sr.DOM, Sr.DCM, Sr.DEN, Sr.DSTE & Sr.DEE/TRD) shall inspect the GCT at least once a year to ensure that there is no breach of Agreement or policy provisions by the GCTO. In addition, inspections may also be conducted by Railway officials as per the provisions of para 17.14.2 and 17.15 above.

07/07/2022

18. Dispute Resolution

18.1 In case of any dispute arising in the interpretation of the Policy, the decision of DRM will be final and binding.

18.2 Conciliation: All disputes and differences of any kind whatsoever arising out of or in connection with the construction and operations of GCT shall be referred by the GCTO to Railway Administration through 'Notice of Dispute.' RA shall, within 30 days after receipt of the 'Notice of Dispute,' notify the name of conciliator(s) to the GCTO. The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of Agreement. If the parties reach agreement on a settlement of the dispute, they shall draw up and sign a written Settlement Agreement duly signed by Railway's representative (Sr.DCM), GCTO and conciliator(s). When the settlement agreement is signed, it shall be final and binding on the parties. The conciliators shall be paid fee as fixed by Ministry of Railways time to time, which shall be shared equally by the parties. For other issues related with Conciliation, terms and conditions defined under Indian Railways General Conditions of Contract 2020 may be followed.

18.2.1 The parties shall not initiate, during the conciliation proceedings, any reference to arbitral or judicial proceedings in respect of a dispute that is the subject matter of the conciliation proceedings.

18.2.2 The conciliation shall be carried out as per "The Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof" and the proceedings shall be terminated as per Section 76 of the above Act.

18.3 Arbitration: If the dispute is not settled through Conciliation (as mentioned in para 18.2), it shall be decided by reference to arbitration. Arbitration shall be carried out as per provisions available for arbitration in Indian Railways General Conditions of Contract 2020 for works contracts, as amended from time to time.

18.4 Governing Law & Jurisdiction: This Agreement is governed by and shall be construed in accordance with the laws of India. In case of any dispute and difference arises, the Court of the place, where Land License Agreement has been made, shall only have the jurisdiction to try such litigation.

19. Termination of the Agreement

19.1 Subject to the provisions in the Agreement, Railway Administration may terminate the Agreement with a GCTO operating a GCT in the event of any serious irregularity committed by the GCTO. This may include any grave breach of the terms and conditions of the Agreement, any default by GCTO, violation of The Railway Act, 1989, or commission of an unlawful act which is not in-line with Good Industry Practices.

19.2 Before terminating the Agreement, RA shall first issue a Show Cause Notice, informing GCTO to submit representation within 30 days. If no response is received, or if the response of GCTO is not satisfactory, a written Notice of Termination specifying a grace period of 180 days shall be given to the GCTO, by Sr.DCM with the approval of DRM. However, if no reply to the Notice for Termination is received within 180 days of the issue of Notice for Termination, the Agreement with GCTO will stand terminated and the same shall be communicated by Sr.DCM to GCTO. No termination payment shall be made by RA to the GCTO.

07/07/2022

19.2.1 If the GCTO submits a reply within 180 days, RA will take further course of action on the merit of the case.

19.3 The GCTO will also have the right to terminate the Agreement by giving a notice of 180 days to the Railway Administration in the event of any difficulty faced by the GCTO in smooth functioning of the Terminal for reasons attributable to Railway as laid down in this policy, or for any other reason internal to the GCTO. No termination payment shall be asked by Railway from GCTO.

19.4 Any dispute arising out of this Agreement will be resolved through the Dispute Resolution Mechanism as prescribed under Para 18 above.

20. ***Power To Terminate Agreement, If Traffic Insufficient :***

20.1 Notwithstanding anything contained in the Agreement, the Railway Administration shall be entitled, in the event of the Railway Administration being of the opinion that the Applicant's traffic over the terminal is insufficient to justify the retention of terminal by the Applicant of which the 'Divisional Railway Manager' of the Railway Administration will be the sole judge to terminate this Agreement by giving to the Applicant not less than 6(six) months' notice in writing of the Railway Administration's intention to terminate this Agreement and on the expiry of such notice, this Agreement shall stand terminated.

20.2 The termination of this agreement under the provisions of this Clause shall be without prejudice to any rights of remedies to which the Railway Administration will be entitled to, in respect of any acts, matter or things arising before such termination.

21. ***Power To Close The Portion Of The Terminal Within Railway Land Colored Red In The Annexed Plan Or Work It For Public Traffic :***

21.1 In the event of the Railway Administration deciding in the public interest to close the terminal or any part or extension thereof or to work the terminal or any part or extension thereof for public traffic as part of the railway system (the decision of the Railway being final in this case and the service of the notice as hereinafter stated shall be conclusive evidence of the same) the Railway Administration may terminate this Agreement by giving to the Applicant 6(six) month's previous notice in writing of such decision and on the expiration of such notice this Agreement shall terminate.

22. ***Power To Stop Traffic And To Terminate Agreement In Certain Events:***

The Railway Administration shall have the absolute right to refuse at any time to allow their rolling stock to go on or be used upon the Terminal or any part or extension thereof and shall also be entitled to determine this Agreement at any time after the happening of any of the following events:

22.1 In the event of the Applicant failing to deposit within the time fixed for the purpose any sum of sums required to be deposited under the provision of these presents or according to any direction of the Railway Administration.

22.2 In the event of the Applicant failing to pay any other sums payable to the Railway Administration under this Agreement or any other changes payable to the Railway administration in respect of the terminal or the use thereof within one month after the due date of payment or in the event of a due date not being specified then within one month after service of a written-demand for payment.

22.3 In the events of the Applicant failing to comply with any requisition of the Railway Administration to remove or repair any defect which in the opinion of the Railway

07/07/2022

administration may endanger the working and safety of the terminal within such time as shall be fixed by the Railways Administration for the purpose.

22.4 In the events of the Applicant ceasing for a consecutive period of 3 (three) months to use the terminal or any part for extension thereof for the Applicant's own traffic in connection with the Applicant's Works.

22.5 In the event of the Applicant contravening the provision of Clause 15 hereof.

22.6 In the event of the Applicant failing to observe or perform any other obligation on his part herein contained.

22.7 In the event of the terminal becoming dangerous or defective by reason of any act of God or other act or circumstances for which the Railway Administration is not responsible.

22.8 In the event of any branch line, terminal or part or extension thereof, connecting the terminal or any part or extension thereof with the Railway system, becoming dangerous or defective for any reason whatsoever and whether such branch line, terminal part or extension shall belong to the Applicant or to any third person.

22.9 In the event of any branch line, terminal or any part or extension thereof connecting the terminal or any part or extension thereof with the Railway system, being closed by the Railway Administration under any powers which the Railway Administration may possess whether by status or by Agreement with third persons or closed by order of the Government of India or any State Government.

The Applicant shall have no claim whatsoever against the Railway Administration in respect of any refusal by the Railway Administration to allow their rolling stock to go on or be used upon the terminal or any connected Terminal or branch line in any of the aforesaid events.

Provided always that on the happening of any of the events mentioned in sub-Clauses 22.1, 22.2, 22.4, 22.5, 22.6, the Railway Administration shall not exercise the power conferred upon it by this Clause unless 14 (Fourteen) days' previous notice has been given in writing requiring the Applicant to comply with the demand or requisition as the case may be, of the Railway Administration and the Applicant has failed to comply with the Same within the time specified in such notice.

No notice shall be required to be given in the cases specified in the other sub-clauses of this clause.

23. ***Termination of Agreement on Death. Insolvency etc. :***

This agreement may be determined by the Railway Administration without prior notice at any time after the happening of any of the following events:

23.1 In the event of the death of the Applicant, if he is an individual person.

23.2 In the event of a partition of the Joint family properties, if the Applicant is a Joint family governed by the Mitakshara School if Hindu Law.

23.3 In the event of dissolution of partners either by act of parties or by order of Court, if the Applicant is a firm or other association or body of individuals.

23.4 In the event of dissolution of partners either by act of parties or by order of Court, if the Applicant is a firm or other association or body of individuals.

23.5 In the event of Applicant becoming insolvent or going into liquidation either voluntarily or under an order of a competent Court.

23.6 In the event of the Applicant's interest in the works becoming wholly or partially vested in some other person.

23.7 In the event of the Applicant contravening the provision of Clause 21 hereof.

24. ***Consequence of Termination Under Clauses 19, 20, 21, 22 & 23 :***

*24.1 On termination of this agreement under provisions of Clauses **19, 20, 21, 22 & 23** thereof, the Railway Administration shall be entitled to disconnect from their Railway,*

07/07/2022

the portion of the said terminal within the Railway land (colored red on the said plan) at the cost of the Applicant and take up and remove the same and the appliance connected therewith and dispose of the materials thereof as they may think fit rendering to the Applicant surplus (if any) to arise from such disposal after first defraying and reimbursing there at all costs and expenses on and incidental to such taking up, removal and disposal and all sums owing to them by the applicant under the terms of this Agreement or for freight or carriage.

24.2 Provided always that the Railway Administration shall at all times have lien on the portion of the said terminal within the Railway land (colored red in the said plan) and appliances connected therewith and materials thereof for all sums owing to them from the Applicant under the terms of this agreement or for freight or carriage. The Applicant shall have no claim whatsoever against the Railway Administration in respect of termination of this agreement whether under any of the provisions of those presents or in any manner not provided for by those presents.

25. ***Agreement To Bind Applicant Until Terminated By The Railway Administration***

25.1 Until terminated by the Railway Administration or unless and until the person or persons in whom the entire rights and interests of the Applicant have vested and with wham the Railway Administration has agreed to enter into a Cargo Terminal Agreement has executed and registered such Agreement in the same form as these presents or in such other form as the Railway Administration may require as provided in Clause 21 hereof, this Agreement shall be binding upon the Applicant and the successors in title or interest of the Applicant in the Applicant's work

(i) Provided that the Applicant may by giving 6 (six) months' notice to the Railway Administration, discontinue the use of the terminal. In such event, the Applicant shall not be liable for the payment of maintenance and other charges under the Agreement for the period subsequent to the date of expiry of the said notice, but nevertheless all other obligations under the Agreement shall binding on him.

(ii) Provided further that the Railway Administration has the right without assigning any reason to terminate this Agreement on 6 (six) months' notice.

26. ***Applicant To handover/revert back Railway land along with entire Infrastructure developed on it Within A Month Of Termination***

On termination of this Agreement, Railway land, along with the entire infrastructure developed on it by the bidder, shall revert back to Railway on as-is-where-is basis within a month of termination, without payment of any compensation.

27. ***Right To Charge Interest On Money Due Hereunder To The Railway Administration:***
Notwithstanding anything contained in the foregoing Clauses of this Agreement, the Railway Administration shall have the right to charge and recover from the Applicant interest at such rates, as may be fixed by the Railway Administration from time to time on any or all sums payable by the Applicant under the terms thereof, if such sums are not paid within one month from the due date and if no such date is fixed, within one month from the date on which a written demand is made by the railway Administration.

28. ***Right Of Deduction Of Money Due To The Railway Administration***

The Railway Administration shall have the right to deduct from any amount which may become payable by the Railway Administration to the Applicant or to the legal representative of the

07/07/2022

Applicant any money due from the Applicant to the Railway Administration under these presents or for freight, haulage or other charges or otherwise in connection with the construction, maintenance or working of the terminal.

29. ***Service Of Notices On Applicant:***
The Applicant shall maintain a proper office to which all letters, notices, demands and other communications intended for the Applicant may be sent and every notice, demand or other communication which shall be delivered at or sent by Registered Post to such office shall for all purposes whatsoever be deemed to have been validly and effectively delivered to the Applicant.

30. ***Exercise Of Powers :***
Subject as otherwise provided in this agreement, all notices to be given on behalf of the President of India and all other actions to be taken on his behalf may be given or taken on his behalf by the Railway Administration; the agreement signing authority or his authorized representative.

31. ***Alteration / Variation Of The Agreement:***
Except as hereby provided any verbal or written arrangement or abandoning, varying or supplementing this Agreement or any of the terms hereof shall be deemed conditional and shall not be binding on the railway administration unless and until the same is endorsed on this agreement or incorporated in a formal instrument and signed by the parties hereto and till then the Railway administration shall have the right to repudiate such arrangement.

32. ***Applicant Not To Transfer Rights ;***

32.1 The Applicant shall not be entitled to assign or transfer or subject or permit to be used or enjoyed by any other person in any manner whatsoever any of the rights or benefits conferred upon the Applicant by these presents and any purported assignment transfer or subletting or permission shall be void and of no effect. Provided also that in the event of any other person being permitted by the Railway Administration to use the terminal on the Applicant's request or otherwise, the Applicant shall remain responsible to the Railway Administration for all the charges and obligations under this Agreement.

32.2 Provided, however, that if the Applicant shall desire to transfer the Applicant's Works to any person or if the applicant being a Company shall go into liquidation and such intended transferee or the liquidator of the Company shall desire the use and benefit of the terminal than subject to the under mentioned conditions being complied with the Railway Administration may at its discretion on the written request of the Applicant and of the intended transferee or liquidator made prior to the transfer or within one month after the commencement of the liquidation as the case may be and after production by the transferee of the registered Deed of Transfer of the Applicant's Works pr after proof by the liquidator of this intension to carry on the Company's business for the purpose of the liquidation proceedings, allow the transferee or liquidator the use and benefit of the terminal. The conditions above mentioned are the following:

(i) That the liquidator shall be approved by the Railway Administration, but such approval will not unreasonably withheld.

(ii) That the liquidator shall duly sign and register a Cargo Terminal Agreement in the same form as these presents so far as then applicable or in such other form as the Railway Administration may then require.

07/07/2022

(iii) That the applicant, Railway Administration and transferee shall duly execute an agreement of assignment as may be prescribed by the Railway Administration.

33. ***Cost of Execution Of Agreement:***
All expenses in drawing up the Agreement and the cost of stamping and registration shall be borne by the TO/Applicant. "Money receipt obtained from the Registration Office should be handed over to the Railways for collection of registered agreement which shall remain in the custody of Railways. Any charges, if levied for collection of registered agreement, shall also be borne by the Applicant.

34. **Agreement period**

The period of Agreement shall be signed for five (05) years, which shall be renewed / extended in blocks of five (05) years at a time, provided any of the provisions of the Agreement and / or Policy has not been violated by the GCTO.

35. **Agreement In Force From :**
The agreement shall be deemed to have come into force on and from……..

36. **Head Notes :**
The head notes herein are for the convenience of reference only and shall not affect the construction of these presents.

In WITNESS WHEREOF, the parties to these presents have set and subscribed their respective hands and seals hereunto on the day and year first above written.

For and on behalf of
THE PRESIDENT OF INDIA (First Party)
SIGNED, SEALED AND DELIVERED BY

Name : ……
Designation …
Address : …….
(Authorized Signatory)

……..(Second Party)
(SIGNED, SEALED AND DELIVERED by

Name : ……
Designation :……..
Address : ……

In the present of Witness

1.

2.

07/07/2022

Cargo Terminal Agreement-

Reg. No.: _____ For _____ Terminal

At Kilometre: _____ Between Stations _____ and _____

07/07/2022

Land License Agreement

(For Private Terminal)

{Note- This agreement is not to *be used for the cases where Railway Land is given on Lease* to *other government departmentlP5U For such cases, Land Leasing Agreement has to be signed in lieu* of *Land License Agreement in the standard format* of *Zonal Railway}*

This **Land Licensee Agreement** is made and executed at .....on this ..... Day of ....., 20.....

BY AND BETWEEN

THE PRESIDENT OF INDIA acting through (incorporate name and designation of the officer authorized under Article 299(1) of the Constitution) having its office at ..... (hereinafter referred to as "**Licensor**" which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the One Part;

AND

..... [hereinafter referred to as **("Licensee")*** which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the Other Part.

The Licensor and the Licensee are hereinafter collectively referred to as the "Parties" and Individually as a "Party",

WHEREAS,

(A) The Licensor and the Licensee have entered into a Cargo Terminal Agreement, dated ____ _(Agreement No,), wherein the Licensee has agreed to lay the terminal and the Licensor has agreed to provide the land for providing connectivity to the Terminal,

(B) The Licensor is owner of the land described in the Annexure hereunder (the "Site") and now desires to License the Site to the Licensee and the Licensee desires to take on License from the Licensor, the Site for the purpose of connectivity to the terminal,

NOW THEREFORE, In consideration of the promises and covenants herein set forth and for other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the Parties mutually agree as hereunder-

1, Definitions and Interpretation -

1.1 Definitions:

In this Land License Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

"Applicable Permits" means all clearances, permits, authorizations, consents and approvals required to be obtained or maintained under applicable laws in connection with the Site and the Terminal during the subsistence of the Land license Agreement;

"Encumbrance" means any encumbrance, such as an easement, right of way, license, mortgage, charge, pledge, lien, hypothecation, pre-emptive right or security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations, whether or not registered and howsoever arising, including by statute or common law;

07/07/2022

"Land License Fee" shall have the meaning set forth in Clause 4.1 of this agreement.

"Site" shall have the meaning set forth in Recital (B); and

"Term" shall have the meaning setforth in Clause 3 of this agreement.

1.2. Interpretations-

In this Land License Agreement, except to the extent that the context requires otherwise:

(a) the Annexure to this Land License Agreement forms part of this Land License Agreement and shall be of full force and effect as though it is expressly set out in the body of this Land License Agreement;

(b) the terms of this Land License Agreement shall be read in consonance with and not in derogation with the terms of Cargo Terminal Agreement;

(c) the words and expressions beginning with capital letters and defined in this Land License Agreement shall have the meaning ascribed thereto herein, and the words and expressions beginning with capital letters used in this Land License Agreement and not defined herein, but defined in the Cargo Terminal Agreement shall, unless repugnant to the context, have the meaning ascribed thereto in the Cargo Terminal Agreement.

2. Grant of License and Possession -

2.1.1 The provisions of this Land License Agreement shall take effect and become binding on the Parties on the date of signing of this Agreement.

2.1.2 In consideration of the Land License Fee and subject to Clause 2.1.3, the Licensor grants on License to the Licensee and the Licensee agrees to accept the License from the Licensor, free from Encumbrances and/or encroachments, of all that piece and parcel of land measuring_____ situated at_____, described in the Annexure and to hold, possess, use and enjoy the Site a*nd/or* any part thereof, in accordance with the provisions of this Land License Agreement.

2.1.3 The Licensor hereby grants and transfers physical possession of the land specified in Annexure and in accordance with the provisions of Clause 4 of the Cargo Terminal Agreement.

3. Term-

3.1 The License granted in pursuance of this Land License Agreement shall be for a period of 5 (five) years from the date of signing of Land License Agreement (the "Term") which shall be renewed / extended in blocks of five (05) years at a time, up to 35 years unless principle GCT agreement is terminated / or the Land License Agreement is terminated prematurely in accordance with Clause 6 hereunder.

3.2 Both the Land License Agreement and the Cargo Terminal Agreement shall be co-terminus with each other.

3.3 The Licensee shall not derive any right, title or interest in the said Site which shall remain property of the Railways all the times. The Licensee only shall have possessory right as a Licensee for ___ years of the said premises in accordance with the terms of the agreement, provided regular and timely payment of land license fee is made.

3.4 Renewal of the Land License Agreement shall be at the sole discretion of the Licensor.

07/07/2022

4. Land License Fee -

4.1 The Licensee shall pay to the Licensor, subject to Clause 4.3, an annual Land License Fee ("Land License Fee") @ 6% of market value of land per annum in terms of Board's circular on land licensing i.e. 2005/LML/18/8 dated 10.02.2005 and 08.06.2005 as amended from time to time.

4.2 The Licensee shall pay the Land License Fee to the Licensor in advance on the first day of April every year and into such account, as may be designated by the Licensor from time to time.

4.3 If the Licensee fails to pay the Land License Fee as aforesaid, the Licensee shall be liable to pay interest for the period of delay calculated at a rate equal to 5% (five percent) above the base interest rate prescribed by State Bank of India.

4.4 Upon failure to pay Land License Fee within a period of 180 days from due date i.e. First day of April every year, Licensor reserves the right to terminate the Land License Agreement in accordance with Clause 19 of GCTO Agreement. However, the same shall not stop Licensor from taking action for recovery of their dues.

5. Use of Site –

5.1 During the Term of this Land License Agreement, the Licensee shall use the Site only for the purpose of terminal.

5.2 The Licensor shall always be at liberty to construct adjoining to the Licensed Site and the Licensee shall not be entitled to raise any objection to ask compensation thereafter on the plea of inconvenience, whatsoever at any point of time.

6. Termination of Land License Agreement –

6.1 This Land License Agreement may be terminated earlier by mutual agreement between the Parties in writing.

6.2 The Land License Agreement shall be co-terminus with the Cargo Terminal agreement. Thus, in the event that the Cargo Terminal Agreement is terminated during the currency thereof, then this Land License Agreement shall be deemed to be terminated without any further notice for termination of Land License Agreement and the Licensor shall be at full liberty to deal with the site in such manner as it deems fit in its sole discretion.

6.3 The Licensor shall have the right to terminate this Land License Agreement on occurrence of anyone or more default(s) by the Licensee as enlisted hereunder:

(a) failure of the Licensee to make payments to the Licensor in accordance with the provisions hereof, where such failure continues for a period of 30 (thirty) days after a written notice from the Licensor:

(b) transfer or assignment of this Land License Agreement or creation of any Encumbrance on the Site, without securing prior written approval of the Licensor;

07/07/2022

(c) use of the Site for any purpose other than the purposes stated under Clause 5 of this Land License Agreement and such breach is not remedied within a period of 60 (Sixty) days after a notice from the Licensor in this behalf; and

(d) Voluntary abandonment by the Licensee of period of 90 (ninety) days or more.

6.4 On expiry of the License Term or early termination of the Land License Agreement, for any reason whatsoever, the site, shall revert back to the Licensor.

6.5 Upon termination under Clauses 4.4, 6.1, 6.2 and 6.3, the Licensor shall have the following additional rights:

(a) The recovery of any unpaid Land License Fee due and payable at the time of termination;

(b) the recovery of any damages, costs, fees and expenses incurred by the Licensor as a result of the breach of the Land License Agreement by the Licensee; and

(c) Any other right or remedy, legal or equitable, that the Licensor is entitled to under applicable laws.

7. Licensee's Obligations and Covenants

Licensee hereby covenants, agrees and represents that:

(a) the Licensee, during the Term of the Land License Agreement, shall pay the Land License Fee in accordance with terms and conditions set out in this Land License Agreement and shall observe and fulfil each of its obligations and covenants set forth herein;

(b) the Licensee shall obtain, at its own cost and expense, all utilities, such as water, electricity etc. from the appropriate authorities;

(c) It shall obtain and keep current all Applicable Permits that may be required under the applicable laws;

(d) it shall pay all taxes, service tax, cess charges, assessments and levies in respect of the Site, which are leviable at any time during the Term of the Land License Agreement;

(e) it shall not create any lien, charge or Encumbrance on the Site, except as permitted in this Land License Agreement, without prior approval of the Licensor;

(f) it shall take all necessary care to keep the premises neat and clean and in sanitary conditions.; and

(g) It shall, after expiry or termination of the Land License Agreement forthwith, the Licensee hand over possession of the land to the Licensor along with entire infrastructure on railway land on as-is-where-is basis in terms of Clause 17.8 of agreement, without any payment / compensation.

a. shall revert back to Railway on as-is-where-is basis, without payment of any compensation.

07/07/2022

8. Stamp Duty and Registration Charges -
Subject to the exemption or waiver, if any, granted by Government or any other authority, the Parties agree that all stamp duties, registration charges and all other local/statutory charges payable In respect of the License contemplated herein shall be to the account of and borne by the Licensee.

9. Indemnities and Limitation of Liability -
The Licensee shall fully indemnify, defend and hold harmless the Licensor, its officers, servants, agents, against any and all suits, proceedings, actions, demands, claims and liabilities, which may be incurred or suffered by the Licensor and which may arise out of or as a result of any of the following causes:

(a) any breach by the Licensee of any of its obligations, covenants, agreements, representations or warranties set forth In this Land License Agreement;

(b) any loss of property, damage to property, personal injury or death occasioned to or suffered by any person, to the extent that the damage to or loss of property or the personal injury or death is caused willfully or negligently by the Licensee; and

(c) any breach, violation or non-compliance by the Licensee of any applicable laws and/or Applicable Permits.

10. Assignment-

The Licensee shall not, without the Licensor's prior written consent, transfer, assign or grant any form of security over any of its rights or obligations under this Land License Agreement.

11. Dispute Resolution -

11.1 The Parties shall use their respective reasonable endeavors to settle any dispute, difference, claim, question or controversy between the Parties arising out of, in connection with or in relation to this Land License Agreement ("Dispute") amicably between themselves through negotiation.

11.2 Any Dispute which the Parties are unable to resolve pursuant to Clause 11.1, within 60 (sixty) days (or such longer period as the Parties may agree) of notice by one Party to the other of the existence of a Dispute, shall be resolved in accordance with the provisions of the Cargo Terminal Agreement.

12. Governing Law -

This Land License Agreement is governed by and shall be construed in accordance with the laws of India. In case of any dispute and difference arises, the Court of the place, where Land License Agreement has been made, shall only have the jurisdiction to try such litigation.

In Witness Whereof The Parties Have Executed And Delivered This Land License Agreement As Of The Day, Month And Year First Above Written.

For and on behalf of
THE PRESIDENT OF INDIA (First Party - Licensor)
SIGNED, SEALED AND DELIVERED BY

Name : .....
Designation ..... (Sr. Divisional Engineer)

07/07/2022

Address : .....
(Authorized Signatory)

.....(Second Party -Licensee)
(SIGNED, SEALED AND DELIVERED by

Name : .....
Designation :.....
Address : .....

In the present of Witness

1.

2.

07/07/2022

MAITHON POWER LIMITED

MPL/FY 22/22-01/024

27th January 2022

To
Divisional Railway Manager
Eastern Railway
Asansol

Sub: Commissioning of MPL Siding – Migrating to "Gati Shakti Multi-Model Cargo Terminal" (GCT 2021) and Issuance of Siding Notification.

Ref:

1. CTPM ER HQ Kolkata Letter no. C.490/575/BG dated 25/01/2022
2. Our DPR January 2010 vide letter TPL/RLY/Maithon/09-10/064 dated 10/01/2010
3. CTPM ER HQ approval of DPR no. TW 535/439 Pt. I dated 29/03/2010

Dear Sir,

MPL has submitted DPR for Railway Siding after approval of feasibility report by Eastern Railway. The Project has been under execution and meanwhile Master Circular on Gati shakti Multi Model Cargo Terminal (GCT Policy 2021) has been issued by Railway Board. We are almost ready with work of siding and will like to migrate to the revised policy of GCT2021 as per Railway Board Guidelines.

However, there are some changes from the earlier DPR submitted and therefore in terms of para 11 and 11.1, we would like to submit our revised ESP for your approval. You are requested to initiate necessary action at your end.

Thanking You.

Yours faithfully,
For Maithon Power Limited

Ramesh Jha
Chief Executive Officer-MPL

Copy to:
Sr. DOM, Eastern Railway Asansol

परमानंद शर्मा
आई आर एस एम ई
Permanand Sharma
IRSME
मंडल रेल प्रबन्धक
पूर्व रेलवे / आसनसोल
DIVISIONAL RAILWAY MANAGER
EASTERN RAILWAY, ASANSOL

आसनसोल | 713301
Asansol
जिला – पश्चिम बर्द्धमान / Dist. - Paschim Barddhaman
दूरभाष / Telephone
Off. : (DOT) 0341 - 2302319 (RLY) 82000
Fax : (DOT) 0341 - 2315520 (RLY) 82017
0341 - 2302319
E-mail : drm@asn.railnet.gov.in
drmasn14@gmail.com

No.G/DRM/ASN/MPL/2022

Asansol, 27th January ,2022

To

Chief Executive Officer,
Maithon Power Ltd,
Maithon, Jharkhand.

Sub : Commissioning of MPL siding- Migrating to "Gati Shakti Multi Modal Cargo Terminal" and issuance of Siding Notification

Ref: Your letter No MPL/FY22/22-01/024 dt 27.01.2022

Vide reference above your request for migration to "Gati Shakti Multi Modal Cargo Terminal" (GCT 2021) has been examined. As per the revised policy circular for migration, you are required to :-

1) Submit Rs.10 lakhs as security deposits to Railways.
2) You are advised to clear all dues and certify that no arbitration/court cases are pending as per Para 1.2.1 of GCT Policy 2021.
3) You are also advised to submit your revised ESP for scrutiny by the Division.
4) Once the ESP is approved further necessary action regarding notification of siding can be undertaken.

This is for your information and necessary action please.

P. Sharma

(Permanand Sharma)
Divisional Railway Manager
Eastern Railway,Asansol

MAITHON POWER LIMITED

MPL/FY 22/22-01/026

28th January 2022

To
Divisional Railway Manager
Eastern Railway
Asansol

Sub: Commissioning of MPL Siding – Migrating to "Gati Shakti Multi-Model Cargo Terminal" (GCT 2021) and Issuance of Siding Notification.

Ref:

1. DRM Asansol Letter no. G/DRM/ASN/MPL/2022 dated 27th January 2022
2. Our letter no. MPL/FY22/22-01/024 dated 27/01/2022

Dear Sir,

As per your letter dated 27 January 2022, our request for migrating to "Gati Shakti Multi Model Cargo Terminal" has been examined with certain requirements as per revised policy, please find below the compliances:

1. Security Deposit: MPL has transferred Rs 10 lacs to account of FA & CAO/Eastern Railway (SBI Kolkata account no. 306054982120) with transaction no CTQ9479298. Copy of transaction statement is attached for your ready reference.
2. MPL has cleared all dues, also certify that no arbitration/court cases are pending as per Para 1.2.1 of GCT Policy 2021.
3. Three nos. Revised ESP (where changes are envisaged) as per policy guidelines are attached on Tracing paper for your scrutiny and approval as per following details:
   - Yard Arrangement with MPL and DFCCIL Alignment at Thaparnagar Station (Drawing no. MBB/RLY/MPL/TNW/CP/01 dated 25/01/2022 Rev 01
   - Yard Arrangement at Mugma Station (Drawing no. MBB/RLY/MPL/MMU/CP/01 dated 25/01/2022 Rev 00
   - Yard Arrangement at MGR Bulb (Drawing no. MBB/MPL/SH08/MGR-BULB/01 dated 25/01/2022 Rev 00

   Please also consider Approved ESP "Proposed Yard Arrangements at Junction Cabin (Drawing no. TPL/RLY/MAITHON/03 dated 04/12/2009 Rev 03 ALT-1 as part of MPL Siding under GCT policy 2021 for your approval/acceptance.

Request your review & Approval of ESP and further action regarding notification of MPL siding.

Thanking You.

Yours faithfully,
For Maithon Power Limited

Ramesh Jha
Chief Executive Officer-MPL

Copy to:
Sr. DOM, Eastern Railway Asansol

SBI

Date : 28 Jan 2022
Account Number : 00000031828734113
Description : BR-CC- Stocks - C and I
Name : MAITHON POWER LIMITED
Currency : INR
Corporate Address C/O TATA POWER, CORPORATE CENTRE-B,34 SANT TUKARAM ROAD,CARNAC BUNDER, MUMBAI,PIN-400009

VILLAGE- DAMBHUI,P.O. BARBINDIA, P.S NIRSA, DISTRICT DHANBAD, JHARKHAND, PIN-828205

MUMBAI
MAHARASHTRA-400009

Branch : CAG, MUMBAI(09995)
Rate of Interest (% p.a.) : 7.55%
IFS Code : SBIN0009995
Book Balance : 21723795.60
Available Balance : 121723795.60
Hold Value : 0.00
Uncleared Amount : 0.00
Drawing Power : 100000000.00
Limit Sanctioned : 100000000.00
Balance as on 28 Jan 2022 : 77,23,795.60

Account Statement from 28 Jan 2022 to 28 Jan 2022

Txn Date	Value Date	Description	Ref No./Cheque No.	Branch Code	Debit	Credit	Balance
28/01/2022	28/01/2022	BY TRANSFER-RTGS UTR NO: CITIR52022012800701701 -DSP MUTUAL FUND REDEMPTION AC	TRANSFER FROM 3199855044301 / DSP MUTUAL FUND REDEMPTION AC	4430		1,50,00,000.00	2,27,23,795.60
28/01/2022	28/01/2022	TO TRANSFER-INB Security deposit-	CTQ9479298 TRANSFER TO 30605498212 FA & CAO EASTERN RAILW /	99922	10,00,000.00		2,17,23,795.60

**This is a computer generated statement and does not require a signature.

MAITHON POWER LIMITED

MPL/FY 22/22-01/026A

28th January 2022

To
Divisional Railway Manager
Eastern Railway
Asansol

Sub: Commissioning of MPL Siding – Migrating to "Gati Shakti Multi-Model Cargo Terminal" (GCT 2021) – Justification of Revised ESP.

Ref:

1. DRM Asansol Letter no. G/DRM/ASN/MPL/2022 dated 27th January 2022
2. Our letter no. MPL/FY22/22-01/024 dated 27/01/2022
3. Our letter no. MPL/FY 22/ 21-11/015 dated 26th November 2021

Dear Sir,

This has reference of above cited letters and revised ESP submitted for your kind approval, please find below the reasons/constraints for modification of ESP:

1. **Wagon Tippler:**
   As per DPR we have to commission Wagon tripper in plant area. During survey it was observed that the area is having rocky strata. Seeing the actual condition of site, provision of Wagon tripper is technically not feasible.
   All the facilities required for unloading of rakes, redundancy of operations and other operational requirements has been made by the company, and installation of wagon tippler not possible at this juncture, accordingly ESP has been revised.
2. **Mugma Loop Line:**
   Due to financial crunch MPL is not in a position to create this facility. In DPR, at Mugma Up loop line is proposed with the assumption that coal rakes are coming from ECL i.e. Mugma side. Moreover our Fuel Supply Agreement (FSA) was signed with BCCL and CCL up to year 2030 and 2032 respectively. So, we will be receiving our coal rakes only from Thaparnagar end. Therefore, the entire rake movement shall be on downside from Pradhankhunta to Sitarampur section. Therefore, the requirement of Mugma Up loop line may be dispensed with and accordingly ESP has been revised.

Request your review & Approval of ESP and further action regarding notification of MPL siding.
Thanking You.

Yours faithfully,

For Maithon Power Limited
Vikash Kumar
Head- Railway Projects

08.2.22

MPLCopy to:
Sr. DOM, Eastern Railway Asansol

MPL
MAITHON POWER LIMITED

MPL/FY 22/22-01/026A

28th January 2022

To
Divisional Railway Manager
Eastern Railway
Asansol

Sub: Commissioning of MPL Siding – Migrating to "Gati Shakti Multi-Model Cargo Terminal" (GCT 2021) – Justification of Revised ESP.

Ref:
1. DRM Asansol Letter no. G/DRM/ASN/MPL/2022 dated 27th January 2022
2. Our letter no. MPL/FY22/22-01/024 dated 27/01/2022
3. Our letter no. MPL/FY 22/ 21-11/015 dated 26th November 2021

Dear Sir,

This has reference of above cited letters and revised ESP submitted for your kind approval, please find below the reasons/constraints for modification of ESP:

1. **Wagon Tippler:**
   The location envisaged initially and mentioned in DPR approved in 2010 for installation of Wagon Tippler is having rocky strata and it was anticipated to install the same prior to start up activities of the power plant, however same was not done due to various issues involved in Railway infrastructure projects.

   Now after commissioning of both the units in 2011/2012 respectively; plant is Generating Power and supplying to its consumers since 2011/2012 onwards. Since the identified location is in the vicinity of Coal conveyor (which is one of the most critical system for feeding coal from coal yard to both the units on continuous basis); it is not possible to install Wagon Tippler at MGR bulb (either at identified location or any alternate location due to running system/space constraints). Thus, under present situation, installation of Wagon Tippler is not possible.

   Moreover, the present provision of Track hopper is designed for evacuation of coal@2000 MT/hr and ready to unload BOBRN Rakes & its immediate evacuation by stacking at stacker-reclaimer/coal Bunkers. Company has also made arrangement for unloading of BOXN Rakes at WHARF (same shall be used for unloading of coal and for dispatch of Ash from the plant), thus offering redundancy of handling of all types of Rakes in the plant.

   All the facilities required for unloading of rakes, redundancy of operations and other operational requirements has been made by the company, and installation of wagon tippler is not required and not possible at this juncture, accordingly ESP has been revised.

A Joint Venture of TATA POWER & DVC
Registered Office : Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400 009, Tel: 91 22 67171232
Works : Village Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand
Tel: +91 6540 278001/50 Fax: +91 6540 278040/ +91 8860075658
Corporate Identity Number (CIN) : U74899MH2000PLC267297, Website Address : www.tatapower.com/mpl

MPL
MAITHON POWER LIMITED

2. **Mugma Loop Line:**

   In DPR, at Mugma Up loop line is proposed with the assumption that coal rakes are coming from ECL i.e. Mugma side; however after our Fuel Supply Agreement (FSA) was signed with BCCL and CCL which is valid till the year 2030 and 2032 respectively. So, we will be receiving our coal rakes only from Thaparnagar end. Even in future, Aforesaid FSA shall be extended with BCCL & CCL for ensuring coal supply for plant operation.

   Therefore, the entire rake movement shall be on downside of Pradhankhunta to Sitarampur section. Hence, up loop line will not be required by MPL in future. Therefore, the requirement of Mugma Up loop line is not envisaged and accordingly ESP has been revised.

Request your review & Approval of ESP and further action regarding notification of MPL siding.

Thanking You.

Yours faithfully,
For Maithon Power Limited

28/01/2022

Dinesh Kumar Gangwal
Head- FGD & Railway Projects -MPL

Copy to:
Sr. DOM, Eastern Railway Asansol

A Joint Venture of TATA POWER & DVC
Registered Office : Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400 009, Tel: 91 22 67171232
Works : Village Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand
Tel: +91 6540 278001/50 Fax: +91 6540 278040/ +91 8860075658
Corporate Identity Number (CIN) : U74899MH2000PLC267297, **Website Address :** www.tatapower.com/mpl



पश्चिमबङ्ग पश्चिम बंगाल WEST BENGAL AL 162763

Undertaking

1. M/s M/s Maithon Power Limited (M/s MPL) executing this agreement as M/s MPL switching over as "Gati Shakti Multi-modal Cargo Terminal"(GCT)" in terms of Master Circular on "Gati Shakti Multi-modal Cargo Terminal"(GCT)/2021" circulated vide L no. 2021/TC(FM)/18/23 Dated. 15.12.2021.

2. M/s MPL will abide by all provisions made vide circular mentioned in Sl no.01.

3. Any further Revision /Edition/Deletion/Modification of the terms and condition of contract as issued by competent authority (Railway Board /Eastern Railway Headquarter) shall be binding on M/s Maithon Power Limited .

MAITHON POWER LTD. MAITHON

7

204218

No .....

Name Maithan Power Ltd.

.....

Addr. as : Tharkhand.

..... 828207

Rs. 1021 —

Kolkata Collectorate
11, Netaji Subhas Road
Kolkata-1

Sunil Kr. Saha

Date .....

TO FEB 2022



पश्चिमबङ्गा पश्चिम बंगाल WEST BENGAL AL 162764

EASTERN ---------- RAILWAY

Private Siding Agreement

MEMORANDUM OF AGREEMENT made this 16th day of FEB / 2022 between The President Of India , acting through the ER Railway Administration (Hereinafter called "The Railway Administration") of the one part and MAITHON POWER LIMITED (Hereinafter called "The Applicant)* of the other part. WHEREAS The applicant is desirous of having a private siding laid by the Railway Administration at MAITHON ---from the THAPARNAGAR ---- station yard of the Eastern Railway taking off from kilometer No.----------between ---------- -station and ----------station of the ----------Railway as shown in red and green on the plan bearing CE's No. ----------hereto annexed for the purpose of carrying on the Applicant's premises situated at P.O - NIRSA District DHANBAD, JHARKHAND - 828205

AND WHEREAS THE Railway Administration is willing to lay the said siding for the said applicant upon and subject to the terms and conditions hereinafter set forth.

MAITHON POWER LTD. MAITHON

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

Introduction

1.1 This policy seeks to promote proliferation of new Cargo Terminals and improve existing Cargo Terminals to accelerate the growth in Railways' cargo traffic. All new as well as under-construction/ under-approval Cargo Terminals (approved/ proposed under 'Private Siding' or 'Private Freight Terminal' policies) shall be covered by this 'Gati Shakti Multi-Modal Cargo Terminal (GCT)' policy.

1.2 Existing Cargo Terminals, governed by Private Siding or Private Freight Terminal policies, shall have the option to continue with their existing Agreements, or to migrate to this new GCT policy.

1.2.1 Existing Cargo Terminals can migrate to this new GCT Policy by submitting a request to the Divisional Railway Manager (DRM) of the concerned Division of Railway, after clearing pending Railway dues and withdrawing all pending arbitration cases/ court cases, if any. The provisions of this Policy shall be applicable on such Cargo Terminals from the date the request is approved by the DRM.

1.2.2 Existing Cargo Terminal owners shall be allowed to migrate to this new GCT policy only when all pending Railway dues of all Cargo Terminals belonging to the same owner/ its subsidiaries/ parent company/ sister concerns over Indian Railways are cleared and all pending arbitration cases/ court cases over Indian Railways are withdrawn.

2. Definitions

2.1 The Key Terms used in these policy guidelines have been defined below for correct interpretation and elimination of ambiguities.

i. Act: The Railways Act, 1989, as amended from time to time.

ii. Agreement: Document executed by a Gati Shakti Multi-Modal Cargo Terminal Operator (GCTO) and Railway Administration (RA) setting forth the terms and conditions for operation of a Gati Shakti Multi-Modal Cargo Terminal (GCT).

iii. Authorized Users: Rail users authorized by the GCTO to make use of the facilities at a GCT.

iv. Benchmark Traffic: Traffic (inward plus outward, combined) expected to be handled per annum at Cargo Terminals established fully or partially on Railway land.

v Cargo Terminal: Terminal where goods are loaded in wagons/ coaching vehicles for transportation over Indian Railway network, and/or unloaded from wagons/ coaching vehicles after being transported over Indian Railway network.

vi Charging on Through Distance Basis: The system of charging freight up to the buffer end of the siding, instead of levying Siding Charges

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

vii. Common User Facility: A facility available for common use of all Rail users without any discrimination including yards/ additional lines/ loop lines at the serving station, crossing station, patch doubling, etc.

viii. Consignee: The person named as consignee in Railway Receipt.

ix. Consignor: The person named in Railway Receipt as consignor, by whom or on whose behalf goods covered by the Railway Receipt are entrusted to a Railway Administration for carriage.

x. EIMWB: Electronic In-motion Weighbridge.

xi. FOIS: Freight Operations Information System.

xii. Gati Shakti Multi-Modal Cargo Terminal Operator (GCTO): The entity constructing and/or managing a Gati Shakti Multi-Modal Cargo Terminal (GCT).

xiii. Good Industry Practices: The practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability, and prudence which are generally and reasonably expected from a reasonably skilled and experienced operator engaged in the same type of undertaking as envisaged under this Policy, following applicable laws and applicable permits in reliable, safe, economical and efficient manner; and which are expected to result in fulfillment of obligations of operator under the Agreement.

xiv. Over Head Equipment (OHE): Infrastructure and equipment installed to provide electric traction.

xv. Private Freight Terminal (PFT): A terminal notified under Private Freight Terminal (PFT) policy of Indian Railways, to deal with rail-based cargo.

xvi. Private Siding: Privately owned siding constructed by a 'customer' at its own cost for railway cargo services at the premises of its plant, or manufacturing unit, or production unit, or mine, etc, connecting the customer's works with the Railway system.

xvii. 'Railway Administration (RA)' means Divisional Railway Manager (DRM) including Railways' Divisional officers, viz. Senior Divisional Operations Manager (Sr.DOM), Senior Divisional Commercial Manager (Sr.DCM), Senior Divisional Finance Manager (Sr.DFM), Senior Divisional Engineer (Sr.DEN), Senior Divisional Electrical Engineer (Sr.DEE), Senior Divisional Signaling & Telecommunication Engineer (Sr.DSTE), Senior Divisional Mechanical Engineer (Sr.DME), and their representatives.

xviii. Railway Land: Land owned by Railways.

xix. Railway Receipt (RR): The receipt issued by Railway Administration (under section 65 of The Railways Act, 1989) on acceptance of goods and which entitles the consignee to take delivery of the goods at the destination Rail Terminal.

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manage
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

xx. Rake: A train load of wagons with a prescribed composition.

xxi. Take-off point: The Stock Rail Joint of 'last point and crossing' at serving station, through which the rolling stock can be diverted towards a Cargo Terminal.

xxii. Terminal Access Charges: Charges levied by Railways on rail-customers for handling of ***privately-owned*** rakes at 'Railway goods-sheds' and 'Cargo Terminals fully or partially on Railway land' as per the Policy, at the rates prescribed by Railways.

xxiii. Terminal Charges: Charges levied by Railways on rail-customers for handling of ***railway-owned*** rakes at 'Railway goods-sheds' and 'Cargo Terminals fully or partially on Railway land' as well as on rakes at 'Cargo Terminals entirely on non-Railway land' as per the Policy, at the rates prescribed by Railways.

xxiv. TMS: Terminal Management System of FOIS.

3. **Eligibility for GCT Operators (GCTO)**

3.1 The categories of applicants permitted to set-up GCTs, as GCTO, shall be as under:

Category	*Supporting Documents* *(self-attested copies to be submitted/ uploaded)*
a) Individual/ Sole Proprietorship Firm	1. PAN and TAN
b) Hindu Undivided Family (HUF)	1. PAN 2. Notarized Affidavit declaring that the signatory is the 'Karta' of the HUF and has the authority, power, and consent of other members
c) Partnership Firm	1. PAN and TAN 2. Notarized copy of the Partnership Deed/ Partnership Deed registered with the Registrar 3. Notarized or registered copy of Power of Attorney in favour of the individual to sign on behalf of, and to create liability against the firm
d) Company registered under Companies Act 2013	1. PAN and TAN 2. Memorandum of Association (MoA)/ Articles of Association (AoA) 3. Certificate of Incorporation 4. Notarized or registered copy of Power of Attorney in favour of individual to sign on behalf of, and to create liability against the company 5. Resolution of the Directors of the Company, permitting the company to set up and/or operate a GCT
e) Limited Liability Partnership (LLP)	1. PAN and TAN 2. LLP Agreement 3. Certificate of Incorporation 4. Notarized or registered copy of Power of Attorney in favour of individual to sign on behalf of, and to create liability against the

MAITHON POWER LTD.

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

	LLP
f) Registered Society/ Registered Trust	1. PAN and TAN 2. Certificate of Registration 3. Memorandum of Association of Society/ Trust Deed 4. Rules & Regulations of the Society 5. Notarized or registered copy of Power of Attorney in favour of individual to sign on behalf of, and to create liability against the Society/ Trust
g) Joint venture (JV)/ Consortium	1. JV/ Consortium Agreement 2. Name and authorization of lead member (*Note:* On receipt of approval of Railway Administration for setting-up and/or operation of GCT, JV/Consortium shall have to convert into a legal entity – Firm/ Company/ LLP. Agreement shall be entered into by RA with the above legal entity only.)

4. **Application and Approval Process**

4.1 For the matters pertaining to GCTs, DRM of the concerned Division shall be the Nodal Officer for all issues regarding setting up and/or operation of a GCT. During approval and construction stage for setting up a new GCT, Sr.DOM shall be the co-ordinating officer; and after commissioning of the GCT, Sr.DCM shall be the co-ordinating officer.

4.2 The processing of Application and approval of GCTs shall be in accordance with the time-lines given in Schedules '1' & '2'.

5. **Capital Cost of GCT**

5.1 The GCTO shall bear the entire capital cost of new GCT from the take-off point onwards (to be marked on the Engineering Scale Plan (ESP)) at the serving station.

5.1.1 For the linear connectivity portion of GCT passing through the Railway land, including the land to be acquired by Railway for this purpose under para 17.2 of this policy, only the minimum essential infrastructure of track, OHE and signalling equipment shall be provided at the cost of GCTO (other assets not related to track, signalling, or OHE, if required, shall be constructed by Railway at its own cost). In case of any dispute, the decision of DRM shall be final in this regard.

5.1.2 The ownership of infrastructure including the track, signalling equipment and OHE created on Railway land under para 5.1.1 above shall belong to Railway, even though the capital cost for these shall be borne by the GCTO.

5.1.3 For migration of existing Terminals to this new policy, the GCTO will be required to transfer the ownership of assets (track, OHE and signalling equipment) created on Railway land to Railway free of cost. The cost of up-gradation of assets (if required) to the desired standards, at the time of transfer of ownership to Railway, shall also be borne by the GCTO.

5.2 The capital cost for all common-user traffic facilities (to be marked on the ESP) at the serving station, including Signalling & Telecommunication works,

MAITHON POWER LTD.

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

modification and up-gradation to existing interlocking/ OHE, or electrification in future within the station limit up to take-off point, shall be borne by the Railway.

5.2.1 Zonal Railway shall ensure adequate availability of funds to ensure timely completion of common-user traffic facility works at the serving station, so that commissioning of GCTs is not delayed.

5.3 Maintenance and operation of assets created under para 5.2 above (common-user traffic facilities) at the serving station including staff costs, shall be the responsibility of the Railway.

5.4 The capital expenditure required for augmenting or up-grading the facilities and infrastructure on the connectivity portion from take-off point onwards towards Terminal and within the premises of Terminal shall be borne by the GCTO.

5.5 The connectivity to GCTs shall normally take-off from the existing serving station. However, in case when it is operationally not feasible to provide a connection from an existing serving station, provision of a Block Hut/ Block station (between two existing stations) with required points & crossings may be considered, provided it is operationally feasible. This will be done on the request of GCTO.

5.5.1 In such cases, the entire capital cost of the new Block Hut/ Block station and related infrastructure shall be borne by the GCTO. However, this work will be executed by Railway, and ownership of the same shall remain with the Railway.

5.5.2 However, for new GCTs planned to load one million Tonne or more (outward traffic) per annum, the capital cost of new Block Hut/ Block station will be repaid to the GCTO by Railway.

5.5.2.1 The repayment of capital cost of the new Block Hut/ Block station will be made by Railway through 10% rebate on the outward traffic loaded at the Terminal, till such time the capital cost has been repaid to the GCTO.

5.5.2.2 The repayment of capital cost will be done only if the Terminal achieves the target of loading one million Tonne per annum within two Calendar Years of commissioning (excluding the year of commissioning). For example, if a GCT commissioned during calendar year 2022 achieves one million Tonne loading during calendar year 2024, then the repayment of capital cost of new Block Hut/ Block station (through 10% rebate on outward traffic) shall start from 01st April 2025.

5.5.2.3 This repayment shall be made for the investment made by the GCTO on behalf of Railways. As such, this repayment through freight rebate shall be admissible over and above all other rebates that the GCTO may become eligible for in future.

5.5.2.4 This provision of repayment shall be applicable only for GCT's for which Agreement between RA and GCTO has not been entered into till the date of issue of this Policy.

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manage
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

5.5.3 The cost of operation and maintenance of such Block Hut/ Block station shall be borne by the Railway w.e.f. the date of issue of this policy. However, for existing Terminals (*where PFT/Private Siding Agreement has been entered into between RA and operator before the issue of this Policy*) where cost of operation and maintenance of such Block Huts/ Block stations has already been deposited by the GCTO, there shall be no refund. Further, dues of operation and maintenance cost of Block Hut/ Block station, if any, pending as on the date of issue of this policy shall be payable by GCTO.

6. **Security of Assets**

6.1 The responsibility of security of railway assets over Railway land shall be of Railways. However, the responsibility of security of railway assets outside Railway Land or on land licensed to GCTO shall be of GCTO.

6.1.1 In case of theft of any railway asset on non-Railway land or railway land licensed to GCTO, the maintenance of which is with Railway, the restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

6.1.2 In case of theft of OHE including OHE on non-Railway land or railway land licensed to GCTO, restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

7. **Maintenance of Assets**

7.1 Maintenance of assets on Railway land (excluding the Railway land licensed to GCTO), including Track and Signalling Equipment installed on Railway land under para 5.1.1, shall be done by Railway at its own cost.

7.2 Maintenance of OHE from the take-off point onward including inside the Terminal shall be done by Railway at its own cost – as this involves safety of men and equipment, and can also impact rail operations outside the Terminal boundary.

7.3 In addition to above, the maintenance of assets (track, bridges, signalling equipment, etc) on non-Railway land including the land licensed to GCTO, ***outside the Terminal***, may also be done by Railway at its own cost if the GCTO transfers the ownership of these assets to Railway (the ownership of land on which such assets are created shall however continue to be with GCTO). Provided further, this provision shall be applicable only to those GCTs where freight tariff is charged on 'through distance basis.'

7.3.1 In case maintenance of assets, including Track and Signalling Equipment, is being handed over to Railways on migration to this policy by GCTO, the GCTO will ensure that the standards of track and signalling infrastructure being transferred to Railway is in accordance with the prescribed standards for GCTs, as decided by Railways (Annexure 'D'). If any up-gradation/ replacement/ renewal of any infrastructure is required, the GCTO shall bear the cost for the same.

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

7.3.2 In case of damages to the assets due to accident, etc, the replacement shall be done by Railway. However, if the responsibility of accident, after Enquiry (joint enquiry by representatives of Railway as well as GCTO), is fixed on the GCTO – the GCTO shall have to bear the cost of all the replacements. The decision of the Nodal Officer, i.e. DRM, in this regard shall be final.

7.3.3 In case the damage to assets is due to an external cause (floods, breaches, terrorist activity, etc), the cost of restoration shall be borne by the GCTO.

7.3.4 If the GCTO does not agree to transfer the ownership of assets (track, bridges, signalling equipment, OHE, etc) to Railway or freight tariff is not chargeable 'on through distance basis'; the maintenance of these assets – except OHE – shall continue to be the responsibility of GCTO.

7.3.4.1 Railway shall be entitled to conduct periodic inspections of such GCTs being maintained by the GCTO, for which Inspection Charges will be levied as per the prescribed norms.

7.3.4.2 GCTO may also get the maintenance done through Railway for such Terminals, in which case Maintenance Charges shall also be levied as per the prescribed norms.

7.3.5 The maintenance of GCT yard, including loading/ unloading lines, shall be the sole responsibility of GCTO. Distribution of the responsibility of track has been explained in Schedule '3'.

7.3.6 At such GCTs, Railway shall maintain the signalling equipment till the line-clear/ receipt-despatch arrangement with serving station(s), at its own cost. Maintenance of signalling equipment internal to the Terminal shall be the sole responsibility of the GCTO.

7.4 The cost of all subsequent up-gradations (on account of change of technology, standards, etc) shall be borne by the GCTO.

7.5 Maintenance of all the infrastructure and equipment inside the GCT which are not to be accessed by Railways' rolling-stock, and maintenance of infrastructure required for loading/ unloading (tipplers, hoppers, etc) shall be the responsibility of GCTO.

7.6 Schedule '3' indicates the ownership and responsibility for maintenance of assets for a GCT.

8. **Cost of Electrification**

8.1 In case of new GCT, the entire cost of electrification of the Terminal and the connectivity portion between take off point and GCT, shall be borne by the GCTO.

8.2 While undertaking electrification of main line and serving station by Railways, the electrification of the existing GCT(s) including the rail-line connecting the Terminal(s) shall be undertaken at the Railway's cost.

9. **Handling of Wagons in GCTs:**

MAITHON POWER LTD. MAITHON

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

9.1 If any damage and deficiencies is caused to railway wagons due to the fault of the GCTO, the damage and deficiency charges shall be raised by Railway and paid by the GCTO as per the extant rules of Railways.

9.2 All tipplers and bulk handling systems used for loading/unloading of Railway wagons shall be provided and commissioned by GCTO at its own cost in accordance with the RDSO's approved specifications. This provision shall however not be applicable on the systems/ equipment installed by GCTO which are not to be used for handling Railway wagons (such as conveyor-belts, JCBs, excavators, etc).

9.2.1 GCTO shall ensure that tipplers, bulk handling systems, and mechanized equipment are operated only by the qualified and experienced staff under adequate supervision.

9.2.2 Such equipment shall be regularly maintained and replaced at the end of their codal life by GCTO at its own cost.

9.2.3 In case of any accident/ derailment inside the Terminal or outside the Terminal up to serving station, Railway will provide Accident Relief Train (ART) initially free of cost. Provided further, if the responsibility of accident/ derailment after enquiry is fixed on the GCTO, ART Charges shall be payable by GCTO as prescribed by Railway from time to time. The due Charges will be deducted from the future payments by Railway to GCTO. However, in case no regular payments are being made by Railway to GCTO, on demand from Railway, the GCTO shall pay ART Charges to Railway without any delay.

9.2.4 The accident enquiry as mentioned in para 9.2.3 above shall be conducted jointly by the representatives of Railway and GCTO to be nominated by DRM and GCTO respectively. The accepting authority of Enquiry Report shall be DRM, whose decision shall be final and binding on GCTO.

10. **C&W Maintenance Facilities**

10.1 Normally C&W facilities shall not be constructed at GCTs.

10.2 However, if C&W facilities are operationally required at any GCT as per the extant instructions, only one-time capital cost for setting-up these facilities shall be borne by the GCTO. Operational costs, including staff cost and material cost (for Railway-owned stock), shall however be borne by the Railway.

10.3 For GCTs dealing with POL and other hazardous material, specialized facilities inside the Terminal as well as in Railway yard (if required) shall be developed by the GCTO at its own cost, and shall be maintained by GCTO to ensure that no untoward incident/ accident takes place at such facilities.

11. **Authorized Users**

11.1 GCTO shall inform Railway about the authorized rail users of the GCT before notification, so that they may be incorporated in the TMS module of FOIS.

MAITHON POWER LTD.

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

11.2 If the GCTO desires to add more rail users subsequently, GCTO shall inform Railway at least seven (07) working days in advance, to enable incorporation of such rail users in FOIS.

12. **Commodities Permitted**

12.1 Unless otherwise specified by Indian Railway, a GCT shall be permitted to book and handle all traffic – including coal and coke, which shall be as per the guidelines of 'preferential traffic schedule' issued by Ministry of Railways from time to time.

13. **Engine-on-Load (EOL) Scheme**

13.1 All new GCTs shall be set up on 'charging on through distance basis,' as per the instructions contained in Rates Master Circular on 'Freight on Through Distance Basis issued on 24.09.2014 (placed as Annexure 'A'), as modified from time to time.

13.2 All new GCTs charged on through distance basis shall be governed by the Engine-on-Load policy (FM Circular No.05 of 2013 dated 07.03.2013), as modified from time-to-time.

13.2.1 Railway may permit commissioning of a new GCT on non-EOL basis with the approval of DRM, if Engine-on-Load scheme is not operationally feasible.

14. **Charging of Commercial Staff**

14.1 No cost of commercial staff will be charged from the GCTO w.e.f the date of issue of this policy. However, for existing Terminals (*where PFT/ Private Siding Agreement has already entered into between RA and operator before the issue of this Policy*) where cost of commercial staff has already been deposited by the GCTO, there shall be no refund. Further, dues of commercial staff cost pending, if any, as on the date of issue of this policy shall be payable by GCTO.

15. **Provision of Weighbridge**

15.1 All GCTs planning to deal with outward cargo (loading) shall have a provision of Electronic In-motion Weighbridge (EIMWB) at a suitable location inside the Terminal. The EIMWB shall comply with OIML (International Organization of Legal Metrology) document (available at https://www.oiml.org/en/files/pdf_r/r106-2-e12.pdf) and the latest RDSO specifications.

15.1.1 Provision of EIMWB shall not be essential for GCTs dealing with inward cargo (unloading) only.

15.1.2 If a GCT without an EIMWB plans to start loading, the GCTO shall make arrangement for provision of an EIMWB as per the provisions of the Policy. DRM, in consultation with CFTM of the Railway, may, however permit loading at a GCT (if operationally feasible) – by nominating an alternative Railway weighbridge for weighment of rakes, awaiting installation of EIMWB, for a period of up to six months at a time from the date of start of such loading, duly recording the reasons for the same.

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

15.2 GCTO shall bear the cost of procurement (inclusive of the requisite warranty and a post-warranty comprehensive Annual Maintenance Contract (AMC) till the end of codal life), installation, and replacement of the EIMWB at the end of its codal life. GCTO shall also bear the cost of weighbridge house, weighbridge siding, and related infrastructure.

15.3 GCTO shall get the weighbridge certified by the Weights & Measures department of the state government, and shall comply with all the applicable statutory and legal requirements.

15.3.1 The weighbridge, after testing and certification by the Weights and Measures department of the state government, shall be sealed by their personnel in presence of GCTO's and Railway's representatives. This seal shall be broken, if required, only in the presence of the personnel of Weights and Measures department and Railway's representative.

15.4 GCTO shall bear the cost of manpower to operate the EIMWB, and the cost for its linking with FOIS.

15.5 RR will be issued on the basis of weighment within a GCT as per the extant instructions provided vide Rates Master Circular/Weighment/2019/0 dated 25.07.2019 and other applicable instructions of Railways (enclosed as Annexure 'B'), as modified from time to time.

15.6 No extra free-time will be provided for weighment at an EIMWB inside a GCT.

15.7 A nominated Senior Section Engineer/Carriage & Wagon (SSE/C&W) shall conduct periodic inspections (once in a fortnight) of the weighbridge to ensure that it is being operated as per the prescribed norms and procedures. In addition, frequent joint inspection by Sr.DME/Carriage &Wagon and Sr.DCM, or by officers nominated by them, shall be conducted and inspection notes issued – preferably once in three months. These inspections shall be conducted to ensure that EIMWBs are being operated as per the prescribed norms and procedures, and shall not necessarily include testing of EIMWBs using test wagons.

15.7.1 DRM or Sr.DME/C&W or Sr.DCM may order surprise inspection or testing of any weighbridge to check for its proper functioning or calibration.

15.8 For the purpose of mandatory testing of EIMWB, test-wagons shall be provided by Railway on payment of Haulage Charges. These Haulage Charges shall be levied for the actual distance travelled or 100 km, whichever is less.

15.8.1 In cases where there is more than one weighbridge located within a GCT, the Haulage Charges as per para 15.8 above shall be levied for the 'first weighbridge,' and shall be levied @25% of the charges for the 'first weighbridge' for other weighbridges inside the Terminal.

15.8.2 For random surprise testing by Railway, test-wagons will be provided for without levying Haulage Charges or any other charges.

15.8.3 Railway shall try to ensure availability of 'test wagon-sets' in the vicinity of all GCTs, so that there is no delay in arranging these wagons for testing.

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

15.9 If any overloading is detected in the outward traffic the same will have to be unloaded/ re-adjusted at the Terminal itself – for which no extra free-time will be provided.

15.10 Whenever the EIMWB goes out of order, it shall be put right by the GCTO within three days, failing which a penalty of Rs 4,000/- per day or part thereof for the next ten days, and Rs 8,000/- per day or part thereof thereafter, shall be imposed.

15.11 Under exceptional circumstances, if it becomes essential to install the EIMWB of a GCT either partially or wholly on Railway land not licensed to GCTO (on account of operational and technical constraints), permission for the same may be given by the DRM. Location of such an EIMWB shall be decided by Sr.DOM, in consultation with Sr.DCM, Sr.DEN & Sr.DME.

15.11.1 All terms and conditions applicable on EIMWB inside a GCT shall also be applicable on an EIMWB installed by GCTO on such land. However, Railway will be the executing agency for installation, operation, and maintenance of such EIMWBs.

15.11.2 Cost of the comprehensive AMC and manpower to operate such EIMWB shall be borne by the GCTO.

15.11.3 Railway will be free to weigh rakes other than those of the concerned GCT at such EIMWB.

15.12 Railway may permit weight-o-meter/ pre-weighbin system of weighment in GCT on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager, keeping in view the requirement and to avoid any manipulation of weighment data.

15.12.1 Such equipment shall be certified by Weights & Measures department, and should also meet all extant statutory provisions and policy guidelines.

15.12.2 The system should have proper locking/ sealing arrangement to avoid any tampering with the system including software. The 'admin' control should rest with the Railways.

15.12.3 One-to-one correspondence between Weight-o-meter discharge and corresponding wagon shall be maintained by GCTO.

15.12.4 A procedure order for normal operations covering precautions to be taken to ensure that wagons are empty before loading and periodical test weighing of this system shall be maintained by GCTO.

15.12.5 The system should have interface with FOIS to avoid any error in data capture during transmission.

15.13 GCTO may also be permitted to install an alternative means of weighment of wagons, which should have accuracy level at least equal to that of EIMWB and should ensure weighment within the time taken by EIMWB.

15.13.1 GCTO shall submit request for such alternative means of weighment, along with all the necessary documents, which may be permitted by

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

Railway on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager.

15.13.2 GCTO shall be responsible for getting the proposed means of weighment of wagons certified by Legal Metrology/ Weights & Measures department, and also for ensuring its proper upkeep and maintenance at its own cost.

16. **Installation of FOIS and TMS**

16.1 FOIS and TMS with limited access as prescribed by Indian Railways shall be installed at the GCT – at the cost of GCTO. All RRs will be prepared through TMS. Complete maintenance of FOIS and TMS will be done by Railway at its own cost.

16.1.1 Cost of replacement of FOIS and TMS equipment, at the end of their codal life, shall be borne by the GCTO.

17. **General Conditions**

17.1 Applicant/ GCTO will be solely responsible for - (a) arranging/ acquiring/ ownership/ lease/ licensing of non-Railway land for the development of GCT; (b) all statutory and non-statutory clearances from other government departments and statutory bodies; and (c) payment of all charges, taxes/ GST, surcharges, cess, levies, etc, related to transportation and handling of cargo.

17.2 For GCTs being developed entirely on non-Railway land, the portion of land required for linear connectivity of GCT with the serving Railway station may be acquired by Railway Administration on the specific request of applicant/ GCTO and at the cost of the applicant/GCTO, under the 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013'/ 'The Railway Act, 1989'.

17.2.1 An estimate of the cost of the land, prepared by Railway Administration in consultation with the Land Acquisition Officer, will be presented to the applicant, who shall deposit the amount before any further action is initiated for the acquisition of land. The applicant shall also agree to pay on demand such excess cost, if any, as may be incurred for the acquisition of this land.

17.2.1.1 The applicant shall also agree to compensate Railway if any extra cost is incurred by Railway arising out of such acquisition, even after commissioning of the Terminal.

17.2.2 Ownership of the land so acquired will vest with Railway, and the applicant for the Terminal shall have no right or claim thereto.

17.2.3 The entire cost of Railway infrastructure to be developed on such portion of acquired land will be borne by the GCTO, however the ownership of assets so created on such land will rest with Railway. Railway will reserve the right to grant connectivity to other Gati Shakti Cargo Terminal(s) taking off from the track passing over this land.

MAITHON POWER LTD. MAITHON

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

17.3 Unless otherwise mentioned in this policy, all 'Commercial and Operating rules' as applicable for a goods-shed for booking, supply and delivery of goods shall be applicable at GCTs.

17.4 The GCTO shall be responsible for clearance of all Railway dues, including demurrage charges, accrued within the GCT.

17.5 The cost of electricity/ diesel consumed by Railway locomotives shall be borne by Railway.

17.6 The GCTO shall provide at his own cost the level-crossings and ROB/ RUB/ LHSs for safe passage of trains as well as road vehicles, as per requirement and prescribed norms.

17.6.1 All level-crossings have to be provided with requisite infrastructure (gate-post, gate-lodge, etc) and have to be manned by GCTO at its own cost.

17.6.1.1 If the level-crossing becomes due for interlocking, the cost of interlocking shall be borne by the GCTO.

17.6.2 Maintenance of level-crossings falling on the track being maintained by Railway shall be done by Railway at its own cost; while maintenance of level-crossings falling on the track being maintained by the GCTO shall be done by GCTO (as illustrated in Section III of Schedule '3').

17.7 Railway shall reserve the right to grant connectivity to another GCT(s) from the portion of track on Railway land as well as from the portion of track which is being maintained (and assets are owned) by Railway. For the sake of clarity, Railway may permit connectivity to another Terminal from the connectivity portion of a Terminal – (i) on Railway land where the assets are owned and maintained by Railway; and (ii) on non-Railway land where the ownership of assets has been transferred to Railway by the GCTO, and the assets are maintained by Railway though the land is owned by the GCTO. This provision shall be applicable on Railway land for all GCTs; and on non-Railway land for all new GCTs, as well as on existing Terminals who decide to migrate to this Policy and transfer the ownership of assets on their land to Railway.

18. **Agreement**

18.1 An Agreement for GCT shall be signed before the issue of commercial notification and operation of the GCT by Railway. Sr.DCM of the concerned Division shall be the signatory of the Agreement.

18.2 For existing Terminals migrating to this Policy, the period of Supplementary Agreement (to be signed as per the provisions of this Policy) shall be co-terminus with the existing Agreement.

19. **Dispute Resolution**

19.1 In case of any dispute arising in the interpretation of the Policy, the decision of DRM will be final and binding.

MAITHON POWER LTD. MAITHON

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

19.2 Conciliation: All disputes and differences of any kind whatsoever arising out of or in connection with the construction and operations of GCT shall be referred by the GCTO to Railway Administration through 'Notice of Dispute.' RA shall, within 30 days after receipt of the 'Notice of Dispute,' notify the name of conciliator(s) to the GCTO. The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of Agreement. If the parties reach agreement on a settlement of the dispute, they shall draw up and sign a written Settlement Agreement duly signed by Railway's representative (Sr.DCM), GCTO and conciliator(s). When the settlement agreement is signed, it shall be final and binding on the parties. The conciliators shall be paid fee as fixed by Ministry of Railways time to time, which shall be shared equally by the parties.

19.2.1 The parties shall not initiate, during the conciliation proceedings, any reference to arbitral or judicial proceedings in respect of a dispute that is the subject matter of the conciliation proceedings.

19.2.2 The conciliation shall be carried out as per 'The Arbitration and Conciliation Act, 1996' and the proceedings shall be terminated as per Section 76 of the above Act.

19.3 Arbitration: If the dispute is not settled through Conciliation (as mentioned in para 19.2), it shall be decided by reference to arbitration. Arbitration shall be carried out as per provisions available for arbitration in Indian Railways General Conditions of Contract 2020 for works contracts, as amended from time to time.

20. **Termination of the Agreement**

20.1 Subject to the provisions in the Agreement, Railway Administration may terminate the Agreement with a GCTO operating a GCT in the event of any serious irregularity committed by the GCTO. This may include any grave breach of the terms and conditions of the Agreement, any default by GCTO, violation of The Railway Act, 1989, or commission of an unlawful act which is not in-line with Good Industry Practices.

20.2 Before terminating the Agreement, RA shall first issue a Show Cause Notice, informing GCTO to submit representation within 30 days. If no response is received, or if the response of GCTO is not satisfactory, a written Notice of Termination specifying a grace period of 180 days shall be given to the GCTO, by Sr.DCM with the approval of DRM. However, if no reply to the Notice for Termination is received within 180 days of the issue of Notice for Termination, the Agreement with GCTO will stand terminated and the same shall be communicated by Sr.DCM to GCTO. No termination payment shall be made by RA to the GCTO.

20.2.1 If the GCTO submits a reply within 180 days, RA will take further course of action on the merit of the case.

20.3 The GCTO will also have the right to terminate the Agreement by giving a notice of 180 days to the Railway Administration in the event of any difficulty faced by the GCTO in smooth functioning of the Terminal for reasons attributable to

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

Railway as laid down in this policy, or for any other reason internal to the GCTO. No termination payment shall be asked by Railway from GCTO.

20.4 Any dispute arising out of this Agreement will be resolved through the Dispute Resolution Mechanism as prescribed under Para 19 of the Policy.

MAITHON POWER LIMITED

वरिष्ठ मंडल वाणिज्य प्रबंधक
Sr. Divisional Commercial Manager
पूर्व रेलवे, आसनसोल
Eastern Railway, Asansol

EASTERN RAILWAY

CL. No. C 490/575/BG Kolkata, dated, the 22nd.Feb'202

From:Principal Chief Commercial Manager,
Eastern Railway, Kolkata.

To : M/s. Maithon Power Ltd., P.O./Tahsil- Nirsha, Dist.-Dhanbad, Jharkhand, Pin-828205.
Station Manager/GSS/Yard Master/E.Rly./Thaparnagar
Station Managers/Comml. Inspectors/Comml. Clerks/GSS/Goods Clerks/ Weighbridge Clerks/Siding Clerks and all concerned.

1. Divl. Rly. Manager/E.Rly./Asansol for his information in relation to his letter No.C.4/Goods/MPL/Agreement/ASN/22 dated 17.02.2022.
Divl. Rly. Manager/E.Rly./Howrah/Sealdah/Malda.
Sr.DCM/E.Rly./Howrah/Sealdah/Malda.
2. Sr.DCM/E.Rly./Asansol, for his information
3. Sr.DOM/E.Rly./ Howrah/Sealdah/Malda/Asansol, They are requested to circulate to all concerned.
4. PCOM/CFTM/CTPM/E.Rly./Kolkata. Sr. DGM/E.Rly./Kolkata.
5. Dy.CAO (TA)/E.Rly./Kolkata
6. PDA/E.Rly./Kolkata.
7. PCCM/CCM(FM)/CCM(PM) of E.Rly.
8. ACM(FM)/SCM(Coaching)/ACM(Cl.)/ACM(CP)/ACM(RG)/ACM(AG/ SCM (Court)/ACM(C&D)/SCM(Cl&R.)/ of CCM's Office/KG/Kolkata.
9. OSs/Hd.Clerks of Rates/Sdg. Cell/BG/ KG /Kolkata.
10. EDRM/Rly. Board/Fairlie Place/Kolkata.
11. SO/Coal Bill Section/KG & OS/Coal Section Office/E.Rly./Asansol.
12. Principal, Zonal Training School/E..Rly./Bhuli/Dhanbad.
13. Sr CRDI/TMS/ER/Kolkata.
14. STM/FOIS/FP/Kolkata.
14. CRIS/Chanakyapuri/New Delhi. 15. CRIS/New Koilaghat/Kolkata.
16. Dy Chief Statistical & Analysis Officer/E.Rly./Kol.

Copy for information and necessary action to:-

1. PCCM/CR-Mumbai	2. PCCM/ECR-Hazipur	3. PCCM/Eco. Rly.-BBS
4. PCCM/NCR-ALD	5. PCCM/NER-GKP	6. PCCM/NFR-Maligaon.
7. PCCM/NWR-Jaipur	8. PCCM/NR-NDLS.	9. PCCM/SCR-S.C.
10 PCCM/SECR-Bilaspur	11 PCCM/SER-Kolkata.	12 PCCM/SWR-Hubli
13. PCCM/SR-Chennai.	14 PCCM/WCR-JBP.	15 PCCM/WR-Mumbai

PCOM/Konkan Railway/Belapur.
Chairman, KoPT Rly./Dock Manager/KPT Rly./KP Dock.
Indian Chamber of Commerce, 4, India Exchange Place, Kolkata
Bengal Chamber of Commerce & Indust ries,23, R.N. Mukherjee Road, Kolkata
Oriental Chamber of Commerce,5, Clive Row, Kolkata.

Contd...2/-

Sub: Provisional Opening of the GCT of M/s. Mithon Power Limited served by Thaparnagar station over Asansol Division.

With effect from 23.02.2022, the GCT of M/s. Mithon Power Ltd. served by Thaparnagar station over Asansol division of this Railway is declared provisionally open as an independent booking point for dealing with inward traffic of Coal and outward traffic of Fly Ash booked in train/wagon load when consigned to/from the above GCT.

Freight charge will be levied on Through Distance basis by adding an additional distance of 14.93 kms. from the serving station, Thaparnagar.

Necessary particulars of the GCT for booking of traffic are given as under:-

Name of the siding	Name of the serving Stn.	Alphabetical code of the siding	Numerical code of the siding	Distance to be added from the serving station to the farthest buffer end of the siding
Maithon Power Limited Sdg	Thaparnagar (TNW)	MMMT	02120735	14.93 kms

The GCT will work as per instructions contained in Master Circular on 'Gati Shakti Multi-modal Cargo Terminal (GCT)' dated 15.12.2021 and its amendments and the clauses of the GCT Agreement. The GCT will be operated on EOL and Round the Clock basis. In case Rly. engine is utilized inside the GCT, shunting charges will be leviable as per extant rules. Compliance of all Commercial formalities must be ensured.

All other charges as leviable to the traffic of the GCT as per the provisions of Railway rules and guidelines in force from time to time should be recovered accordingly.

All instructions of State Pollution Control Board should be adhered to.

All concerned to please note and act accordingly.

Necessary addition should be made in All India Alphabetical list of Stations/Sidings & RBS data as well.

This issues with the approval of the Competent Authority.

22/2/22

(A.Mukherjee)
Sr. Commercial Manager (Catg & PS)
for Principal Chief Commercial Manager

Message

TO
DRM ASN
SR DCM/ASN
SR DOM/ASN

COPY TO CFTM/ER

SUB: KEPT IN HOLD THE PROVISIONAL OPENING OF MAITHON POWER LTD SIDING,

(MMMT)

IN VIEW OF CE(P&D)/ER'S LETTER VIDE NO. W(1)/MISC/21-22 DATED 22.02.2022, THE OPENING OF MAITHAN POWER LTD SIDING (MMMT) W.E.F 23.02.2022 ISSUED VIDE COMMERCIAL NOTIFICATION NO. C 490/575/BG DATED 22 ND FEB, 2022 MAY BE KEPT IN HOLD TILL COMPLIANCE OF OBSERVATION OF CE(P& D)/ ER.

THIS HAS APPROVAL OF PCCM/ER

A.MUKHERJEE
SCM CTG & PS

[Message From: ERHQ, Message For: ASND, Date: 22-02-2022, Subject: KEPT IN HOLD OPENING OF MMMT, From: SCM/ CTG & PS/ERHQ, Sent At: 22:36:22, On: 22-02-2022, Sent By User ID: ERFF , Client ID: 49.37.36.14, Message Category: APPLICATION ISSUE,]

6545

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2021/TC(FM)/18/23 – Part 3 Rail Bhavan, New Delhi – 110 001, dated 07.03.2022

General Managers,
All Zonal Railways

PCCM
PCOM

Sub:- Master Circular on "Gati Shakti Multi-Modal Cargo Terminal" – Instructions regarding Issue of Notification.

A Master circular on 'Gati Shakti Multi-Modal Cargo Terminal (GCT) policy' has been issued vide letter No. 2021/TC(FM)/18/23 dated 15.12.2021. As per Para 1.1 of this new GCT policy, all new as well as under-construction / under-approval Cargo Terminals (approved / proposed under the 'Private Siding' or ' Private Freight Terminal' policies) shall be covered by the GCT policy.

2. It may further be noted that the as per provision of para no. 18.1 of GCT policy an agreement for GCT shall be signed before the issue of commercial notification and operation of the GCT by Railway.

3. In this regard, references have been received from Zonal Railways regarding issued faced in signing of agreement for the GCTs ready for commissioning after 15.12.2021 --on account of non availability of any standard agreement.

4. Standard Agreement is under the process of finalization and approval. Therefore it is requested that the commissioning of new Terminals shall not be delayed on account of non-availability of standard agreement; and Zonal Railways may notify new Terminals by issuing comprehensive Notifications having details of the relevant provisions of the GCT policy.

However, this arrangement shall be ***ad-interim*** for an initial period of 03 months or till finalization of standard agreement, whichever is earlier.

(Yasir Rizvi)
Dy. Director Freight Marketing
Railway Board

C/- PCCMs and PCOMs, All Zonal Railways for information & n/action please.

द.म. रेलवे/S.C. Railway

Eastern Railway

No: - C.490/575/BG Kolkata, dated 08.03.2022.

Divisional Railway Manager/ER/ASN
CFTM/ER/KKK
Sr. DCM/ER/ASN
Sr.DOM/ER/ASN
Director/ Rail Movement/ Railway Board/FP.

Sub: - Provisional opening of the GCT of M/s Mithon Power Limited served by Thaparnagar Station.

Ref: - i) This office circular of even no. dated 22.02.2022.

ii) This office FOIS message dated 22.02.2022 at 22.36.22 hrs.

The subject GCT was declared provisionally opened w.e.f 23.02.2022 through this office circular referred under item (i) above. Subsequently it was kept in abeyance through this office FOIS message referred under item (ii) above.

Competent Authority has permitted to withdraw the "kept in abeyance" status for opening of the GCT. Accordingly, the subject GCT will be provisionally opened w.e.f 09.03.2022.

All other conditions notified earlier will remain unaltered.

8/3/22

(Ananta Mukherjee)
Sr. Commercial Manager/ Catg & PS
For Principal Chief Commercial Manager

MAITHON POWER LIMITED

MPL/FY 22/22-03/007

14TH March 2022

To
Divisional Railway Manager
Eastern Railway
Asansol

Sub: Commissioning of MPL Siding (MMMT) – Migrating to "Gati Shakti Multi-Model Cargo Terminal (GCT Policy-2021)" and First Coal Rake Receipt.

Respected Sir,

Please accept our heartiest congratulations for commissioning of the very first private railway siding under the recently introduced "Gati Shakti Multi-Model Cargo Terminal (GCT Policy-2021)". Maithon Power Limited takes pride in becoming the first siding to get notified under GCT-2021 policy and successfully commissioning the siding with first rake receipt on 10th March 2022.

The commissioning of MPL siding has been made possible with joint effort of MPL project team and Asansol Division over the last few years and indeed is an event to be cherished for times to come. Henceforth, we will be able to receive coal on a sustainable and environment friendly manner, thereby contributing to the cause of reduction in carbon emission for our company and Nation at large.

Your gracious presence along with senior officers of Asansol Division during receipt of first Rake at MPL Siding (MMMT) on 10th March 2022 made it an even more joyous and memorable event for us.

We are thankful for all the support provided by Eastern Railway Kolkata & Asansol Division to achieve this milestone and look forward for continued association with Asansol Division and Eastern Railway.

Thanking You.

Yours faithfully,
For **Maithon Power Limited**

Vijayant Ranjan
CEO-MPL & Chief ER Generation

Copy to:
Sr. DOM, Eastern Railway Asansol
Sr. DCM, Eastern Railway Asansol

ANNEXURE P/8AG

भारत सरकार **GOVERNMENT OF INDIA**
रेल मंत्रालय **MINISTRY OF RAILWAYS**
(रेलवे बोर्ड **RAILWAY BOARD)**

रेल भवन ,नई दिल्ली –110001

No. 2021/TC(FM)/18/23 –Part (I) Rail Bhavan, New Delhi-110 001, Dated 07.07.2022

The General Managers,

1. Central Railway, Mumbai
2. Eastern Railway, Kolkata
3. East Central Railway, Hajipur
4. East Coast Railway, Bhubaneshwar
5. Northern Railway, New Delhi
6. North Central Railway, Prayagraj
7. North Eastern Railway, Gorakhpur
8. Northeast Frontier Railway, Maligaon
9. North Western Railway, Jaipur
10. Southern Railway, Chennai
11. South Central Railway, Secunderabad
12. South Eastern Railway, Kolkata
13. South East Central Railway, Bilaspur
14. South Western Railway, Hubli
15. Western Railway, Mumbai
16. West Central Railway, Jabalpur

Sub: **Standard Agreements for Gati Shakti Multi-Modal Cargo Terminals (GCTs)**

Ref: (i) Master Circular on "Gati Shakti Multi-Modal Cargo Terminal-2021" issued vide letter no. 2021/TC(FM)/18/23 dated 15.12.2021
(ii) Railway Board's letter no. 2021/TC(FM)/18/23 –Part (3) dated 07.03.2022.

The policy guidelines on "**Gati Shakti Multi-Modal Cargo Terminal (GCT)**" were issued under GCT Master Circular 2021 vide Railway Board's letter No. 2021/TC(FM)/18/23 dated 15.12.2021. As per provision contained in Para 18.1 of GCT Master Circular, an agreement for GCT shall be signed before the issue of commercial notification and operation of the GCT by Railway.

In this connection, standard agreement copies viz. **(i)** For GCT on Private Land and **(ii)** For GCT - entirely / partially on Railway Land, have been enclosed, duly vetted by legal directorate.

Accordingly, Zonal Railways may take immediate action for signing of Agreements in respect of GCTs that were initially notified on the basis of comprehensive notifications in terms of guidelines quoted vide Railway Board letter mentioned under ref-(ii) above.

Further, following instructions must be ensured while signing of Agreement-

(i) It may be ensured whosoever executes the present Agreement for an on behalf of the President of India is authorized to do so and his name and designation is correctly mentioned in the opening Para as well as in the Signature Clause at the time of actual execution of the same.

(ii) It may also be ensured that whosoever executes the present Agreement for an on behalf of the Second Party is authorized to do so and his name and designation is correctly mentioned in the opening Para as well as in the Signature Clause at the time of actual execution of the same.

07/07/2022

(iii) In addition to this, the name and full address of the witnesses representing to the parties should also be mentioned in the Signature Clause at the time of execution of the document under reference.

(iv) Blank spaces in the draft agreement, if any, should be filled with appropriate / proper wordings according to their requirements before actual execution of the same.

The Standard Agreements enclosed herewith are issued with the approval of Rates, Traffic Transportation, Mechanical Engineering, Civil Engineering, Land & Amenities and Legal Directorates and with the concurrence of Finance Directorate of the Ministry of Railways.

Please acknowledge receipt of this letter.

Enclosure/As Above

Ashutosh Mishra
Joint Director Freight Marketing

No. 2021/TC(FM)/18/23 –Part (I) New Delhi, Dated 07.07.2022

Copy forwarded for information to :

1. The PFAs, All Indian Railways.
2. The Deputy Comptroller & Auditor General of India (Railways), Rail Bhawan.

07/07/2022

For Member (Finance)/Railway Board

No. 2021/TC(FM)/18/23 –Part (I) New Delhi, Dated 07.07.2022

1. The Principal Chief Operations Managers, All Indian Railways.
2. The Principal Chief Commercial Managers, All Indian Railways.
3. The Chief Traffic Planning Manager, All Indian Railways.
4. The Principal Chief Engineers, All Indian Railways.
5. The Chief Commercial Managers (FM), All Indian Railways.
6. Director General, RDSO, Manak Nagar, Lucknow.
7. Director, Indian Railways Institute of Transport Management (IRITM), Manak Nagar, Lucknow.
8. Director General, National Academy of Indian Railways, Vadodara.
9. The Managing Director/Chief Commercial Manager, Konkan Railway Corporation Ltd., Belapur Bhawan, Plot No. 6, Sector-11, CBD Belapur, Navi Mumbai – 400014.
10. Managing Director, CRIS, Chanakyapuri, Near National Rail Museum, New Delhi.
11. Managing Director, DFCCIL, Pragati Maidan, New Delhi

Ashutosh Mishra
Joint Director Freight Marketing

No. 2021/TC(FM)/18/23 –Part (I) . New Delhi, Dated 07.07.2022

1. Copy for kind information to:
2. OSD/MR and EDPG/MR for kind information of Hon'ble MR.
3. Chairman & CEO, Member (O&BD), Member (Finance), Member (Infra.), Member (T&RS), DG(RPF), and Secretary Railway Board, New Delhi.
4. AM(Traffic), AM(C), Adv (Infra), Adv. (Vig.), EDTC(Rates), EDTT(M), EDTT(S), EDTT(F), ED(Plg.) EDT(PPP), EDV(T), EDF(C), DTT(Coord), OSD/Chairman & CEO, OSD/Member (O&BD), Co-Chairman/TMIR, Chairman and Convener/AGE and DTC(R)/ Railway Board, New Delhi.

Model Agreement for 'Gati-Shakti Rail Multi-modal Cargo Terminal' built entirely on private land'

_____Railway

This **Agreement** is made and executed at ……..on this ……. Day of ……., 20…….

BY AND BETWEEN

THE PRESIDENT OF INDIA acting through (incorporate name and designation of the officer authorized under Article 299(1) of the Constitution) having its office at ……. (hereinafter referred to as "**The Railway Administration**" which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the One Part;

AND

……. [hereinafter referred to as **("Applicant or GCTO")*** which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the Other Part.

WHEREAS The Applicant is desirous of having a Cargo Terminal laid by the Railway Administration at _____ from the _____station yard of the _____ _ Railway taking off from Kilometer No. _____ between_____ station and_____ station of the Railway as shown in red and green on the plan bearing CE's No. _____ hereto annexed for the purpose of carrying on the Applicant's business in the Applicant's premises situated at _____ _ District _____

AND WHEREAS the Railway Administration is willing to lay the said cargo terminal for the said Applicant upon and subject to the terms and conditions hereinafter set forth.

NOW, Therefore, this Agreement witnesseth as follows:

1. **Interpretation**: In these presents, unless the context otherwise requires, the following Words and Expressions have the meaning and shall be interpreted as specified, namely-

Words importing the singular number include the plural number and vice versa.

"Person" includes a firm or other association or body of individuals and a Company or other Corporate Body.

"Railway Administration" means and includes the General Manager for the time being of (name of Zonal Railway) Railway and any officer of the (name of Zonal Railway) Railway authorized by any such General Manager to deal with any matters, with which these presents are concerned.

"Applicant" means the person named as party hereto of the other part and includes in the case of a firm or other association or body of individuals, the individual person or persons for the time being and from time to time constituting the association or body and, In the case of a company, corporation or body corporate the Successor in business of interest, such company, corporation or body corporate for the time being.

07/07/2022

"Works" means the premises belonging to or occupied or used by the Applicant which are connected with the (name of the Zonal Railway) Railway system by the terminal herein before mentioned,

"Undertaking" includes all land, railway lines, works, buildings, engines, rolling stock and other movable or immovable property now or at any time hereafter forming part of or pertaining to the (name of the Zonal Railway) Railway system as now or hereafter constituted and all engines and rolling stock (whether belonging to the _____ Railway system or not) passing over such system.

"Cargo Terminal" Includes the Railway track connecting the Applicant's works with the Railway system, as hereinafter agreed to be constructed by the Railway Administration and all branches and extensions thereof which may hereafter be constructed by the Applicant or by the Railway Administration at the Applicant's request and all sleepers, ballast, embankments, bridges, tunnels, signals interlocking and tele-communication equipment gates, buildings and other constructions, erections, works and movable property constructed / erected / made/ provided or used in connection with the said track and also all land whereon or on part whereof the said track and connected things aforesaid are constructed / erected / made / provided or used including land acquired for the purpose thereof as hereinafter provided and land belonging to the Railway Administration and land belonging to or occupied or used by the Applicant.

The Cargo Terminal shall cover only that portion of track network on which Railway rolling stock will ply. The network utilized by the Company/Party for their internal use shall not form part of the Cargo Terminal defined herein."

"Sub-grade Work" includes the construction of embankments, the making of cuttings and the carrying out of other earth work, the construction of bridges (exclusive of girder works), buildings, platforms, tunnels, culverts, drains and openings and laying out of ballast and all other works necessary to permit the laying and construction of railway track of the terminal and generally all works which have to be abandoned, if the terminal be closed.

"Permanent Way Materials" includes girders, rails, sleepers, fastenings, points and crossings, fencings, signaling, interlocking and telecommunication equipment and over-head structure and any other things connected therewith for electric traction and other machinery (except station machinery) and equipments necessary for working the terminal.

"Legal Representative" means any person who is competent to give the Railway Administration a valid discharge in respect of any money or property which may be payable or deliverable to the Applicant and shall include the executor and administrator of a deceased person, a succession certificate holder, the surviving or continuing partners or members in the case of a firm, association or body of individuals, the certificated guardian if a minor's property, the committee of lunatic, the assignee or receiver of an insolvent's estate, the liquidator of a Company, a receiver and any person legally appointed to represent the estate of the Applicant.

* **Note**: Forms Of Description Of The Applicant –

(Where a single person is the Applicant) "and A.B. (insert full name) of (insert address and occupation)"

(Where two or more persons are Joint Applicants), "and A.B. (insert full name) of (insert address and occupation) and C.D.: (insert full name) of (insert address and occupation)".

07/07/2022

(Where a single person trading under a different fee name is the Applicant) "and A.B. (Insert full name) of (insert address and occupation) carrying an business under the name or style of (insert name) at (if the business is carried on at a different address from the address already Inserted then insert such additional address)."

(Where a partnership firm is the Applicant and the names of the partner known), "and A.B. (Full name) and C.D. (full name) carrying on business partnership as (insert nature of business) under the style or firm of (insert name or style of the firm and address).

(Where a partnership firm is the applicant and the names of partners are not known), "and A &Co. (insert name or style of the firm) a partnership firm carrying on business at (insert address) as (insert nature of business)."
(Where an incorporated Company is the Applicant), "A.B. &CO. Ltd. a company incorporated in (Insert country of incorporation (e.g. India, England or elsewhere, as the case may be) and having its registered office at (insert address)" (in the case of a company incorporated elsewhere than in India address) "and its principal office in India at (insert address)".

(Where the Applicant is a joint family governed by the Mitakshara School of Hindu Law), "A.B. (insert full name) for self and as Karta or managing member of the Joint family, governed by the Mitakshara School of Hindu Law, carrying on business under the name or style of (insert name under which the joint family business is carried on) at (Insert address) and C.D.E.F.G.H. etc. (insert full name) being the other adult members of the said Joint family.

2. **<u>Agreement To Construct Gati Shakti Multi-Modal Cargo Terminal</u> (GCT) :**

Subject to the terms and conditions hereinafter contained, the Railway Administration shall at the cost and expense of the Applicant in all respects, construct fully on the land of the Applicant of the said Cargo Terminal, from _____ (length of terminal) Kilometers on _____ (name of portion) Branch as shown in red and green on the plan annexed hereto (bearing CE's No. _____) connecting the Applicant's work known as _____ situated at or near _____ in the District of with the system at or near _____ on _____ Railway.

3. **Capital Cost of GCT**

3.1 The Gati Shakti Cargo Terminal Operator (GCTO) shall bear the entire capital cost of new GCT from the take-off point onwards, as marked on the Engineering Scale Plan (ESP) at the serving station.

3.1.1 For the linear connectivity portion of GCT passing through the Railway land, including the land to be acquired by Railway for this purpose under para 17.2 of the Master Circular on Gati Shakti Multi-modal Cargo Terminal Policy dated 15.12.2021 (**hereinafter referred to as the policy**), GCTO shall provide only the minimum essential infrastructure of track, OHE and signalling equipment at the cost of GCTO (other assets not related to track, signalling, or OHE, if required, shall be constructed by Railway at its own cost). In case of any dispute, the decision of DRM shall be final in this regard.

3.1.2 The ownership of infrastructure including the track, signalling equipment and OHE created on Railway land under para 5.1.1 of the policy shall belong to Railway, even though the capital cost for these shall be borne by the GCTO.

07/07/2022

3.2 The capital cost for all common-user traffic facilities at the serving station (as marked on the ESP), including Signalling & Telecommunication works, modification and up-gradation to existing interlocking/ OHE, or electrification in future within the station limit up to take-off point, shall be borne by the Railway.

3.3 Maintenance and operation of assets created under para 5.2 of the policy (common-user traffic facilities) at the serving station including staff costs, shall be the responsibility of the Railway.

3.4 The capital expenditure required for augmenting or up-grading the facilities and infrastructure on the connectivity portion from take-off point onwards towards Terminal and within the premises of Terminal shall be borne by the GCTO.

3.5 The connectivity to GCTs shall normally take-off from the existing serving station. However, in case when it is operationally not feasible to provide a connection from an existing serving station, provision of a Block Hut/ Block station (between two existing stations) with required points & crossings may be considered, provided it is operationally feasible. This will be done on the request of GCTO.

3.5.1 In such cases, the entire capital cost of the new Block Hut/ Block station and related infrastructure shall be borne by the GCTO. However, this work will be executed by Railway, and ownership of the same shall remain with the Railway.

3.5.2 However, for new GCTs planned to load one million Tonne or more (outward traffic) per annum, the capital cost of new Block Hut/ Block station will be repaid to the GCTO by Railway.

3.5.2.1 The repayment of capital cost of the new Block Hut/ Block station will be made by Railway through 10% rebate on the outward traffic loaded at the Terminal, till such time the capital cost has been repaid to the GCTO. This 10% rebate shall be granted on the normal tariff rate (NTR) of the commodity.

3.5.2.2 The repayment of capital cost as mentioned in para 3.5.2.1 above will be done only if the Terminal achieves the target of loading one million Tonne per annum within two Calendar Years of commissioning (excluding the year of commissioning). For example, if a GCT commissioned during calendar year 2022 achieves one million Tonne loading during calendar year 2024, then the repayment of capital cost of new Block Hut/ Block station (through 10% rebate on outward traffic) shall start from 01st April 2025.

3.5.2.3 This repayment shall be made for the investment made by the GCTO on behalf of Railways. As such, this repayment through freight rebate shall be admissible over and above all other rebates that the GCTO may become eligible for in future.

3.5.2.4 This provision of repayment shall be applicable only for GCTs for which Agreement between RA and GCTO has not been entered into till the date of issue of this Policy. **Further, existing terminals migrating to GCT Policy shall not be eligible for this repayment.**

4. **<u>Sub-Grade Work</u>** :

The sub-grade work, culverts & bridges, drains, pitching & protection work and ballast supply shall be carried out at the cost and expense of the Applicant either by his own agency or by the Railway Administration on his request. When the works or part of them are carried out by the Applicant, the work shall conform to the Railway Administration's drawings and

07/07/2022

specifications and shall be executed under the supervision of Engineering staff of the Railway Administration or under the supervision of Approved Consultant.

5. **Security of Assets**

5.1 The responsibility of security of railway assets over Railway land shall be of Railways. However, the responsibility of security of railway assets outside Railway Land or on land licensed to GCTO shall be of GCTO.

5.1.1 In case of theft of any railway asset on non-Railway land, the maintenance of which is with Railway, the restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

5.1.2 In case of theft of OHE including OHE on non-Railway land, restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

6. **Maintenance of Assets**

6.1 Maintenance of assets on Railway land, including Track and Signalling Equipment installed on Railway land under para 5.1.1 of the policy, shall be done by Railway at its own cost.

6.2 Maintenance of OHE from the take-off point onward including inside the Terminal shall be done by Railway at its own cost – as this involves safety of men and equipment, and can also impact rail operations outside the Terminal boundary.

6.3 In addition to above, the maintenance of assets (track, bridges, signalling equipment, etc) on non-Railway land ***outside the Terminal***, may also be done by Railway at its own cost if the GCTO transfers the ownership of these assets to Railway (the ownership of land on which such assets are created shall however continue to be with GCTO). Provided further, this provision shall be applicable only to those GCTs where freight tariff is charged on 'through distance basis.'

6.3.1 In case maintenance of assets, including Track and Signalling Equipment, is being handed over to Railways on migration to this policy by GCTO, the GCTO will ensure that the standards of track and signalling infrastructure being transferred to Railway is in accordance with the prescribed standards for GCTs, as decided by Railways (as per Annexure 'D' of the policy). If any up-gradation/ replacement/ renewal of any infrastructure is required, the GCTO shall bear the cost for the same.

6.3.2 In case of damages to the assets due to accident, etc, the replacement shall be done by Railway. However, if the responsibility of accident, after Enquiry (joint enquiry by representatives of Railway as well as GCTO), is fixed on the GCTO – the GCTO shall have to bear the cost of all the replacements. The decision of the Nodal Officer, i.e. DRM, in this regard shall be final.

6.3.3 In case the damage to assets is due to an external cause (floods, breaches, terrorist activity, etc), the cost of restoration shall be borne by the GCTO.

6.3.4 If the GCTO does not agree to transfer the ownership of assets (track, bridges, signalling equipment, OHE, etc) to Railway or freight tariff is not chargeable 'on through distance basis'; the maintenance of these assets – except OHE – shall continue to be the responsibility of GCTO.

6.3.4.1 Railway shall be entitled to conduct periodic inspections of such GCTs being maintained by the GCTO, for which Inspection Charges will be levied as per the prescribed norms.

07/07/2022

6.3.4.2 GCTO may also get the maintenance done through Railway for such Terminals, in which case Maintenance Charges shall also be levied as per the prescribed norms.

6.3.5 The maintenance of GCT yard, including loading/ unloading lines, shall be the sole responsibility of GCTO. Distribution of the responsibility of track has been explained in Schedule '3' of the policy.

6.3.6 At such GCTs, Railway shall maintain the signalling equipment till the line-clear/ receipt-despatch arrangement with serving station(s), at its own cost. Maintenance of signalling equipment internal to the Terminal shall be the sole responsibility of the GCTO.

6.4 The cost of all subsequent up-gradations (on account of change of technology, standards, etc) shall be borne by the GCTO.

6.5 Maintenance of all the infrastructure and equipment inside the GCT which are not to be accessed by Railways' rolling-stock, and maintenance of infrastructure required for loading/ unloading (tipplers, hoppers, etc) shall be the responsibility of GCTO.

7. Cost of Electrification

7.1 In case of new GCT, the entire cost of electrification of the Terminal and the connectivity portion between take off point and GCT, shall be borne by the GCTO.

7.2 While undertaking electrification of main line and serving station by Railways, the electrification of the existing GCT(s) including the rail-line connecting the Terminal(s) shall be undertaken at the Railway's cost.

8. Handling of Wagons in GCTs:

8.1 If any damage and deficiencies is caused to railway wagons due to the fault of the GCTO, the damage and deficiency charges shall be raised by Railway and paid by the GCTO as per the extant rules of Railways.

8.2 All tipplers and bulk handling systems used for loading/unloading of Railway wagons shall be provided and commissioned by GCTO at its own cost in accordance with the RDSO's approved specifications. This provision shall however not be applicable on the systems/ equipment installed by GCTO which are not to be used for handling Railway wagons (such as conveyor-belts, JCBs, excavators, etc).

8.2.1 GCTO shall ensure that tipplers, bulk handling systems, and mechanized equipment are operated only by the qualified and experienced staff under adequate supervision.

8.2.2 Such equipment shall be regularly maintained and replaced at the end of their codal life by GCTO at its own cost.

8.2.3 In case of any accident/ derailment inside the Terminal or outside the Terminal up to serving station, Railway will provide Accident Relief Train (ART) initially free of cost. Provided further, if the responsibility of accident/ derailment after enquiry is fixed on the GCTO, ART Charges shall be payable by GCTO as prescribed by Railway from time to time. The due Charges will be deducted from the future payments by Railway to GCTO. However, in case no regular payments are being made by Railway to GCTO, on demand from Railway, the GCTO shall pay ART Charges to Railway without any delay.

8.2.4 The accident enquiry as mentioned in para 9.2.3 above shall be conducted jointly by the representatives of Railway and GCTO to be nominated by DRM and

07/07/2022

GCTO respectively. The accepting authority of Enquiry Report shall be DRM, whose decision shall be final and binding on GCTO.

9. **C&W Maintenance Facilities**

9.1 Normally C&W facilities shall not be constructed at GCTs.

9.2 However, if C&W facilities are operationally required at any GCT as per the extant instructions, only one-time capital cost for setting-up these facilities shall be borne by the GCTO. Operational costs, including staff cost and material cost (for Railway-owned stock), shall however be borne by the Railway.

9.3 For GCTs dealing with POL and other hazardous material, specialized facilities inside the Terminal as well as in Railway yard (if required) shall be developed by the GCTO at its own cost, and shall be maintained by GCTO to ensure that no untoward incident/ accident takes place at such facilities.

10. **Authorized Users**

10.1 GCTO shall inform Railway about the authorized rail users of the GCT before notification, so that they may be incorporated in the TMS module of FOIS.

10.2 If the GCTO desires to add more rail users subsequently, GCTO shall inform Railway at least seven (07) working days in advance, to enable incorporation of such rail users in FOIS.

11. **Commodities Permitted**

11.1 Unless otherwise specified by Indian Railway, a GCT shall be permitted to book and handle all traffic – including coal and coke, which shall be as per the guidelines of 'preferential traffic schedule' issued by Ministry of Railways from time to time.

12. **Engine-on-Load (EOL) Scheme**

12.1 All new GCTs shall be set up on 'charging on through distance basis,' as per the instructions contained in Rates Master Circular on 'Freight on Through Distance Basis issued on 24.09.2014 (Annexure 'A' of the policy), as modified from time to time.

12.2 All new GCTs charged on through distance basis shall be governed by the Engine-on-Load policy (FM Circular No.05 of 2013 dated 07.03.2013), as modified from time-to-time.

12.2.1 Railway may permit commissioning of a new GCT on non-EOL basis with the approval of DRM, if Engine-on-Load scheme is not operationally feasible.

13. **Charging of Commercial Staff**

13.1 No cost of commercial staff will be charged from the GCTO w.e.f the date of issue of this policy. However, for existing Terminals (*where PFT/ Private Siding Agreement has already entered into between RA and operator before the issue of this Policy*) where cost of commercial staff has already been deposited by the GCTO, there shall be no refund. Further, dues of commercial staff cost pending, if any, as on the date of issue of this policy shall be payable by GCTO.

14. **Provision of Weighbridge**

14.1 All GCTs planning to deal with outward cargo (loading) shall have a provision of Electronic In-motion Weighbridge (EIMWB) at a suitable location inside the Terminal. The EIMWB shall comply with OIML (International Organization of Legal Metrology)

07/07/2022

document (available at https://www.oiml.org/en/files/pdf_r/ r106-2-e12.pdf) and the latest RDSO specifications.

14.1.1 Provision of EIMWB shall not be essential for GCTs dealing with inward cargo (unloading) only.

14.1.2 If a GCT without an EIMWB plans to start loading, the GCTO shall make arrangement for provision of an EIMWB as per the provisions of the Policy. DRM, in consultation with CFTM of the Railway, may, however permit loading at a GCT (if operationally feasible) – by nominating an alternative Railway weighbridge for weighment of rakes, awaiting installation of EIMWB, for a period of up to six months at a time from the date of start of such loading, duly recording the reasons for the same.

14.2 GCTO shall bear the cost of procurement (inclusive of the requisite warranty and a post-warranty comprehensive Annual Maintenance Contract (AMC) till the end of codal life), installation, and replacement of the EIMWB at the end of its codal life. GCTO shall also bear the cost of weighbridge house, weighbridge siding, and related infrastructure.

14.3 GCTO shall get the weighbridge certified by the Weights & Measures department of the state government, and shall comply with all the applicable statutory and legal requirements.

14.3.1 The weighbridge, after testing and certification by the Weights and Measures department of the state government, shall be sealed by their personnel in presence of GCTO's and Railway's representatives. This seal shall be broken, if required, only in the presence of the personnel of Weights and Measures department and Railway's representative.

14.4 GCTO shall bear the cost of manpower to operate the EIMWB, and the cost for its linking with FOIS.

14.5 RR will be issued on the basis of weighment within a GCT as per the extant instructions provided vide Rates Master Circular/Weighment/2019/0 dated 25.07.2019 and other applicable instructions of Railways (Annexure 'B' of the policy), as modified from time to time.

14.6 No extra free-time will be provided for weighment at an EIMWB inside a GCT.

14.7 Railway Administration reserves the right to conduct periodic and/or surprise inspections of the operation, functioning and calibration of EIMWB.

14.8 For the purpose of mandatory testing of EIMWB, test-wagons shall be provided by Railway on payment of Haulage Charges. These Haulage Charges shall be levied for the actual distance travelled or 100 km, whichever is less.

14.8.1 In cases where there is more than one weighbridge located within a GCT, the Haulage Charges as per para 14.8 above shall be levied for the 'first weighbridge,' and shall be levied @25% of the charges for the 'first weighbridge' for other weighbridges inside the Terminal.

14.8.2 For random surprise testing by Railway, test-wagons will be provided for without levying Haulage Charges or any other charges.

14.8.3 Railway shall try to ensure availability of 'test wagon-sets' in the vicinity of all GCTs, so that there is no delay in arranging these wagons for testing.

14.9 If any overloading is detected in the outward traffic the same will have to be unloaded/ re-adjusted at the Terminal itself – for which no extra free-time will be provided.

14.10 Whenever the EIMWB goes out of order, it shall be put right by the GCTO within three days, failing which a penalty of Rs 4,000/- per day or part thereof for the next ten days, and Rs 8,000/- per day or part thereof thereafter, shall be imposed.

14.11 Under exceptional circumstances, if it becomes essential to install the EIMWB of a GCT either partially or wholly on Railway land not licensed to GCTO (on account of operational and technical constraints), permission for the same may be given by the

07/07/2022

DRM. Location of such an EIMWB shall be decided by Sr.DOM, in consultation with Sr.DCM, Sr.DEN & Sr.DME.

14.11.1 All terms and conditions applicable on EIMWB inside a GCT shall also be applicable on an EIMWB installed by GCTO on such land. However, Railway will be the executing agency for installation, operation, and maintenance of such EIMWBs.

14.11.2 Cost of the comprehensive AMC and manpower to operate such EIMWB shall be borne by the GCTO.

14.11.3 Railway will be free to weigh rakes other than those of the concerned GCT at such EIMWB.

14.12 Railway may permit weight-o-meter/ pre-weighbin system of weighment in GCT on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager, keeping in view the requirement and to avoid any manipulation of weighment data.

14.12.1 Such equipment shall be certified by Weights & Measures department, and should also meet all extant statutory provisions and policy guidelines.

14.12.2 The system should have proper locking/ sealing arrangement to avoid any tampering with the system including software. The 'admin' control should rest with the Railways.

14.12.3 One-to-one correspondence between Weight-o-meter discharge and corresponding wagon shall be maintained by GCTO.

14.12.4 A procedure order for normal operations covering precautions to be taken to ensure that wagons are empty before loading and periodical test weighing of this system shall be maintained by GCTO.

14.12.5 The system should have interface with FOIS to avoid any error in data capture during transmission.

14.13 GCTO may also be permitted to install an alternative means of weighment of wagons, which should have accuracy level at least equal to that of EIMWB and should ensure weighment within the time taken by EIMWB.

14.13.1 GCTO shall submit request for such alternative means of weighment, along with all the necessary documents, which may be permitted by Railway on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager.

14.13.2 GCTO shall be responsible for getting the proposed means of weighment of wagons certified by Legal Metrology/ Weights & Measures department, and also for ensuring its proper upkeep and maintenance at its own cost.

15. **Installation of FOIS and TMS**

15.1 FOIS and TMS with limited access as prescribed by Indian Railways shall be installed at the GCT – at the cost of GCTO. All RRs will be prepared through TMS. Complete maintenance of FOIS and TMS will be done by Railway at its own cost.

15.1.1 Cost of replacement of FOIS and TMS equipment, at the end of their codal life, shall be borne by the GCTO.

16. **General Conditions**

16.1 Applicant/ GCTO will be solely responsible for – (a) arranging/ acquiring/ ownership/ lease/ licensing of non-Railway land for the development of GCT; (b) all statutory and non-statutory clearances from other government departments and statutory bodies; and (c) payment of all charges, taxes/ GST, surcharges, cess, levies, etc, related to transportation and handling of cargo.

16.2 For GCTs being developed entirely on non-Railway land, the portion of land required for linear connectivity of GCT with the serving Railway station may be acquired by Railway Administration on the specific request of applicant/ GCTO and at the cost of

07/07/2022

the applicant/GCTO, under the 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013'/ 'The Railway Act, 1989'.

16.2.1 An estimate of the cost of the land, prepared by Railway Administration in consultation with the Land Acquisition Officer, will be presented to the applicant, who shall deposit the amount before any further action is initiated for the acquisition of land. The applicant shall also agree to pay on demand such excess cost, if any, as may be incurred for the acquisition of this land.

16.2.1.1 The applicant shall also agree to compensate Railway if any extra cost is incurred by Railway arising out of such acquisition, even after commissioning of the Terminal.

16.2.2 Ownership of the land so acquired will vest with Railway, and the applicant for the Terminal shall have no right or claim thereto.

16.2.3 The entire cost of Railway infrastructure to be developed on such portion of acquired land will be borne by the GCTO, however the ownership of assets so created on such land will rest with Railway. Railway will reserve the right to grant connectivity to other Gati Shakti Cargo Terminal(s) taking off from the track passing over this land.

16.3 Unless otherwise mentioned in this policy, all 'Commercial and Operating rules' as applicable for a goods-shed for booking, supply and delivery of goods shall be applicable at GCTs.

16.4 The GCTO shall be responsible for clearance of all Railway dues, including demurrage charges, accrued within the GCT. For the sake of clarity, it is explicitly mentioned that demurrage charges will be borne by the GCTO for demurrage occurring on its own private land or occurring on railway land licensed to the GCTO.

16.5 The cost of electricity/ diesel consumed by Railway locomotives shall be borne by Railway.

16.6 The GCTO shall provide at his own cost the level-crossings and ROB/ RUB/ LHSs for safe passage of trains as well as road vehicles, as per requirement and prescribed norms.

16.6.1 All level-crossings have to be provided with requisite infrastructure (gate-post, gate-lodge, etc) and have to be manned by GCTO at its own cost.

16.6.1.1 If the level-crossing becomes due for interlocking, the cost of interlocking shall be borne by the GCTO.

16.6.2 Maintenance of level-crossings falling on the track being maintained by Railway shall be done by Railway at its own cost; while maintenance of level-crossings falling on the track being maintained by the GCTO shall be done by GCTO (as illustrated in Section III of Schedule '3').

16.7 Railway shall reserve the right to grant connectivity to another GCT(s) from the portion of track on Railway land as well as from the portion of track which is being maintained (and assets are owned) by Railway. For the sake of clarity, Railway may permit connectivity to another Terminal from the connectivity portion of a Terminal – (i) on Railway land where the assets are owned and maintained by Railway; and (ii) on non-Railway land where the ownership of assets has been transferred to Railway by the GCTO, and the assets are maintained by Railway though the land is owned by the GCTO. This provision shall be applicable on non-Railway land for all new GCTs, as well as on existing Terminals who decide to migrate to this Policy and transfer the ownership of assets on their land to Railway.

16.8 The Railway land to be used for providing connectivity to a GCT (on non-Railway land) shall not be licensed to the GCTO. This land shall remain in the possession and control of Railway, and the infrastructure (track, signalling equipment, and OHE) developed on this land, though funded and constructed by the GCTO, shall also be owned by Railway – as per the provisions of para 5.1.2 & 5.1.3 of the Policy.

07/07/2022

16.9 For GCTs developed entirely on non-Railway land, Railway will levy Terminal Charges for each rake handled (as per the applicable guidelines), which will be reimbursed to the GCTO.

16.10 No Terminal Charges shall be levied on cargo for which GCTO himself is the consignor and/or the consignee.

16.11 No Terminal Access Charges will be levied for rakes of privately-owned wagons when handled at GCTs built entirely on non-Railway land.

17. Dispute Resolution

17.1 In case of any dispute arising in the interpretation of the Policy, the decision of DRM will be final and binding.

17.2 Conciliation: All disputes and differences of any kind whatsoever arising out of or in connection with the construction and operations of GCT shall be referred by the GCTO to Railway Administration through 'Notice of Dispute.' RA shall, within 30 days after receipt of the 'Notice of Dispute,' notify the name of conciliator(s) to the GCTO. The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of Agreement. If the parties reach agreement on a settlement of the dispute, they shall draw up and sign a written Settlement Agreement duly signed by Railway's representative (Sr.DCM), GCTO and conciliator(s). When the settlement agreement is signed, it shall be final and binding on the parties. The conciliators shall be paid fee as fixed by Ministry of Railways time to time, which shall be shared equally by the parties. For other issues related with Conciliation, terms and conditions defined under Indian Railways General Conditions of Contract 2020 may be followed.

17.2.1 The parties shall not initiate, during the conciliation proceedings, any reference to arbitral or judicial proceedings in respect of a dispute that is the subject matter of the conciliation proceedings.

17.2.2 The conciliation shall be carried out as per "The Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof" and the proceedings shall be terminated as per Section 76 of the above Act.

17.3 Arbitration: If the dispute is not settled through Conciliation (as mentioned in para 17.2), it shall be decided by reference to arbitration. Arbitration shall be carried out as per provisions available for arbitration in Indian Railways General Conditions of Contract 2020 for works contracts, as amended from time to time.

17.4 Governing Law & Jurisdiction: This Agreement is governed by and shall be construed in accordance with the laws of India. In case of any dispute and difference arises, the Court of the place, where Land License Agreement has been made, shall only have the jurisdiction to try such litigation.

18. Termination of the Agreement

18.1 Subject to the provisions in the Agreement, Railway Administration may terminate the Agreement with a GCTO operating a GCT in the event of any serious irregularity committed by the GCTO. This may include any grave breach of the terms and conditions of the Agreement, any default by GCTO, violation of The Railway Act,

07/07/2022

1989, or commission of an unlawful act which is not in-line with Good Industry Practices.

18.2 Before terminating the Agreement, RA shall first issue a Show Cause Notice, informing GCTO to submit representation within 30 days. If no response is received, or if the response of GCTO is not satisfactory, a written Notice of Termination specifying a grace period of 180 days shall be given to the GCTO, by Sr.DCM with the approval of DRM. However, if no reply to the Notice for Termination is received within 180 days of the issue of Notice for Termination, the Agreement with GCTO will stand terminated and the same shall be communicated by Sr.DCM to GCTO. No termination payment shall be made by RA to the GCTO.

18.2.1 If the GCTO submits a reply within 180 days, RA will take further course of action on the merit of the case.

18.3 The GCTO will also have the right to terminate the Agreement by giving a notice of 180 days to the Railway Administration in the event of any difficulty faced by the GCTO in smooth functioning of the Terminal for reasons attributable to Railway as laid down in this policy, or for any other reason internal to the GCTO. No termination payment shall be asked by Railway from GCTO.

18.4 Any dispute arising out of this Agreement will be resolved through the Dispute Resolution Mechanism as prescribed under Para 17 above.

19. ***Power To Stop Traffic And To Terminate Agreement In Certain Events:***

The Railway Administration shall have the absolute right to refuse at any time to allow their rolling stock to go on or be used upon the Terminal or any part or extension thereof and shall also be entitled to determine this Agreement at any time after the happening of any of the following events:

19.1 In the event of the Applicant failing to deposit within the time fixed for the purpose any sum of sums required to be deposited under the provision of these presents or according to any direction of the Railway Administration.

19.2 In the event of the Applicant failing to pay any other sums payable to the Railway Administration under this Agreement or any other changes payable to the Railway administration in respect of the terminal or the use thereof within one month after the due date of payment or in the event of a due date not being specified then within one month after service of a written-demand for payment.

19.3 In the events of the Applicant failing to comply with any requisition of the Railway Administration to remove or repair any defect which in the opinion of the Railway administration may endanger the working and safety of the terminal within such time as shall be fixed by the Railways Administration for the purpose.

19.4 In the events of the Applicant ceasing for a consecutive period of 3 (three) months to use the terminal or any part for extension thereof for the Applicant's own traffic in connection with the Applicant's Works.

19.5 In the event of the Applicant contravening the provision of Clause 15 hereof.

19.6 In the event of the Applicant failing to observe or perform any other obligation on his part herein contained.

19.7 In the event of the terminal becoming dangerous or defective by reason of any act of God or other act or circumstances for which the Railway Administration is not responsible.

19.8 In the event of any branch line, terminal or part or extension thereof, connecting the terminal or any part or extension thereof with the Railway system, becoming dangerous or defective for any reason whatsoever and whether such branch line, terminal part or extension shall belong to the Applicant or to any third person.

07/07/2022

19.9 *In the event of any branch line, terminal or any part or extension thereof connecting the terminal or any part or extension thereof with the Railway system, being closed by the Railway Administration under any powers which the Railway Administration may possess whether by status or by Agreement with third persons or closed by order of the Government of India or any State Government.*

The Applicant shall have no claim whatsoever against the Railway Administration in respect of any refusal by the Railway Administration to allow their rolling stock to go on or be used upon the terminal or any connected Terminal or branch line in any of the aforesaid events.

Provided always that on the happening of any of the events mentioned in sub-Clauses 21.1, 21.2, 21.4, 21.5, 21.6, the Railway Administration shall not exercise the power conferred upon it by this Clause unless 14 (Fourteen) days' previous notice has been given in writing requiring the Applicant to comply with the demand or requisition as the case may be, of the Railway Administration and the Applicant has failed to comply with the Same within the time specified in such notice.

No notice shall be required to be given in the cases specified in the other sub-clauses of this clause.

20. ***Termination of Agreement on Death. Insolvency etc. :***

This agreement may be determined by the Railway Administration without prior notice at any time after the happening of any of the following events:

20.1 *In the event of the death of the Applicant, if he is an individual person.*
20.2 *In the event of a partition of the Joint family properties, if the Applicant is a Joint family governed by the Mitakshara School if Hindu Law.*
20.3 *In the event of dissolution of partners either by act of parties or by order of Court, if the Applicant is a firm or other association or body of individuals.*
20.4 *In the event of dissolution of partners either by act of parties or by order of Court, if the Applicant is a firm or other association or body of individuals.*
20.5 *In the event of Applicant becoming insolvent or going into liquidation either voluntarily or under an order of a competent Court.*
20.6 *In the event of the Applicant's interest in the works becoming wholly or partially vested in some other person.*
20.7 *In the event of the Applicant contravening the provision of Clause 21 hereof.*

21. ***Agreement To Bind Applicant Until Terminated By The Railway Administration***

21.1 *Until terminated by the Railway Administration or unless and until the person or persons in whom the entire rights and interests of the Applicant have vested and with wham the Railway Administration has agreed to enter into a Cargo Terminal Agreement has executed and registered such Agreement in the same form as these presents or in such other form as the Railway Administration may require as provided in Clause 21 hereof, this Agreement shall be binding upon the Applicant and the successors in title or interest of the Applicant in the Applicant's work*

(i) Provided that the Applicant may by giving 6 (six) months' notice to the Railway Administration, discontinue the use of the terminal. In such event, the Applicant shall not be liable for the payment of maintenance and other charges under the Agreement for the period subsequent to the date of expiry of the said notice, but nevertheless all other obligatians under the Agreement shall binding on him.

(ii) Provided further that the Railway Administration has the right without assigning any reason to terminate this Agreement on 6 (six) months' notice.

07/07/2022

22. ***Right To Charge Interest On Money Due Hereunder To The Railway Administration:***
Notwithstanding anything contained in the foregoing Clauses of this Agreement, the Railway Administration shall have the right to charge and recover from the Applicant interest at such rates, as may be fixed by the Railway Administration from time to time on any or all sums payable by the Applicant under the terms thereof, if such sums are not paid within one month from the due date and if no such date is fixed, within one month from the date on which a written demand is made by the railway Administration.

23. ***Right Of Deduction Of Money Due To The Railway Administration***

The Railway Administration shall have the right to deduct from any amount which may become payable by the Railway Administration to the Applicant or to the legal representative of the Applicant any money due from the Applicant to the Railway Administration under these presents or for freight, haulage or other charges or otherwise in connection with the construction, maintenance or working of the terminal.

24. ***Service Of Notices On Applicant:***
The Applicant shall maintain a proper office to which all letters, notices, demands and other communications intended for the Applicant may be sent and every notice, demand or other communication which shall be delivered at or sent by Registered Post to such office shall for all purposes whatsoever be deemed to have been validly and effectively delivered to the Applicant.

25. ***Exercise Of Powers :***
Subject as otherwise provided in this agreement, all notices to be given on behalf of the President of India and all other actions to be taken on his behalf may be given or taken on his behalf by the Railway Administration; the agreement signing authority or his authorized representative.

26. ***Alteration / Variation Of The Agreement:***
Except as hereby provided any verbal or written arrangement or abandoning, varying or supplementing this Agreement or any of the terms hereof shall be deemed conditional and shall not be binding on the railway administration unless and until the same is endorsed on this agreement or incorporated in a formal instrument and signed by the parties hereto and till then the Railway administration shall have the right to repudiate such arrangement.

27. ***Applicant Not To Transfer Rights ;***

27.1 The Applicant shall not be entitled to assign or transfer or subject or permit to be used or enjoyed by any other person in any manner whatsoever any of the rights or benefits conferred upon the Applicant by these presents and any purported assignment transfer or subletting or permission shall be void and of no effect. Provided also that in the event of any other person being permitted by the Railway Administration to use the terminal on the Applicant's request or otherwise, the Applicant shall remain responsible to the Railway Administration for all the charges and obligations under this Agreement.

27.2 Provided, however, that if the Applicant shall desire to transfer the Applicant's Works to any person or if the applicant being a Company shall go into liquidation and such intended transferee or the liquidator of the Company shall desire the use and benefit of the terminal than subject to the under mentioned conditions being complied with the Railway Administration may at its discretion on the written request of the Applicant and of the intended transferee or liquidator made prior to the transfer or within one month after the commencement of the liquidation as the case may be and after production by the transferee of the registered Deed of Transfer of the Applicant's Works pr after proof by the liquidator of this intension to carry on the Company's business for the purpose of

07/07/2022

the liquidation proceedings, allow the transferee or liquidator the use and benefit of the terminal. The conditions above mentioned are the following:

(i) That the liquidator shall be approved by the Railway Administration, but such approval will not unreasonably withheld.

(ii) That the liquidator shall duly sign and register a Cargo Terminal Agreement in the same form as these presents so far as then applicable or in such other form as the Railway Administration may then require.

(iii) That the applicant, Railway Administration and transferee shall duly execute an agreement of assignment as may be prescribed by the Railway Administration.

28. ***Cost of Execution Of Agreement:***
All expenses in drawing up the Agreement and the cost of stamping and registration shall be borne by the TO/Applicant. "Money receipt obtained from the Registration Office should be handed over to the Railways for collection of registered agreement which shall remain in the custody of Railways. Any charges, if levied for collection of registered agreement, shall also be borne by the Applicant.

29. **Agreement period**

The period of Agreement for operation of Gati-shakti Rail Cargo Terminals shall be for a maximum period of 35 years, which can be renewed further according to the rules and procedures applicable at the time of renewal.

30. **Agreement In Force From :**
The agreement shall be deemed to have come into force on and from……..

31. **Head Notes :**
The head notes herein are for the convenience of reference only and shall not affect the construction of these presents.

In WITNESS WHEREOF, the parties to these presents have set and subscribed their respective hands and seals hereunto on the day and year first above written.

For and on behalf of
THE PRESIDENT OF INDIA (First Party)
SIGNED, SEALED AND DELIVERED BY

Name : ……
Designation …….. (Sr. Divl. Commercial Manager)
Address : …….
(Authorized Signatory)

……..(Second Party)
(SIGNED, SEALED AND DELIVERED by

07/07/2022

Name : .....
Designation :.....
Address : .....

In the present of Witness

1.

2.

Dated the ____ Day of ~ ___ 20_

Cargo Terminal Agreement-
Reg. No.: _____ For _____ Terminal
At Kilometre: _____ Between Stations _____ and _____

07/07/2022

Model Agreement for Gati Shakti Multi-modal Cargo Terminal (fully/partially) on Railway Land

_____Railway
'Gati-Shakti Rail Multi-modal Cargo Terminal' Agreement

This **Agreement** is made and executed at ……..on this ……. Day of ……., 20…….

BY AND BETWEEN

THE PRESIDENT OF INDIA acting through (incorporate name and designation of the officer authorized under Article 299(1) of the Constitution) having its office at ……. (hereinafter referred to as "**The Railway Administration**" which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the One Part;

AND

……. [hereinafter referred to as **("Applicant or GCTO")*** which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the Other Part.

WHEREAS The Applicant is desirous of having a Cargo Terminal laid by the Railway Administration at _____ from the _____station yard of the _____ Railway taking off from ;Kilometer No. _____ between_____ station and_____ station of the Railway as shown in red and green on the plan bearing CE's No. _____ hereto annexed for the purpose of carrying on the Applicant's business in the Applicant's premises situated at _____ _ District _____

AND WHEREAS the Railway Administration is willing to lay the said cargo terminal for the said Applicant upon and subject to the terms and conditions hereinafter set forth.

NOW, Therefore, this Agreement witnesseth as follows:

1. **Interpretation**: In these presents, unless the context otherwise requires, the following Words and Expressions have the meaning and shall be interpreted as specified, namely-

Words importing the singular number include the plural number and vice versa.

"Person" includes a firm or other association or body of individuals and a Company or other Corporate Body.

"The Railway Administration" means and includes the General Manager for the time being of (name of Zonal Railway) Railway and any officer of the (name of Zonal Railway) Railway authorized by any such General Manager to deal with any matters, with which these presents are concerned.

"The Applicant" means the person named as party hereto of the other part and includes in the case of a firm or other association or body of individuals, the individual person or persons for the time being and from time to time constituting the association or body and, In the case of a company, corporation or body corporate the Successor in business of interest, such company, corporation or body corporate for the time being.

07/07/2022

"Works" means the premises belonging to or occupied or used by the Applicant which are connected with the (name of the Zonal Railway) Railway system by the terminal herein before mentioned,

"Undertaking" includes all land, railway lines, works, buildings, engines, rolling stock and other movable or immovable property now or at any time hereafter forming part of or pertaining to the (name of the Zonal Railway) Railway system as now or hereafter constituted and all engines and rolling stock (whether belonging to the _____ Railway system or not) passing over such system.

"Terminal" Includes the Railway track connecting the Applicant's works with the Railway system, as hereinafter agreed to be constructed by the Railway Administration and all branches and extensions thereof which may hereafter be constructed by the Applicant or by the Railway Administration at the Applicant's request and all sleepers, ballast, embankments, bridges, tunnels, signals interlocking and tele-communication equipment gates, buildings and other constructions, erections, works and movable property constructed / erected / made/ provided or used in connection with the said track and also all land whereon or on part whereof the said track and connected things aforesaid are constructed / erected / made / provided or used including land acquired for the purpose thereof as hereinafter provided and land belonging to the Railway Administration and land belonging to or occupied or used by the Applicant.

The Cargo Terminal shall cover only that portion of track network on which Railway rolling stock will ply. The network utilized by the Company/Party for their internal use shall not form part of the Cargo Terminal defined herein."

"Sub-grade Work" includes the construction of embankments, the making of cuttings and the carrying out of other earth work, the construction of bridges (exclusive of girder works), buildings, platforms, tunnels, culverts, drains and openings and laying out of ballast and all other works necessary to permit the laying and construction of railway track of the terminal and generally all works which have to be abandoned, if the terminal be closed.

"Permanent Way Materials" includes girders, rails, sleepers, fastenings, points and crossings, fencings, signaling, interlocking and telecommunication equipment and over-head structure and any other things connected therewith for electric traction and other machinery (except station machinery) and equipments necessary for working the terminal.

"Legal Representative" means any person who is competent to give the Railway Administration a valid discharge in respect of any money or property which may be payable or deliverable to the Applicant and shall include the executor and administrator of a deceased person, a succession certificate holder, the surviving or continuing partners or members in the case of a firm, association or body of individuals, the certificated guardian if a minor's property, the committee of lunatic, the assignee or receiver of an insolvent's estate, the liquidator of a Company, a receiver and any person legally appointed to represent the estate of the Applicant.

Meaning of other key terms not mentioned above, shall be same as given in para 2 (Definitions) of the Gati Shakti Multi-modal Cargo Terminal Policy issued vide Freight Marketing Master Circular/2021 dated 15.12.2021.

* **Note**: Forms Of Description Of The Applicant –

07/07/2022

(Where a single person is the Applicant) "and A.B. (insert full name) of (insert address and occupation)"

(Where two or more persons are Joint Applicants), "and A.B. (insert full name) of (insert address and occupation) and C.D.: (insert full name) of (insert address and occupation)".

(Where a single person trading under a different fee name is the Applicant) "and A.B. (Insert full name) of (insert address and occupation) carrying an business under the name or style of (insert name) at (if the business is carried on at a different address from the address already Inserted then insert such additional address)."

(Where a partnership firm is the Applicant and the names of the partner known), "and A.B. (Full name) and C.D. (full name) carrying on business partnership as (insert nature of business) under the style or firm of (insert name or style of the firm and address).

(Where a partnership firm is the applicant and the names of partners are not known), "and A &Co. (insert name or style of the firm) a partnership firm carrying on business at (insert address) as (insert nature of business)."
(Where an incorporated Company is the Applicant), "A.B. &CO. Ltd. a company incorporated in (Insert country of incorporation (e.g. India, England or elsewhere, as the case may be) and having its registered office at (insert address)" (in the case of a company incorporated elsewhere than in India address) "and its principal office in India at (insert address)".

(Where the Applicant is a joint family governed by the Mitakshara School of Hindu Law), "A.B. (insert full name) for self and as Karta or managing member of the Joint family, governed by the Mitakshara School of Hindu Law, carrying on business under the name or style of (insert name under which the joint family business is carried on) at (Insert address) and C.D.E.F.G.H. etc. (insert full name) being the other adult members of the said Joint family.

2. **Agreement To Construct Gati Shakti Multi-Modal Cargo Terminal (GCT) :**

Subject to the terms and conditions hereinafter contained, the Railway Administration shall at the cost and expense of the Applicant in all respects, construct partly or fully on the land of the Railway Administration and partly or fully on the land of the Applicant of the said Cargo Terminal, from _____ (length of terminal) Kilometers on _____ (name of portion) Branch as shown in red and green on the plan annexed hereto (bearing CE's No. _____) connecting the Applicant's work known as _____ situated at or near _____ in the District of with the system at or near _____ on _____ Railway.

3. Railway land where GCT is developed partially or wholly on railway land (except for Railway land provided for the connectivity to GCT as mentioned in para 13 of Schedule 1 & 2 of the Gati Shakti Multi-modal Cargo Terminal Policy issued vide Freight Marketing Master Circular/2021 dated 15.12.2021) will be licensed to GCTO – for which modalities of calculating and levying land license fee shall be as per extant rules/Board's circular on land licensing (2005/LML/18/8 dated 10.02.2005 and 08.6.2005), as amended from time to time.

3.1 A separate Land Licensing Agreement shall be executed between the Railway administration and the GCTO as per Annexure

4. **Capital Cost of GCT**

07/07/2022

4.1 The GCTO shall bear the entire capital cost of new GCT from the take-off point onwards, as marked on the Engineering Scale Plan (ESP) at the serving station.

4.1.1 For the linear connectivity portion of GCT passing through the Railway land, GCTO shall provide only the minimum essential infrastructure of track, OHE and signalling equipment at the cost of GCTO (other assets not related to track, signalling, or OHE, if required, shall be constructed by Railway at its own cost). In case of any dispute, the decision of DRM shall be final in this regard.

4.1.2 The ownership of infrastructure including the track, signalling equipment and OHE created on Railway land under para 5.1.1 of Master Circular on Gati Shakti Multi-modal Cargo Terminal Policy dated 15.12.2021 (**hereinafter referred to as the policy**) shall belong to Railway, even though the capital cost for these shall be borne by the GCTO.

4.2 The capital cost for all common-user traffic facilities at the serving station (as marked on the ESP), including Signalling & Telecommunication works, modification and up-gradation to existing interlocking/ OHE, or electrification in future within the station limit up to take-off point, shall be borne by the Railway.

4.3 Maintenance and operation of assets created under para 5.2 of the policy (common-user traffic facilities) at the serving station including staff costs, shall be the responsibility of the Railway.

4.4 The capital expenditure required for augmenting or up-grading the facilities and infrastructure on the connectivity portion from take-off point onwards towards Terminal and within the premises of Terminal shall be borne by the GCTO.

4.5 The connectivity to GCTs shall normally take-off from the existing serving station. However, in case when it is operationally not feasible to provide a connection from an existing serving station, provision of a Block Hut/ Block station (between two existing stations) with required points & crossings may be considered, provided it is operationally feasible. This will be done on the request of GCTO.

4.5.1 In such cases, the entire capital cost of the new Block Hut/ Block station and related infrastructure shall be borne by the GCTO. However, this work will be executed by Railway, and ownership of the same shall remain with the Railway.

4.5.2 However, for new GCTs planned to load one million Tonne or more (outward traffic) per annum, the capital cost of new Block Hut/ Block station will be repaid to the GCTO by Railway.

4.5.2.1 The repayment of capital cost of the new Block Hut/ Block station will be made by Railway through 10% rebate on the outward traffic loaded at the Terminal, till such time the capital cost has been repaid to the GCTO. This 10% rebate shall be granted on the normal tariff rate (NTR) of the commodity.

4.5.2.2 The repayment of capital cost as mentioned in para 4.5.2.1 above will be done only if the Terminal achieves the target of loading one million Tonne per annum within two Calendar Years of commissioning (excluding the year of commissioning). For example, if a GCT commissioned during calendar year 2022 achieves one million Tonne loading during calendar year 2024, then the repayment of capital cost of new Block Hut/ Block station (through 10% rebate on outward traffic) shall start from 01st April 2025.

07/07/2022

4.5.2.3 This repayment shall be made for the investment made by the GCTO on behalf of Railways. As such, this repayment through freight rebate shall be admissible over and above all other rebates that the GCTO may become eligible for in future.

4.5.2.4 This provision of repayment shall be applicable only for GCTs for which Agreement between RA and GCTO has not been entered into till the date of issue of this Policy.

5. **Sub-Grade Work** :

The sub-grade work, culverts & bridges, drains, pitching & protection work and ballast supply shall be carried out at the cost and expense of the Applicant either by his own agency or by the Railway Administration on his request. When the works or part of them are carried out by the Applicant, the work shall conform to the Railway Administration's drawings and specifications and shall be executed under the supervision of Engineering staff of the Railway Administration or under the supervision of Approved Consultant.

6. **Security of Assets**

6.1 The responsibility of security of railway assets over Railway land shall be of Railways. However, the responsibility of security of railway assets outside Railway Land or on land licensed to GCTO shall be of GCTO.

6.1.1 In case of theft of any railway asset on non-Railway land or railway land licensed to GCTO, the maintenance of which is with Railway, the restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

6.1.2 In case of theft of OHE including OHE on non-Railway land or railway land licensed to GCTO, restoration shall be done by Railway but the cost of such restoration shall be borne by the GCTO.

7. **Maintenance of Assets**

7.1 Maintenance of assets on Railway land (excluding the Railway land licensed to GCTO), including Track and Signalling Equipment installed on Railway land under para 5.1.1 of the policy, shall be done by Railway at its own cost.

7.2 Maintenance of OHE from the take-off point onward including inside the Terminal shall be done by Railway at its own cost – as this involves safety of men and equipment, and can also impact rail operations outside the Terminal boundary.

7.3 In addition to above, the maintenance of assets (track, bridges, signalling equipment, etc) on non-Railway land including the land licensed to GCTO, ***outside the Terminal***, may also be done by Railway at its own cost if the GCTO transfers the ownership of these assets to Railway (the ownership of land on which such assets are created shall however continue to be with GCTO). Provided further, this provision shall be applicable only to those GCTs where freight tariff is charged on 'through distance basis.'

7.3.1 In case maintenance of assets, including Track and Signalling Equipment, is being handed over to Railways on migration to this policy by GCTO, the GCTO will ensure that the standards of track and signalling infrastructure being transferred to Railway is in accordance with the prescribed standards for GCTs, as decided by Railways (Annexure 'D' of the policy). If any up-gradation/ replacement/ renewal of any infrastructure is required, the GCTO shall bear the cost for the same.

07/07/2022

7.3.2 In case of damages to the assets due to accident, etc, the replacement shall be done by Railway. However, if the responsibility of accident, after Enquiry (joint enquiry by representatives of Railway as well as GCTO), is fixed on the GCTO – the GCTO shall have to bear the cost of all the replacements. The decision of the Nodal Officer, i.e. DRM, in this regard shall be final.

7.3.3 In case the damage to assets is due to an external cause (floods, breaches, terrorist activity, etc), the cost of restoration shall be borne by the GCTO.

7.3.4 If the GCTO does not agree to transfer the ownership of assets (track, bridges, signalling equipment, OHE, etc) to Railway or freight tariff is not chargeable 'on through distance basis'; the maintenance of these assets – except OHE – shall continue to be the responsibility of GCTO.

7.3.4.1 Railway shall be entitled to conduct periodic inspections of such GCTs being maintained by the GCTO, for which Inspection Charges will be levied as per the prescribed norms.

7.3.4.2 GCTO may also get the maintenance done through Railway for such Terminals, in which case Maintenance Charges shall also be levied as per the prescribed norms.

7.3.5 The maintenance of GCT yard, including loading/ unloading lines, shall be the sole responsibility of GCTO. Distribution of the responsibility of track has been explained in Schedule '3'.

7.3.6 At such GCTs, Railway shall maintain the signalling equipment till the line-clear/ receipt-despatch arrangement with serving station(s), at its own cost. Maintenance of signalling equipment internal to the Terminal shall be the sole responsibility of the GCTO.

7.4 The cost of all subsequent up-gradations (on account of change of technology, standards, etc) shall be borne by the GCTO.

7.5 Maintenance of all the infrastructure and equipment inside the GCT which are not to be accessed by Railways' rolling-stock, and maintenance of infrastructure required for loading/ unloading (tipplers, hoppers, etc) shall be the responsibility of GCTO.

8. Cost of Electrification

8.1 In case of new GCT, the entire cost of electrification of the Terminal and the connectivity portion between take off point and GCT, shall be borne by the GCTO.

8.2 While undertaking electrification of main line and serving station by Railways, the electrification of the existing GCT(s) including the rail-line connecting the Terminal(s) shall be undertaken at the Railway's cost.

9. Handling of Wagons in GCTs:

9.1 If any damage and deficiencies is caused to railway wagons due to the fault of the GCTO, the damage and deficiency charges shall be raised by Railway and paid by the GCTO as per the extant rules of Railways.

9.2 All tipplers and bulk handling systems used for loading/unloading of Railway wagons shall be provided and commissioned by GCTO at its own cost in accordance with the RDSO's approved specifications. This provision shall however not be applicable on the systems/ equipment installed by GCTO which are not to be used for handling Railway wagons (such as conveyor-belts, JCBs, excavators, etc).

07/07/2022

9.2.1 GCTO shall ensure that tipplers, bulk handling systems, and mechanized equipment are operated only by the qualified and experienced staff under adequate supervision.

9.2.2 Such equipment shall be regularly maintained and replaced at the end of their codal life by GCTO at its own cost.

9.2.3 In case of any accident/ derailment inside the Terminal or outside the Terminal up to serving station, Railway will provide Accident Relief Train (ART) initially free of cost. Provided further, if the responsibility of accident/ derailment after enquiry is fixed on the GCTO, ART Charges shall be payable by GCTO as prescribed by Railway from time to time. The due Charges will be deducted from the future payments by Railway to GCTO. However, in case no regular payments are being made by Railway to GCTO, on demand from Railway, the GCTO shall pay ART Charges to Railway without any delay.

9.2.4 The accident enquiry as mentioned in para 9.2.3 above shall be conducted jointly by the representatives of Railway and GCTO to be nominated by DRM and GCTO respectively. The accepting authority of Enquiry Report shall be DRM, whose decision shall be final and binding on GCTO.

10. C&W Maintenance Facilities

10.1 Normally C&W facilities shall not be constructed at GCTs.

10.2 However, if C&W facilities are operationally required at any GCT as per the extant instructions, only one-time capital cost for setting-up these facilities shall be borne by the GCTO. Operational costs, including staff cost and material cost (for Railway-owned stock), shall however be borne by the Railway.

10.3 For GCTs dealing with POL and other hazardous material, specialized facilities inside the Terminal as well as in Railway yard (if required) shall be developed by the GCTO at its own cost, and shall be maintained by GCTO to ensure that no untoward incident/ accident takes place at such facilities.

11. Authorized Users

11.1 GCTO shall inform Railway about the authorized rail users of the GCT before notification, so that they may be incorporated in the TMS module of FOIS.

11.2 If the GCTO desires to add more rail users subsequently, GCTO shall inform Railway at least seven (07) working days in advance, to enable incorporation of such rail users in FOIS.

12. Commodities Permitted

12.1 Unless otherwise specified by Indian Railway, a GCT shall be permitted to book and handle all traffic – including coal and coke, which shall be as per the guidelines of 'preferential traffic schedule' issued by Ministry of Railways from time to time.

13. Engine-on-Load (EOL) Scheme

13.1 All new GCTs shall be set up on 'charging on through distance basis,' as per the instructions contained in Rates Master Circular on 'Freight on Through Distance Basis issued on 24.09.2014 (Annexure 'A' of the policy), as modified from time to time.

13.2 All new GCTs charged on through distance basis shall be governed by the Engine-on-Load policy (FM Circular No.05 of 2013 dated 07.03.2013), as modified from time-to-time.

07/07/2022

13.2.1 Railway may permit commissioning of a new GCT on non-EOL basis with the approval of DRM, if Engine-on-Load scheme is not operationally feasible.

14. Charging of Commercial Staff

14.1 No cost of commercial staff will be charged from the GCTO w.e.f the date of issue of this policy. However, for existing Terminals (*where PFT/ Private Siding Agreement has already entered into between RA and operator before the issue of this Policy*) where cost of commercial staff has already been deposited by the GCTO, there shall be no refund. Further, dues of commercial staff cost pending, if any, as on the date of issue of this policy shall be payable by GCTO.

15. Provision of Weighbridge

15.1 All GCTs planning to deal with outward cargo (loading) shall have a provision of Electronic In-motion Weighbridge (EIMWB) at a suitable location inside the Terminal. The EIMWB shall comply with OIML (International Organization of Legal Metrology) document (available at https://www.oiml.org/en/files/pdf_r/ r106-2-e12.pdf) and the latest RDSO specifications.

15.1.1 Provision of EIMWB shall not be essential for GCTs dealing with inward cargo (unloading) only.

15.1.2 If a GCT without an EIMWB plans to start loading, the GCTO shall make arrangement for provision of an EIMWB as per the provisions of the Policy. DRM, in consultation with CFTM of the Railway, may, however permit loading at a GCT (if operationally feasible) – by nominating an alternative Railway weighbridge for weighment of rakes, awaiting installation of EIMWB, for a period of up to six months at a time from the date of start of such loading, duly recording the reasons for the same.

15.2 GCTO shall bear the cost of procurement (inclusive of the requisite warranty and a post-warranty comprehensive Annual Maintenance Contract (AMC) till the end of codal life), installation, and replacement of the EIMWB at the end of its codal life. GCTO shall also bear the cost of weighbridge house, weighbridge siding, and related infrastructure.

15.3 GCTO shall get the weighbridge certified by the Weights & Measures department of the state government, and shall comply with all the applicable statutory and legal requirements.

15.3.1 The weighbridge, after testing and certification by the Weights and Measures department of the state government, shall be sealed by their personnel in presence of GCTO's and Railway's representatives. This seal shall be broken, if required, only in the presence of the personnel of Weights and Measures department and Railway's representative.

15.4 GCTO shall bear the cost of manpower to operate the EIMWB, and the cost for its linking with FOIS.

15.5 RR will be issued on the basis of weighment within a GCT as per the extant instructions provided vide Rates Master Circular/Weighment/2019/0 dated 25.07.2019 and other applicable instructions of Railways (Annexure 'B' of the policy), as modified from time to time.

15.6 No extra free-time will be provided for weighment at an EIMWB inside a GCT.

15.7 Railway Administration reserves the right to conduct periodic and/or surprise inspections of the operation, functioning and calibration of EIMWB.

15.8 For the purpose of mandatory testing of EIMWB, test-wagons shall be provided by Railway on payment of Haulage Charges. These Haulage Charges shall be levied for the actual distance travelled or 100 km, whichever is less.

07/07/2022

15.8.1 In cases where there is more than one weighbridge located within a GCT, the Haulage Charges as per para 15.8 above shall be levied for the 'first weighbridge,' and shall be levied @25% of the charges for the 'first weighbridge' for other weighbridges inside the Terminal.

15.8.2 For random surprise testing by Railway, test-wagons will be provided for without levying Haulage Charges or any other charges.

15.8.3 Railway shall try to ensure availability of 'test wagon-sets' in the vicinity of all GCTs, so that there is no delay in arranging these wagons for testing.

15.9 If any overloading is detected in the outward traffic the same will have to be unloaded/ re-adjusted at the Terminal itself – for which no extra free-time will be provided.

15.10 Whenever the EIMWB goes out of order, it shall be put right by the GCTO within three days, failing which a penalty of Rs 4,000/- per day or part thereof for the next ten days, and Rs 8,000/- per day or part thereof thereafter, shall be imposed.

15.11 Under exceptional circumstances, if it becomes essential to install the EIMWB of a GCT either partially or wholly on Railway land not licensed to GCTO (on account of operational and technical constraints), permission for the same may be given by the DRM. Location of such an EIMWB shall be decided by Sr.DOM, in consultation with Sr.DCM, Sr.DEN & Sr.DME.

15.11.1 All terms and conditions applicable on EIMWB inside a GCT shall also be applicable on an EIMWB installed by GCTO on such land. However, Railway will be the executing agency for installation, operation, and maintenance of such EIMWBs.

15.11.2 Cost of the comprehensive AMC and manpower to operate such EIMWB shall be borne by the GCTO.

15.11.3 Railway will be free to weigh rakes other than those of the concerned GCT at such EIMWB.

15.12 Railway may permit weight-o-meter/ pre-weighbin system of weighment in GCT on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager, keeping in view the requirement and to avoid any manipulation of weighment data.

15.12.1 Such equipment shall be certified by Weights & Measures department, and should also meet all extant statutory provisions and policy guidelines.

15.12.2 The system should have proper locking/ sealing arrangement to avoid any tampering with the system including software. The 'admin' control should rest with the Railways.

15.12.3 One-to-one correspondence between Weight-o-meter discharge and corresponding wagon shall be maintained by GCTO.

15.12.4 A procedure order for normal operations covering precautions to be taken to ensure that wagons are empty before loading and periodical test weighing of this system shall be maintained by GCTO.

15.12.5 The system should have interface with FOIS to avoid any error in data capture during transmission.

15.13 GCTO may also be permitted to install an alternative means of weighment of wagons, which should have accuracy level at least equal to that of EIMWB and should ensure weighment within the time taken by EIMWB.

15.13.1 GCTO shall submit request for such alternative means of weighment, along with all the necessary documents, which may be permitted by Railway on case-to-case basis, on the joint recommendation of PCOM, PCME, PCE & PCCM and with the personal approval of the General Manager.

15.13.2 GCTO shall be responsible for getting the proposed means of weighment of wagons certified by Legal Metrology/ Weights & Measures department, and also for ensuring its proper upkeep and maintenance at its own cost.

07/07/2022

16. **Installation of FOIS and TMS**

16.1 FOIS and TMS with limited access as prescribed by Indian Railways shall be installed at the GCT – at the cost of GCTO. All RRs will be prepared through TMS. Complete maintenance of FOIS and TMS will be done by Railway at its own cost.

16.1.1 Cost of replacement of FOIS and TMS equipment, at the end of their codal life, shall be borne by the GCTO.

17. **General Conditions**

17.1 Applicant/ GCTO will be solely responsible for – (a) arranging/ acquiring/ownership/ lease/licensing of non-Railway land for the development of GCT; (b) all statutory and non-statutory clearances from other government departments and statutory bodies; and (c) payment of all charges, taxes/GST, surcharges, cess, levies, etc, related to transportation and handling of cargo.

17.2 Unless otherwise mentioned in this policy, all 'Commercial and Operating rules' as applicable for a goods-shed for booking, supply and delivery of goods shall be applicable at GCTs.

17.3 The GCTO shall be responsible for clearance of all Railway dues, including demurrage charges & land license fee, accrued within the GCT. For the sake of clarity, it is explicitly mentioned that demurrage charges will be borne by the GCTO for demurrage occurring on its own private land or occurring on railway land licensed to the GCTO.

17.4 The cost of electricity/ diesel consumed by Railway locomotives shall be borne by Railway.

17.5 The GCTO shall provide at his own cost the level-crossings and ROB/ RUB/ LHSs for safe passage of trains as well as road vehicles, as per requirement and prescribed norms.

17.5.1 All level-crossings have to be provided with requisite infrastructure (gate-post, gate-lodge, etc) and have to be manned by GCTO at its own cost.

17.5.1.1 If the level-crossing becomes due for interlocking, the cost of interlocking shall be borne by the GCTO.

17.5.2 Maintenance of level-crossings falling on the track being maintained by Railway shall be done by Railway at its own cost; while maintenance of level-crossings falling on the track being maintained by the GCTO shall be done by GCTO (as illustrated in Section III of Schedule '3' of the policy).

17.6 Railway shall reserve the right to grant connectivity to another GCT(s) from the portion of track on Railway land as well as from the portion of track which is being maintained (and assets are owned) by Railway. For the sake of clarity, Railway may permit connectivity to another Terminal from the connectivity portion of a Terminal – (i) on Railway land where the assets are owned and maintained by Railway; and (ii) on non-Railway land where the ownership of assets has been transferred to Railway by the GCTO, and the assets are maintained by Railway though the land is owned by the GCTO. This provision shall be applicable on Railway land for all GCTs; and on non-Railway land for all new GCTs, as well as on existing Terminals who decide to migrate to this Policy and transfer the ownership of assets on their land to Railway.

17.7 For GCTs established entirely or partially on Railway land, Railway will levy Terminal Charges and Terminal Access Charges similar to those being levied on Railway goods-sheds. These Terminal Charges and Terminal Access Charges will be shared with the GCTO according to the quoted bid percentage (as mentioned in para 9 above of this Schedule '2').

07/07/2022

17.8 At the time of cancellation / termination / expiry of the Agreement, the Railway land, along with the entire infrastructure developed on it by the bidder, shall revert back to Railway on as-is-where-is basis, without payment of any compensation.

17.9 The Railway land used for providing connectivity to the Terminal shall remain in possession of Railway, along with the entire infrastructure created on it (as per provisions of para 5.1.2 & 5.1.3 of the Policy).

17.10 Railway land where GCT is developed partially or wholly on railway land (except for Railway land provided for the connectivity to GCT as mentioned in para 13 of Schedule 1 & 2) will be licensed to GCTO – for which modalities of calculating and levying land license fee shall be as per extant rules/Board's circular on land licensing (2005/LML/18/8 dated 10.02.2005 and 08.6.2005, Annexure-E of the policy), as amended from time to time.

17.11 Responsibility for maintaining the track and signalling equipment shall be as per the provisions of para 7 of this Policy. Responsibility of maintaining loading/ unloading wharf(s), roads, drainage, etc, shall rest with the GCTO.

17.12 GCTO shall also be responsible to ensure that the entire infrastructure of Terminal is properly maintained and is duly upgraded/ replaced at the end of codal life, as per Good Industry Practices.

17.13 For GCTs constructed fully or partially on Railway land, the GCTO shall be expected to give at least the prescribed annual bench-mark of traffic (outward plus inward combined, in NTKM) to Railway, which shall be commensurate with the value of Railway land earmarked for GCT, as under:-

Value of land	Bench-mark Traffic (in NTKM)
Up to Rs 10 crore	200 million
More than Rs 10 crore, & up to Rs 25 crore	500 million
More than Rs 25 crore, & up to Rs 50 crore	1,000 million
More than Rs 50 crore, & up to Rs 100 crore	2,000 million
More than Rs 100 crore	4,000 million

17.13.1 The Bench-mark Traffic shall be applicable from the Financial Year subsequent to the year of commissioning, and shall be revised at the time of each renewal/ extension of Land Licensing Agreement according to the revised value of land. For example, if a GCT has been commissioned during 2023-24, with the value of Railway land being Rs 20 crore – then the Bench-mark from the years 2024-25 onwards shall be 500 million NTKM. This Bench-mark Traffic shall be revised at the time of every renewal/ extension of Land Licensing Agreement.

17.13.2 If the GCTO achieves or surpasses the Bench-mark Traffic during any Financial Year, an incentive equal to 5% of the Land License Fee (which be levied as per the provisions of para 17.10 above) shall be granted for the next year provided that previous Land License Fee have been paid and there is no outstanding dues in this regard. For the example given in para 17.13.1 above, if the GCTO achieves Bench-mark Traffic during 2025-26, then an incentive equal to 5% of Land License Fees (as per the provisions of para 17.10) shall be granted for the year 2026-27.

07/07/2022

17.14 Subject to the provisions of para 17.10 above, GCTO will be free to create infrastructure and/or to provide value-added services/ facilities (such as warehousing, processing, packaging, etc. provided that such infrastructure/ value-added services/ facilities, if created, shall be available to all users of the GCT without discrimination of any sort. GCTO will also have the authority for deciding the user charges/ fees for value-added services/ facilities as per market conditions – without any interference from Railway. However, the use of value-added services/ facilities will be optional and no customer will be forced to use those services or to pay for them. Such value-added services/ facilities shall conform to Good Industry Practices.

17.14.1 GCTO shall not sub-lease/ sub-license/ mortgage Railway land, and shall not create any third-party encumbrance on Railway land.

17.14.2 For any value-added service/ facility developed on Railway land, GCTO shall ensure that either the complete inward traffic or the complete outward traffic, for each commodity handled, is transported through Indian Railway system. Railway reserves the right to undertake any inspection of the Terminal to safeguard its interests and to direct the GCTO to discontinue such activities if such activities are detrimental to Railway's cargo business, failing which the Agreement may be terminated. For avoidance of doubt, such termination will be treated as default by the GCTO.

17.14.3 The responsibility of obtaining all statutory and environmental clearances for such value-added services, if required, shall rest solely with the GCTO. Any violation of statutory compliance will invite merit for termination clause of the Agreement on GCTO's default. Any liability/ default created by such violation will be the sole responsibility of the GCTO, and Railway will not be responsible for this.

17.15 GCTO shall use Railway land for activities related to Railway cargo business only. If the GCTO indulges in any commercial activity not related to Railway cargo business on Railway land or fail to adhere to the provisions of para 17.14, 17.14.1, 17.14.2 & 17.14.3 above, the Agreement for GCT may be terminated without any compensation/ termination payment to the GCTO. For avoidance of doubt, such termination will be treated as default by the GCTO. In case of any dispute whether any activity is related to Railway cargo business or not, the decision of the nodal officer (i.e. DRM) shall be final and binding on the GCTO.

17.16 The GCT located completely or partially on Railway land will remain a common-user facility, and GCTO shall ensure non-discriminatory access for all rail-customers/ potential customers to such Terminals. The GCTO will not prevent any rail-customer/ potential customer from accessing the Terminal (provided the facilities for handling their cargo exists at the terminal). Road access to the GCT will not be blocked by the GCTO.

17.17 GCTO will have the permission to expand the Terminal further by acquiring/ leasing the adjacent non-Railway land. However, any such acquisition/ leasing of additional land will have to be managed by the GCTO through his own resources. Railway will not charge any Land License Fees for the additional land acquired by the GCTO.

17.17.1 In such cases, the levy of Terminal Charges and Terminal Access Charges – and their sharing with the GCTO – will continue as before as per the decided principle.

17.18 A joint team (comprising of Sr.DOM, Sr.DCM, Sr.DEN, Sr.DSTE & Sr.DEE/TRD) shall inspect the GCT at least once a year to ensure that there is no breach of Agreement or policy provisions by the GCTO. In addition, inspections may also be conducted by Railway officials as per the provisions of para 17.14.2 and 17.15 above.

07/07/2022

18. Dispute Resolution

18.1 In case of any dispute arising in the interpretation of the Policy, the decision of DRM will be final and binding.

18.2 Conciliation: All disputes and differences of any kind whatsoever arising out of or in connection with the construction and operations of GCT shall be referred by the GCTO to Railway Administration through 'Notice of Dispute.' RA shall, within 30 days after receipt of the 'Notice of Dispute,' notify the name of conciliator(s) to the GCTO. The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of Agreement. If the parties reach agreement on a settlement of the dispute, they shall draw up and sign a written Settlement Agreement duly signed by Railway's representative (Sr.DCM), GCTO and conciliator(s). When the settlement agreement is signed, it shall be final and binding on the parties. The conciliators shall be paid fee as fixed by Ministry of Railways time to time, which shall be shared equally by the parties. For other issues related with Conciliation, terms and conditions defined under Indian Railways General Conditions of Contract 2020 may be followed.

18.2.1 The parties shall not initiate, during the conciliation proceedings, any reference to arbitral or judicial proceedings in respect of a dispute that is the subject matter of the conciliation proceedings.

18.2.2 The conciliation shall be carried out as per "The Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof" and the proceedings shall be terminated as per Section 76 of the above Act.

18.3 Arbitration: If the dispute is not settled through Conciliation (as mentioned in para 18.2), it shall be decided by reference to arbitration. Arbitration shall be carried out as per provisions available for arbitration in Indian Railways General Conditions of Contract 2020 for works contracts, as amended from time to time.

18.4 Governing Law & Jurisdiction: This Agreement is governed by and shall be construed in accordance with the laws of India. In case of any dispute and difference arises, the Court of the place, where Land License Agreement has been made, shall only have the jurisdiction to try such litigation.

19. Termination of the Agreement

19.1 Subject to the provisions in the Agreement, Railway Administration may terminate the Agreement with a GCTO operating a GCT in the event of any serious irregularity committed by the GCTO. This may include any grave breach of the terms and conditions of the Agreement, any default by GCTO, violation of The Railway Act, 1989, or commission of an unlawful act which is not in-line with Good Industry Practices.

19.2 Before terminating the Agreement, RA shall first issue a Show Cause Notice, informing GCTO to submit representation within 30 days. If no response is received, or if the response of GCTO is not satisfactory, a written Notice of Termination specifying a grace period of 180 days shall be given to the GCTO, by Sr.DCM with the approval of DRM. However, if no reply to the Notice for Termination is received within 180 days of the issue of Notice for Termination, the Agreement with GCTO will stand terminated and the same shall be communicated by Sr.DCM to GCTO. No termination payment shall be made by RA to the GCTO.

07/07/2022

19.2.1 If the GCTO submits a reply within 180 days, RA will take further course of action on the merit of the case.

19.3 The GCTO will also have the right to terminate the Agreement by giving a notice of 180 days to the Railway Administration in the event of any difficulty faced by the GCTO in smooth functioning of the Terminal for reasons attributable to Railway as laid down in this policy, or for any other reason internal to the GCTO. No termination payment shall be asked by Railway from GCTO.

19.4 Any dispute arising out of this Agreement will be resolved through the Dispute Resolution Mechanism as prescribed under Para 18 above.

20. ***Power To Terminate Agreement, If Traffic Insufficient :***

20.1 Notwithstanding anything contained in the Agreement, the Railway Administration shall be entitled, in the event of the Railway Administration being of the opinion that the Applicant's traffic over the terminal is insufficient to justify the retention of terminal by the Applicant of which the 'Divisional Railway Manager' of the Railway Administration will be the sole judge to terminate this Agreement by giving to the Applicant not less than 6(six) months' notice in writing of the Railway Administration's intention to terminate this Agreement and on the expiry of such notice, this Agreement shall stand terminated.

20.2 The termination of this agreement under the provisions of this Clause shall be without prejudice to any rights of remedies to which the Railway Administration will be entitled to, in respect of any acts, matter or things arising before such termination.

21. ***Power To Close The Portion Of The Terminal Within Railway Land Colored Red In The Annexed Plan Or Work It For Public Traffic :***

21.1 In the event of the Railway Administration deciding in the public interest to close the terminal or any part or extension thereof or to work the terminal or any part or extension thereof for public traffic as part of the railway system (the decision of the Railway being final in this case and the service of the notice as hereinafter stated shall be conclusive evidence of the same) the Railway Administration may terminate this Agreement by giving to the Applicant 6(six) month's previous notice in writing of such decision and on the expiration of such notice this Agreement shall terminate.

22. ***Power To Stop Traffic And To Terminate Agreement In Certain Events:***

The Railway Administration shall have the absolute right to refuse at any time to allow their rolling stock to go on or be used upon the Terminal or any part or extension thereof and shall also be entitled to determine this Agreement at any time after the happening of any of the following events:

22.1 In the event of the Applicant failing to deposit within the time fixed for the purpose any sum of sums required to be deposited under the provision of these presents or according to any direction of the Railway Administration.

22.2 In the event of the Applicant failing to pay any other sums payable to the Railway Administration under this Agreement or any other changes payable to the Railway administration in respect of the terminal or the use thereof within one month after the due date of payment or in the event of a due date not being specified then within one month after service of a written-demand for payment.

22.3 In the events of the Applicant failing to comply with any requisition of the Railway Administration to remove or repair any defect which in the opinion of the Railway

07/07/2022

administration may endanger the working and safety of the terminal within such time as shall be fixed by the Railways Administration for the purpose.

22.4 In the events of the Applicant ceasing for a consecutive period of 3 (three) months to use the terminal or any part for extension thereof for the Applicant's own traffic in connection with the Applicant's Works.

22.5 In the event of the Applicant contravening the provision of Clause 15 hereof.

22.6 In the event of the Applicant failing to observe or perform any other obligation on his part herein contained.

22.7 In the event of the terminal becoming dangerous or defective by reason of any act of God or other act or circumstances for which the Railway Administration is not responsible.

22.8 In the event of any branch line, terminal or part or extension thereof, connecting the terminal or any part or extension thereof with the Railway system, becoming dangerous or defective for any reason whatsoever and whether such branch line, terminal part or extension shall belong to the Applicant or to any third person.

22.9 In the event of any branch line, terminal or any part or extension thereof connecting the terminal or any part or extension thereof with the Railway system, being closed by the Railway Administration under any powers which the Railway Administration may possess whether by status or by Agreement with third persons or closed by order of the Government of India or any State Government.

The Applicant shall have no claim whatsoever against the Railway Administration in respect of any refusal by the Railway Administration to allow their rolling stock to go on or be used upon the terminal or any connected Terminal or branch line in any of the aforesaid events.

Provided always that on the happening of any of the events mentioned in sub-Clauses 22.1, 22.2, 22.4, 22.5, 22.6, the Railway Administration shall not exercise the power conferred upon it by this Clause unless 14 (Fourteen) days' previous notice has been given in writing requiring the Applicant to comply with the demand or requisition as the case may be, of the Railway Administration and the Applicant has failed to comply with the Same within the time specified in such notice.

No notice shall be required to be given in the cases specified in the other sub-clauses of this clause.

23. ***Termination of Agreement on Death. Insolvency etc. :***

This agreement may be determined by the Railway Administration without prior notice at any time after the happening of any of the following events:

23.1 In the event of the death of the Applicant, if he is an individual person.

23.2 In the event of a partition of the Joint family properties, if the Applicant is a Joint family governed by the Mitakshara School if Hindu Law.

23.3 In the event of dissolution of partners either by act of parties or by order of Court, if the Applicant is a firm or other association or body of individuals.

23.4 In the event of dissolution of partners either by act of parties or by order of Court, if the Applicant is a firm or other association or body of individuals.

23.5 In the event of Applicant becoming insolvent or going into liquidation either voluntarily or under an order of a competent Court.

23.6 In the event of the Applicant's interest in the works becoming wholly or partially vested in some other person.

23.7 In the event of the Applicant contravening the provision of Clause 21 hereof.

24. ***Consequence of Termination Under Clauses 19, 20, 21, 22 & 23 :***

*24.1 On termination of this agreement under provisions of Clauses **19, 20, 21, 22 & 23** thereof, the Railway Administration shall be entitled to disconnect from their Railway,*

07/07/2022

the portion of the said terminal within the Railway land (colored red on the said plan) at the cost of the Applicant and take up and remove the same and the appliance connected therewith and dispose of the materials thereof as they may think fit rendering to the Applicant surplus (if any) to arise from such disposal after first defraying and reimbursing there at all costs and expenses on and incidental to such taking up, removal and disposal and all sums owing to them by the applicant under the terms of this Agreement or for freight or carriage.

24.2 Provided always that the Railway Administration shall at all times have lien on the portion of the said terminal within the Railway land (colored red in the said plan) and appliances connected therewith and materials thereof for all sums owing to them from the Applicant under the terms of this agreement or for freight or carriage. The Applicant shall have no claim whatsoever against the Railway Administration in respect of termination of this agreement whether under any of the provisions of those presents or in any manner not provided for by those presents.

25. ***Agreement To Bind Applicant Until Terminated By The Railway Administration***

25.1 Until terminated by the Railway Administration or unless and until the person or persons in whom the entire rights and interests of the Applicant have vested and with wham the Railway Administration has agreed to enter into a Cargo Terminal Agreement has executed and registered such Agreement in the same form as these presents or in such other form as the Railway Administration may require as provided in Clause 21 hereof, this Agreement shall be binding upon the Applicant and the successors in title or interest of the Applicant in the Applicant's work

(i) Provided that the Applicant may by giving 6 (six) months' notice to the Railway Administration, discontinue the use of the terminal. In such event, the Applicant shall not be liable for the payment of maintenance and other charges under the Agreement for the period subsequent to the date of expiry of the said notice, but nevertheless all other obligations under the Agreement shall binding on him.

(ii) Provided further that the Railway Administration has the right without assigning any reason to terminate this Agreement on 6 (six) months' notice.

26. ***Applicant To handover/revert back Railway land along with entire Infrastructure developed on it Within A Month Of Termination***

On termination of this Agreement, Railway land, along with the entire infrastructure developed on it by the bidder, shall revert back to Railway on as-is-where-is basis within a month of termination, without payment of any compensation.

27. ***Right To Charge Interest On Money Due Hereunder To The Railway Administration:***
Notwithstanding anything contained in the foregoing Clauses of this Agreement, the Railway Administration shall have the right to charge and recover from the Applicant interest at such rates, as may be fixed by the Railway Administration from time to time on any or all sums payable by the Applicant under the terms thereof, if such sums are not paid within one month from the due date and if no such date is fixed, within one month from the date on which a written demand is made by the railway Administration.

28. ***Right Of Deduction Of Money Due To The Railway Administration***

The Railway Administration shall have the right to deduct from any amount which may become payable by the Railway Administration to the Applicant or to the legal representative of the

07/07/2022

Applicant any money due from the Applicant to the Railway Administration under these presents or for freight, haulage or other charges or otherwise in connection with the construction, maintenance or working of the terminal.

29. ***Service Of Notices On Applicant:***
The Applicant shall maintain a proper office to which all letters, notices, demands and other communications intended for the Applicant may be sent and every notice, demand or other communication which shall be delivered at or sent by Registered Post to such office shall for all purposes whatsoever be deemed to have been validly and effectively delivered to the Applicant.

30. ***Exercise Of Powers :***
Subject as otherwise provided in this agreement, all notices to be given on behalf of the President of India and all other actions to be taken on his behalf may be given or taken on his behalf by the Railway Administration; the agreement signing authority or his authorized representative.

31. ***Alteration / Variation Of The Agreement:***
Except as hereby provided any verbal or written arrangement or abandoning, varying or supplementing this Agreement or any of the terms hereof shall be deemed conditional and shall not be binding on the railway administration unless and until the same is endorsed on this agreement or incorporated in a formal instrument and signed by the parties hereto and till then the Railway administration shall have the right to repudiate such arrangement.

32. ***Applicant Not To Transfer Rights ;***

32.1 The Applicant shall not be entitled to assign or transfer or subject or permit to be used or enjoyed by any other person in any manner whatsoever any of the rights or benefits conferred upon the Applicant by these presents and any purported assignment transfer or subletting or permission shall be void and of no effect. Provided also that in the event of any other person being permitted by the Railway Administration to use the terminal on the Applicant's request or otherwise, the Applicant shall remain responsible to the Railway Administration for all the charges and obligations under this Agreement.

32.2 Provided, however, that if the Applicant shall desire to transfer the Applicant's Works to any person or if the applicant being a Company shall go into liquidation and such intended transferee or the liquidator of the Company shall desire the use and benefit of the terminal than subject to the under mentioned conditions being complied with the Railway Administration may at its discretion on the written request of the Applicant and of the intended transferee or liquidator made prior to the transfer or within one month after the commencement of the liquidation as the case may be and after production by the transferee of the registered Deed of Transfer of the Applicant's Works pr after proof by the liquidator of this intension to carry on the Company's business for the purpose of the liquidation proceedings, allow the transferee or liquidator the use and benefit of the terminal. The conditions above mentioned are the following:

(i) That the liquidator shall be approved by the Railway Administration, but such approval will not unreasonably withheld.

(ii) That the liquidator shall duly sign and register a Cargo Terminal Agreement in the same form as these presents so far as then applicable or in such other form as the Railway Administration may then require.

07/07/2022

(iii) That the applicant, Railway Administration and transferee shall duly execute an agreement of assignment as may be prescribed by the Railway Administration.

33. ***Cost of Execution Of Agreement:***
All expenses in drawing up the Agreement and the cost of stamping and registration shall be borne by the TO/Applicant. "Money receipt obtained from the Registration Office should be handed over to the Railways for collection of registered agreement which shall remain in the custody of Railways. Any charges, if levied for collection of registered agreement, shall also be borne by the Applicant.

34. **Agreement period**

The period of Agreement shall be signed for five (05) years, which shall be renewed / extended in blocks of five (05) years at a time, provided any of the provisions of the Agreement and / or Policy has not been violated by the GCTO.

35. **Agreement In Force From :**
The agreement shall be deemed to have come into force on and from……..

36. **Head Notes :**
The head notes herein are for the convenience of reference only and shall not affect the construction of these presents.

In WITNESS WHEREOF, the parties to these presents have set and subscribed their respective hands and seals hereunto on the day and year first above written.

For and on behalf of
THE PRESIDENT OF INDIA (First Party)
SIGNED, SEALED AND DELIVERED BY

Name : ……
Designation …
Address : …….
(Authorized Signatory)

……..(Second Party)
(SIGNED, SEALED AND DELIVERED by

Name : ……
Designation :……..
Address : ……

In the present of Witness

1.

2.

07/07/2022

Cargo Terminal Agreement-

Reg. No.: _____ For _____ Terminal

At Kilometre: _____ Between Stations _____ and _____

07/07/2022

Land License Agreement

(For Private Terminal)

{Note- This agreement is not to *be used for the cases where Railway Land is given on Lease* to *other government departmentlP5U For such cases, Land Leasing Agreement has to be signed in lieu* of *Land License Agreement in the standard format* of *Zonal Railway}*

This **Land Licensee Agreement** is made and executed at .....on this ..... Day of ....., 20.....

BY AND BETWEEN

THE PRESIDENT OF INDIA acting through (incorporate name and designation of the officer authorized under Article 299(1) of the Constitution) having its office at ..... (hereinafter referred to as "**Licensor**" which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the One Part;

AND

..... [hereinafter referred to as **("Licensee")*** which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the Other Part.

The Licensor and the Licensee are hereinafter collectively referred to as the "Parties" and Individually as a "Party",

WHEREAS,

(A) The Licensor and the Licensee have entered into a Cargo Terminal Agreement, dated ____ _(Agreement No,), wherein the Licensee has agreed to lay the terminal and the Licensor has agreed to provide the land for providing connectivity to the Terminal,

(B) The Licensor is owner of the land described in the Annexure hereunder (the "Site") and now desires to License the Site to the Licensee and the Licensee desires to take on License from the Licensor, the Site for the purpose of connectivity to the terminal,

NOW THEREFORE, In consideration of the promises and covenants herein set forth and for other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the Parties mutually agree as hereunder-

1, Definitions and Interpretation -

1.1 Definitions:

In this Land License Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

"Applicable Permits" means all clearances, permits, authorizations, consents and approvals required to be obtained or maintained under applicable laws in connection with the Site and the Terminal during the subsistence of the Land license Agreement;

"Encumbrance" means any encumbrance, such as an easement, right of way, license, mortgage, charge, pledge, lien, hypothecation, pre-emptive right or security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations, whether or not registered and howsoever arising, including by statute or common law;

07/07/2022

"Land License Fee" shall have the meaning set forth in Clause 4.1 of this agreement.

"Site" shall have the meaning set forth in Recital (B); and

"Term" shall have the meaning setforth in Clause 3 of this agreement.

1.2. Interpretations-

In this Land License Agreement, except to the extent that the context requires otherwise:

(a) the Annexure to this Land License Agreement forms part of this Land License Agreement and shall be of full force and effect as though it is expressly set out in the body of this Land License Agreement;

(b) the terms of this Land License Agreement shall be read in consonance with and not in derogation with the terms of Cargo Terminal Agreement;

(c) the words and expressions beginning with capital letters and defined in this Land License Agreement shall have the meaning ascribed thereto herein, and the words and expressions beginning with capital letters used in this Land License Agreement and not defined herein, but defined in the Cargo Terminal Agreement shall, unless repugnant to the context, have the meaning ascribed thereto in the Cargo Terminal Agreement.

2. Grant of License and Possession -

2.1.1 The provisions of this Land License Agreement shall take effect and become binding on the Parties on the date of signing of this Agreement.

2.1.2 In consideration of the Land License Fee and subject to Clause 2.1.3, the Licensor grants on License to the Licensee and the Licensee agrees to accept the License from the Licensor, free from Encumbrances and/or encroachments, of all that piece and parcel of land measuring_____ situated at_____, described in the Annexure and to hold, possess, use and enjoy the Site a*nd/or* any part thereof, in accordance with the provisions of this Land License Agreement.

2.1.3 The Licensor hereby grants and transfers physical possession of the land specified in Annexure and in accordance with the provisions of Clause 4 of the Cargo Terminal Agreement.

3. Term-

3.1 The License granted in pursuance of this Land License Agreement shall be for a period of 5 (five) years from the date of signing of Land License Agreement (the "Term") which shall be renewed / extended in blocks of five (05) years at a time, up to 35 years unless principle GCT agreement is terminated / or the Land License Agreement is terminated prematurely in accordance with Clause 6 hereunder.

3.2 Both the Land License Agreement and the Cargo Terminal Agreement shall be co-terminus with each other.

3.3 The Licensee shall not derive any right, title or interest in the said Site which shall remain property of the Railways all the times. The Licensee only shall have possessory right as a Licensee for ___ years of the said premises in accordance with the terms of the agreement, provided regular and timely payment of land license fee is made.

3.4 Renewal of the Land License Agreement shall be at the sole discretion of the Licensor.

07/07/2022

4. Land License Fee -

4.1 The Licensee shall pay to the Licensor, subject to Clause 4.3, an annual Land License Fee ("Land License Fee") @ 6% of market value of land per annum in terms of Board's circular on land licensing i.e. 2005/LML/18/8 dated 10.02.2005 and 08.06.2005 as amended from time to time.

4.2 The Licensee shall pay the Land License Fee to the Licensor in advance on the first day of April every year and into such account, as may be designated by the Licensor from time to time.

4.3 If the Licensee fails to pay the Land License Fee as aforesaid, the Licensee shall be liable to pay interest for the period of delay calculated at a rate equal to 5% (five percent) above the base interest rate prescribed by State Bank of India.

4.4 Upon failure to pay Land License Fee within a period of 180 days from due date i.e. First day of April every year, Licensor reserves the right to terminate the Land License Agreement in accordance with Clause 19 of GCTO Agreement. However, the same shall not stop Licensor from taking action for recovery of their dues.

5. Use of Site –

5.1 During the Term of this Land License Agreement, the Licensee shall use the Site only for the purpose of terminal.

5.2 The Licensor shall always be at liberty to construct adjoining to the Licensed Site and the Licensee shall not be entitled to raise any objection to ask compensation thereafter on the plea of inconvenience, whatsoever at any point of time.

6. Termination of Land License Agreement –

6.1 This Land License Agreement may be terminated earlier by mutual agreement between the Parties in writing.

6.2 The Land License Agreement shall be co-terminus with the Cargo Terminal agreement. Thus, in the event that the Cargo Terminal Agreement is terminated during the currency thereof, then this Land License Agreement shall be deemed to be terminated without any further notice for termination of Land License Agreement and the Licensor shall be at full liberty to deal with the site in such manner as it deems fit in its sole discretion.

6.3 The Licensor shall have the right to terminate this Land License Agreement on occurrence of anyone or more default(s) by the Licensee as enlisted hereunder:

(a) failure of the Licensee to make payments to the Licensor in accordance with the provisions hereof, where such failure continues for a period of 30 (thirty) days after a written notice from the Licensor:

(b) transfer or assignment of this Land License Agreement or creation of any Encumbrance on the Site, without securing prior written approval of the Licensor;

07/07/2022

(c) use of the Site for any purpose other than the purposes stated under Clause 5 of this Land License Agreement and such breach is not remedied within a period of 60 (Sixty) days after a notice from the Licensor in this behalf; and

(d) Voluntary abandonment by the Licensee of period of 90 (ninety) days or more.

6.4 On expiry of the License Term or early termination of the Land License Agreement, for any reason whatsoever, the site, shall revert back to the Licensor.

6.5 Upon termination under Clauses 4.4, 6.1, 6.2 and 6.3, the Licensor shall have the following additional rights:

(a) The recovery of any unpaid Land License Fee due and payable at the time of termination;

(b) the recovery of any damages, costs, fees and expenses incurred by the Licensor as a result of the breach of the Land License Agreement by the Licensee; and

(c) Any other right or remedy, legal or equitable, that the Licensor is entitled to under applicable laws.

7. Licensee's Obligations and Covenants

Licensee hereby covenants, agrees and represents that:

(a) the Licensee, during the Term of the Land License Agreement, shall pay the Land License Fee in accordance with terms and conditions set out in this Land License Agreement and shall observe and fulfil each of its obligations and covenants set forth herein;

(b) the Licensee shall obtain, at its own cost and expense, all utilities, such as water, electricity etc. from the appropriate authorities;

(c) It shall obtain and keep current all Applicable Permits that may be required under the applicable laws;

(d) it shall pay all taxes, service tax, cess charges, assessments and levies in respect of the Site, which are leviable at any time during the Term of the Land License Agreement;

(e) it shall not create any lien, charge or Encumbrance on the Site, except as permitted in this Land License Agreement, without prior approval of the Licensor;

(f) it shall take all necessary care to keep the premises neat and clean and in sanitary conditions.; and

(g) It shall, after expiry or termination of the Land License Agreement forthwith, the Licensee hand over possession of the land to the Licensor along with entire infrastructure on railway land on as-is-where-is basis in terms of Clause 17.8 of agreement, without any payment / compensation.

a. shall revert back to Railway on as-is-where-is basis, without payment of any compensation.

07/07/2022

8. Stamp Duty and Registration Charges -
Subject to the exemption or waiver, if any, granted by Government or any other authority, the Parties agree that all stamp duties, registration charges and all other local/statutory charges payable In respect of the License contemplated herein shall be to the account of and borne by the Licensee.

9. Indemnities and Limitation of Liability -
The Licensee shall fully indemnify, defend and hold harmless the Licensor, its officers, servants, agents, against any and all suits, proceedings, actions, demands, claims and liabilities, which may be incurred or suffered by the Licensor and which may arise out of or as a result of any of the following causes:

(a) any breach by the Licensee of any of its obligations, covenants, agreements, representations or warranties set forth In this Land License Agreement;

(b) any loss of property, damage to property, personal injury or death occasioned to or suffered by any person, to the extent that the damage to or loss of property or the personal injury or death is caused willfully or negligently by the Licensee; and

(c) any breach, violation or non-compliance by the Licensee of any applicable laws and/or Applicable Permits.

10. Assignment-

The Licensee shall not, without the Licensor's prior written consent, transfer, assign or grant any form of security over any of its rights or obligations under this Land License Agreement.

11. Dispute Resolution -

11.1 The Parties shall use their respective reasonable endeavors to settle any dispute, difference, claim, question or controversy between the Parties arising out of, in connection with or in relation to this Land License Agreement ("Dispute") amicably between themselves through negotiation.

11.2 Any Dispute which the Parties are unable to resolve pursuant to Clause 11.1, within 60 (sixty) days (or such longer period as the Parties may agree) of notice by one Party to the other of the existence of a Dispute, shall be resolved in accordance with the provisions of the Cargo Terminal Agreement.

12. Governing Law -

This Land License Agreement is governed by and shall be construed in accordance with the laws of India. In case of any dispute and difference arises, the Court of the place, where Land License Agreement has been made, shall only have the jurisdiction to try such litigation.

In Witness Whereof The Parties Have Executed And Delivered This Land License Agreement As Of The Day, Month And Year First Above Written.

For and on behalf of
THE PRESIDENT OF INDIA (First Party - Licensor)
SIGNED, SEALED AND DELIVERED BY

Name : .....
Designation ..... (Sr. Divisional Engineer)

07/07/2022

Address : .....
(Authorized Signatory)

.....(Second Party -Licensee)
(SIGNED, SEALED AND DELIVERED by

Name : .....
Designation :.....
Address : .....

In the present of Witness

1.

2.

07/07/2022

Eastern Railway
Asansol Division

No: C.4/MPL/Siding Policy/22

Dated 04.08.22.

Maithon Power Limited,
Thaparnagar, Asansol Division.

Sub: Execution of agreement for 'Gati Shakti Multi-modal Cargo Terminal (GCT).
Ref: Railway Board's letter No. 2021/TC(FM)/18/23 – Part (I) dated 07.07.2022.

****

The policy guidelines on GCT were issued under GCT Master Circular 2021 vide Railway Board's letter No. 2021/TC(FM)/18/23 dated 15.12.2021. As per provision contained in Para 18.1 of GCT Master Circular, an Agreement for GCT shall be signed before the issue of commercial notification and operation.

In this regard, MPL authority has executed the agreement. Due to non availability of any Standard Agreement for GCT with this division, existing siding agreement along with GCT rules and regulations, EOL agreement and an undertaking were executed on 16.02.2022. MPL authority has given the undertaking that any further Revision/Edition/Modification of the terms and condition of contract as issued by competent authority (Railway Board / Eastern Railway) shall be binding on M/s Maithon Power Limited.

In this connection, standard agreement for GCT has been sent vide letter under reference above.

As Standard Agreement for GCT has been issued by Railway Board, it is required to execute the standard agreement.

Hence, it is requested to furnish 04 nos. of stamp paper of demonation Rs. 20/- or Rs. 50/- or Rs. 100/- as well as 92 nos. dummy papers (23 x 4) to this office for execution of agreement as per Railway Board's advice as early as possible.

Asstt Comml. Manager
for Sr Divl Comml Manager
Eastern Railway, Asansol

Saving in Annual Fixed Charges on account of the shifting of Railway capitalization in FY 2021-22

Scenario 1:

1. Capitalization of Railway Claimed in FY 2021-22 with additional IDC of Rs. 2670.24 lakh in FY 2021-22 (i.e. as claimed in the Petition).

Railway Project Capital cost (Rs. Lakh) considering capitalization in FY 2022.

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	**2**	**3**	**4**	**5**	**6**	**7**
1	Opening Capital Cost	-	-	-	72511.14	73121.59
2	Add: Addition during the year/period	-	-	65184.48	52.79	-
3	Less: De-capitalisation during the year/period	-	-	-	-	-
4	Add: Undischarge Liability as on 1st April of each year	-	-	-	1680.24	1122.59
5	Less: Undischarge Liability as on end of each year	-	-	1680.24	1122.59	1115.18
6	Add: Normative IDC on Excess Equity Railways			9006.91		
7	Closing Capital Cost	-	-	72511.14	73121.59	73128.99
8	**Average Capital Cost**	**-**	**-**	**36255.57**	**72816.36**	**73125.29**

2. Annual Fixed Charges computed based on above capital cost and norms specified in Tariff Regulations/ claimed in Tariff Petition:

Summary of Annual Fixed Charges (Rs Lakh) in Scenario-1

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	**2**	**5**	**6**	**7**	**8**	**9**
1.1	Depreciation	-	-	1,816.79	3,654.83	3,717.83
1.2	Interest on Loan	-	-	1,889.67	3,844.43	3,914.49
1.3	Return on Equity	-	-	2,042.86	4,102.91	4,120.32
1.4	Interest on Working Capital	-	-	-	-	-
1.5	O&M Expenses	-	-	-	-	-
	Total	**-**	**-**	**5824.72**	**11754.33**	**11928.64**

Scenario 2:

3. Capital cost of Railway Project considering capitalization in FY 2020-21.

Capital cost of Railway Project (Rs. Lakh) considering capitalization in FY 2021.

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	**2**	**3**	**4**	**5**	**6**	**7**
1	Opening Capital Cost	-	-	64,954.28	69,840.90	70,451.34
2	Add: Addition during the year/period	-	65,184.48	-	52.79	-
3	Less: De-capitalisation during the year/period	-	-	-	-	-
4	Add: Undischarge Liability as on 1st April of each year	-	-	6,566.87	1,680.24	1,122.59
5	Less: Undischarge Liability as on end of each year	-	6,566.87	1,680.24	1,122.59	1,115.18
6	Add: Normative IDC on Excess Equity Railways		6,336.66	-		
7	Closing Capital Cost	-	64,954.28	69,840.90	70,451.34	70,458.75
8	**Average Capital Cost**	**-**	**32,477.14**	**67,397.59**	**70,146.12**	**70,455.05**

4. Annual Fixed Charges computed based on above capital cost and norms specified in Tariff Regulations/ claimed in Tariff Petition:

Summary of Annual Fixed Charges (Rs Lakh) in Scenario-2

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	**2**	**3**	**4**	**5**	**6**	**7**
1.1	Depreciation	-	1,626.62	3,328.76	3,520.80	3,582.07
1.2	Interest on Loan	-	1,764.35	3,389.09	3,443.09	3,485.54
1.3	Return on Equity	-	1,829.96	3,797.58	3,952.45	3,969.86
1.4	Interest on Working Capital	-	73.43	137.91	143.17	165.29
1.5	O&M Expenses	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**5294.36**	**10653.34**	**11059.51**	**11202.76**

5. It is noteworthy here to mention that capitalization of Railway Project claimed in FY 2021-22 instead of FY 2020-21 would in-fact reduce the AFC burden of the procures by about 100 Crores between FY 2020-21 and FY 2021-22. The summary of the reduced AFC burden on the procurers has been summarized in the table below:

Capitalization of Railway Project Claimed in FY 22 (In Rs. Lakh)			Capitalization of Railway Project Claimed in FY 21 (In Rs. Lakh)			Reduced AFC Burden (In Rs. Lakh)
2020-21	2021-22	Total	2020-21	2021-22	Total	
1	2	3=1+2	4	5	6=4+5	7=3-6
0.00	5824.72	5824.72	5294.36	10653.34	15947.70	**-10122.98**

6. It may be noted that the delay in capitalization of the Railway Project is mainly due to the reasons beyond the control of the Petitioner as detailed in the Petition. On the basis of the summary of Capital Cost for Railway Project and corresponding Annual Fixed Charges under both the Scenarios provided hereinabove, it is evident that benefit of delayed capitalization by a year is already available with the procurers. As such, it is most humbly prayed that the impact of IDC of Rs. 2670.24 lakh in FY 2021-22 is justified to be considered and hence, may please be allowed.

EXIDE
Exide Industries Limited
Station Road, Jugsalai
(Near Ghora Chowk),
Jamshedpur - 831006
Ph. : 0657- 2293021, 2293022,
2292090

Recommendation Letter from OEM

Ref: EIL/MPL/09
Date: 09.09.2019

To
The Lead Engineer - Elect. Testing
Maithon Power Ltd.,
(A Joint Venture Company of Tata Power & DVC),
Works: Villàge Dambhui, P.O. Barbindia,
P.S. Nirsa, District Dhanbad 828 205,
Jharkhand, India

Dear Sir,

This has reference to several discussion held in recent time. We would like to inform you that the life of the Tubular Battery manufactured by Exide is 8 to 10 year under normal float application under 27 Degree Celsius temperature.

Thanking you,

Yours faithfully,
For Exide Industries Limited

Sudipta Chatterjee

Sudipta Chatterjee
Asst. Manager – Indl. Sales (Power & Projects)
Jamshedpur Branch
Mob: 8294003705

EXIDE

Exide Industries Limited
Regional Sales Office
6A, Hatibagan Road, Entally
Kolkata - 700 014
Phone : 2286-1860 / 6193
2286-6158 / 59
Fax : 91 (033) 2289-7455

Ref.: MPL/RRC/03
Dt. 11.12.2020

Maithon Power Limited
MA-5, Gonga, P.O.Maithon
Dist.: Dhanbad.

Kind Attn. : Mr.A.K.Nayek.

Dear Sir,

Sub. : Report on Health Survey of Battery Banks of Battery Bank-1&2 of U#2.

This has reference to the visit of undersigned to your Power Plant on 1st Dec.'20 in connection to the above job. Our Observations are as under:

(1) Battery Type : 108YHP29

Location: 220V Battery Bank-I of U#2.
Yr. of Installation: 2010.
Condition of the Battery Bank:

(a) Heavy Corrosion on Positive Strap was noticed in 32 nos.(Sl. No.: 4,6,8,20,25,29,31,,35,45,46,47, 49,51,52,53,54,60,61,63,64,66,67,68,72,75,79,80,83,87,90,94, & 108).
(b) Copper Contamination caused by Strap corrosion was noticed in 24 nos.(Sl. No.: 4,6,25,29,31,45, 46,47,49,52,53,54,60,61,63,64,66,72,75,77,79,80,87 & 90)
(c) Crack on the top lid caused by Strap Corrosion was also noticed in 20 nos.
(d) Corrosion on the Positive Plate was noticed in 33 nos.(Sl. No.4,6,11,12,18,28,31,36,38,39,40,41, 42,45,46,47,52,53,54,57,60,61,63,66,72,75,76,79,87,93,94,98 & 104)

Recommendation: Condition of the Battery Bank is alarming and under present condition, it will not be possible to revive the Battery Bank, hence should be replaced by a new one.

(2) Battery Type : 108YHP29

Location: 220V Battery Bank-II of U#2
Yr. of Installation: 2010
Condition of the Battery Bank:

(a) Heavy Corrosion on Positive Strap was noticed in 17 nos.(Sl. No.: 1,2,3,4,5,6,11,52,57,58,61,64, 71,78,96,97 & 106).
(b) Copper Contamination caused by Strap corrosion was noticed in 10 nos.(Sl.No.:1,2,4,6,52,57,58, 64, 72 & 78).
(c) Crack on the top lid caused by Strap Corrosion was also noticed in 08 nos.
(d) Growth in the Positive Plates was noticed in 20 nos. (Sl.No.: 2,4,5,11,17,27,29,34,38,57,58,64,65, 70, 94, 96, 97,102,104&106).

.....contd.

Recommendation: Condition of the Battery Bank is not satisfactory. Overhauling of the Battery Bank and rectification of the defective cells should be carried out at the earliest.

A record of Voltage and Specific Gravity measured and recorded during Survey is attached for your ready reference.

Yours faithfully
For Exide Industries Limited



Ashutosh Mishra.
Officer- Customer Service (Indl)

EXIDE

Exide Industries Limited
Regional Sales Office
6A, Hatibagan Road, Entally
Kolkata - 700 014
Phone : 2286-1860 / 6193
2286-6158 / 59
Fax : 91 (033) 2289-7455

Ref. : MPL/AKM/08
Dt.15.12.2020

Maithon Power Ltd.,
(A Joint Venture Company of Tata Power & DVC),
Works: Villàge Dambhui, P.O. Barbindia,
P.S. Nirsa, District Dhanbad 828 205,
Jharkhand, India

Kind Attn.: Mr. Ashim Nayak
Group Head-EMD (BTG & Switchyard)

Dear Sir,

Sub. : Report on Health Survey of Battery Banks of Unit#1

Dear Sir,
This has reference to the visit of undersigned to your plant on 1st Dec'20 in connection to the above job. Our Observations are as under:

1. **Battery Type: 108YHP-29**

Location: Unit# 1 Battery Bank- I
Yr. of Installation: 2010
Condition of the Battery Bank:

(a) Corrosion in the Positive Plate and strap was noticed in large number of Cells ((Cell No.6,8, 10, ,16, 17, 23, 29, ,42, 45, 46, 47, 52, 56, 57, 58 ,63, 64,65,69, 75, 76,77,78,86,87,88,91,100,& 107)
(b) Cell no.70 is By-Passed.
(c) Specific Gravity of all cells is low.
(d) The battery bank is in service with very high Float Voltage.

Recommendation: As a immediate precautionary measure Overhauling of the Battery Bank should be carried out, however considering the condition of the Battery Bank, replacement of the same by a new one in near future is required to achieve a trouble free service..

2. **Battery Type : 108 YHP-29**

Location: UNIT #1 Battery Bnak -II
Yr. of Installation: 2010
Condition of the Battery Bank:

(a) The Battery Bank is in Service with very high Float Voltage.
(b) Cell No.108 is By-Passed and Cell No. 3,26,74,95,96 is in deep discharged condition.
(c) Majority of cells in the Battery Bank are lagging marginally

…….contd.

(d) Corrosion in the Positive Plate & Strap was noticed in large number of cells (3, 13, 16,20, 26, 29,30,36, 74, 95,96, 101, 105 & 106)
(e) Float Voltage is very high resulting overcharge of the Battery Bank.

Recommendation: As a immediate precautionary measure Overhauling of the Battery Bank should be carried out, however considering the condition of the Battery Bank, replacement of the same by a new one in near future is required to achieve a trouble free service.

A record of voltage and Specific Gravity measured during inspection is attached for your ready reference. Shall you need any clarification on the above, please feel free to write to us.

Yours faithfully
For Exide Industries Limited

Ashutosh Kumar Mishra
Officer Power & Project.
Ashutosh.mishra@exide.co.in
Mob- +91 95235 97149

EXIDE
Exide Industries Limited
Regional Sales Office
6A, Hatibagan Road, Entally
Kolkata-700 014
Phone : 2286-1860 / 6193
2286-6158 / 59
Fax : 91 (033) 2289-7455

Ref.: MPL/JLP/05
Dt. 09.07.2022

Maithon Power Limited
PO: Nisra(Barbendia)
Dist.: Dhanbad.
PIN: 828207.

ind Attn.: Mr. P.V.Deshmukh (Gr. Head-EMD)

Dear Sir,
Sub.: Report on Health Survey of Battery Bank.

This has reference to our telephonic discussion on the above issue and visit of our representative to your plant in connection to the above job on 2nd July'22.

Our Observations are as under:

Battery Type: 110TM100PHDPII
Location: CHP
Yr. of Installation: 2010
Condition of the Battery Bank:

(a) Specific Gravity of Majority of Cells in Service is low.
(b) Growth noticed in Positive Plates and Gr. Bar of majority of Cells.
(c) Bulge noticed in majority of Cells.
(d) Upper portion of majority of Cells is in damaged condition.

Recommendation: The Battery Bank has completed its normal Service life. Present condition of the Battery Bank is alarming and under present condition it will not be possible to revive the Battery Bank, hence should be replaced by a new one at the earliest.

Yours faithfully
For Exide Industries Limited

J.L.Pradhan
Zonal Service In-Charge-Indl. (P&P-East)

Dangratoli Chowk, Purulia Road, Ranchi-834 001 Phone: 0651-2531169, 2531215, Fax:0651-2531432,
E-mail: emcons@emcons.co.in; emcons123@yahoo.co.in

The Sr. Manager (C&I),
Maithon Power Limited,
MA-5 Gona,
P.O.-Maithon Dam,
Dist. - Dhanbad – 828205
Jharkhand.

Ref: EM/MPL/F71/19-20/
Date: 05.09.2019

Kind Attn : Mr. Kundan Kumar Raj.
Sub : Life Cycle Report on Installed PLC-HMI System at CHP.

Dear Sir,

With reference to the discussions which we had with you during our visit to your plant regarding life cycle status of installed Rockwell Automation PLC-HMI System in Coal Handling Plant Plant. Based on our system study and assessment, we are enclosing a brief report on major installed software & hardware that needs to be migrated to latest solution **primarily due to obsolescence of Windows XP OS by Microsoft and make the system compatible with latest Windows 10 Prof. operating system.**

We understand the CHP is a critical & a most important part of part of plant process and it needs immediate attention on migration from Windows XP to Windows 10 prof operating system, owing to technological obsolescence. If you require any further clarification / information in regard to the above, please feel free to write us.

Thanking you & assuring you of our best attention & services at all times, we remains,

Yours faithfully
For **EMCONS**

(P.Lakhani)

Rockwell Automation
Recognized System Integrator

Annexure-I

Brief Report on Installed System Software & Major Hardware of CHP that Needs Migration

1.0 Existing System:

Existing installed system is L6x Control Logix Redundant System with System Redundancy Module & 1756 Series of I/O hardware. HMI Software is Factory Talk View Studio as development package & Factory Talk View SE System which are operating on 32 bit Windows XP operating system and its compatible PC hardware. Owing to the technological obsolescence of Windows XP by Microsoft and availability of 64 bit processors for PC, it is becoming increasingly difficult to maintain & troubleshoot the old system hardware's as the latest set of software's have either very restricted or no support for old hardware's., present day hardware does not support Windows XP as OS platform since most of the hardware driver are not available. HMI being the integral & most critical part of CHP operation, it always runs the risk of running in an obsolete & unsupported system. A table of such hardware & software is enclosed at Annexure-II for your reference.

Keeping in view the criticality of the system, we strongly recommend to upgrade the obsolete portion of the system, retaining majority of existing hardware alongwith panels, etc. Since there is not going to be any major hardware or software modification, upgradation work can be carried our in smooth manner in normal planned shutdowns of the plant.

Rockwell Automation
Recognized System Integrator

Annexure-II

LIFE CYCLE STATUS & WINDOWS 10 COMPATIBILITY OF INSTALLED ROCKWELL PLC SOFTWARE & MAJOR HARDWARE FOR CHP					
Sl.No.	**Description**	**Cat. No.**	**Installed Qty.**	**Life Cycle Status**	**Remarks**
A.	**CHP**				
1	CLX PROGRAMMING SOFTWARE, RS LOGIX 5000 WITH NETWORX WORKING ON **32 BIT WINDOWS XP OS**	9324-RLD300NXENE	1	DISCONTINUED FOR WINDOWS XP	Since 32 bit Windows XP operating software is no longer supported by Microsoft & new PCs, it needs to be migrated to 64 bit platform for compatibility with Windows 10 Prof. OS by way of Warranty Renewal.
2	HMI DEVELOPMENT SOFTWARE, FT VIEW STUDIO ON **32 BIT WINDOWS XP OS**	9701-VWSTAENE	1	DISCONTINUED FOR WINDOWS XP	Since 32 bit Windows XP operating software is no longer supported by Microsoft & new PCs, it needs to be migrated to 64 bit platform for compatibility with Windows 10 Prof. OS by way of Warranty Renewal.
3	HMI RUNTIME SOFTWARE, FT VIEW SE 100 DISPLAY ON **32 BIT WINDOWS XP**	9701-VWSB100ENM	2	DISCONTINUED FOR WINDOWS XP	Since 32 bit Windows XP operating software is no longer supported by Microsoft & new PCs, it needs to be migrated to 64 bit platform for compatibility with Windows 10 Prof. OS by way of Warranty Renewal.
4	CONTROLLER WITH 8MB RAM	1756-L63	2	REACHED END OF LIFE	Needs to be migrated to latest L7x platform for compatibility with latest Windows 10 Prof OS
5	SYSTEM REDUNDANCY MODULE	1757-SRM	2	REACHED END OF LIFE	Needs to be migrated to latest L7x platform for compatibility with latest Windows 10 Prof OS
6	REDUNDANCY FIBER CABLE	1757-SRC1	1	ACTIVE MAURE	Needs to be upgraded with 1756-RMC1 for compatibility with upgraded system as its technological requirement.
7	ETHERNET BRIDHE MODULE	1756-ENBT	2	ACTIVE MAURE	Needs to be upgraded with 1756-EN2T for compatibility with upgraded system as its technological requirement.
8	CONTROLNET BRIDGE MODULE (CPU RACK & LOCAL I/O RACKS)	1756-CNBR	5	ACTIVE MAURE	Recommended to be upgraded for I/Os on Ethernet DLR Network & compatibility with upgraded system as its technological requirement.
9	CONTROLNET BRIDGE MODULE (REMOTE I/O RACKS)	1756-CNBR	5	ACTIVE MAURE	Needs to be upgraded for I/Os on Ethernet DLR Network & compatibility with upgraded system as its technological requirement.
10	MODBUS RTU & TCP INTERFACE CONTROLLER	1769-L35CR	2	REACHED END OF LIFE	Needs to be migrated to latest L30ER Controller, retaining the all other interface hardwares for compatibility with latest Windows 10 Prof OS

Rockwell Automation Recognized System Integrator

Plot No. 42P, Tupudana Industrial Area, Hatia, Ranchi – 834003 (Jharkhand), Phone: 0651-2531215, 2951926
E-mail: emcons@emcons.co.in; emcons123@yahoo.co.in

The Group Head – C&I Maintenance
Maithon Power Ltd.
Vill : Dambhui,
P. O. : Barbendia,
P. S. : Nirsa,
Dist : Dhanbad – 828 205

Ref : EM/MPL/24-25
Dated : 15th Dec'2021

Kind Attn : ***Mr. Mayank Garg***

Ref : ***Your P. O. No. 7500001748 dt. 09.12.2021***

Dear Sir,

This has reference to your above referred purchase order. We would like to bring to your kind knowledge that it shall not be possible to have seamless communication with Stacker PLC on Ethernet Network as it is an old technology PLC of ABB. Further it shall not be possible to establish Redundant Communication for reliable operation.

Hence we strongly recommend to upgrade the same suitably so as to have smooth communication between CHP and Stacker PLC.

Thanking you and assuring you of our best attention and services at all times, we remain,

Yours faithfully
For EMCONS

EMCONS RANCHI

(Samir K Mandilwar)

GOLD System Integrator
A ROCKWELL AUTOMATION PARTNER

Plot No. 42P, Tupudana Industrial Area, Hatia, Ranchi – 834003 (Jharkhand), Phone: 0651-2531215
E-mail: emcons@emcons.co.in; emcons123@yahoo.co.in

The Group Head (C&I),
Maithon Power Limited,
P.O.-Maithon Dam,
Dist. - Dhanbad – 828205
Jharkhand.

Ref: EM/MPL/F71/22-23/204
Date: 04.05.2022

Kind Attn *: **Mr. Mayank Garg.***
Sub *: **Life Cycle Report on Installed PLC-HMI System at DM Plant.***

Dear Sir,

With reference to the discussions which we had with you during our visit to your plant regarding life cycle status of installed Rockwell Automation PLC-HMI System in DM Plant. Based on our system study and assessment, we are enclosing a brief report on major installed software & hardware that needs to be migrated to latest solution ***primarily due to obsolescence of Windows XP OS by Microsoft and make the system compatible with latest Windows 10 Prof. operating system.***

We understand the DM Plant is a critical & a most important part of plant process and it needs immediate attention on migration from Windows XP to Windows 10 prof operating system, owing to technological obsolescence. If you require any further clarification / information in regard to the above, please feel free to write us.

Thanking you & assuring you of our best attention & services at all times, we remains,

Yours faithfully
For ***EMCONS***

EMCONS RANCHI

(S. K. Mandilwar)

GOLD System Integrator
A ROCKWELL AUTOMATION PARTNER

Plot No. 42P, Tupudana Industrial Area, Hatia, Ranchi – 834003 (Jharkhand), Phone: 0651-2531215
E-mail: emcons@emcons.co.in; emcons123@yahoo.co.in

The Group Head (C&I),
Maithon Power Limited,
P.O.-Maithon Dam,
Dist. - Dhanbad – 828205
Jharkhand.

Ref: EM/MPL/F71/22-23/203
Date: 04.05.2022

Kind Attn *: **Mr. Mayank Garg.***
Sub *: **Life Cycle Report on Installed PLC-HMI System at Raw Water PLC System.***

Dear Sir,

With reference to the discussions which we had with you during our visit to your plant regarding life cycle status of installed Rockwell Automation PLC-HMI System in Raw Water Plant. Based on our system study and assessment, we are enclosing a brief report on major installed software & hardware that needs to be migrated to latest solution ***primarily due to obsolescence of Windows XP OS by Microsoft and make the system compatible with latest Windows 10 Prof. operating system.***

We understand the Raw Water Plant is a critical & a most important part of part of plant process and it needs immediate attention on migration from Windows XP to Windows 10 prof operating system, owing to technological obsolescence. If you require any further clarification / information in regard to the above, please feel free to write us.

Thanking you & assuring you of our best attention & services at all times, we remains,

Yours faithfully
For ***EMCONS***

EMCONS RANCHI

(S. K. Mandilwar)

GOLD System Integrator
A ROCKWELL AUTO

Mondal Priya Ranjan

From: K V Ramprakash <ram.prakash@atlascopco.com>
Sent: 08 June 2024 16:24
To: Chatterjee Subhra
Cc: Ranjan Vijayant; Mishra Naveen Kumar; Butola Yogendra; Tandon Sudhakar; Ramrayka P; Kumar Sanjay; Surodh Dey; Sao Nilima; Dixit Piyush; Vaghasiya Dipti; Tangudu Ravi; Shah Ketan; Garg Mayank; Kaushik Gaurav; Mondal Priya Ranjan; Mahato Kartik; Mishra Shekhar; Milind Mehta; Anil Dave; Sumeet Dasadhikari; Souparno Roy
Subject: Re: Inordinate Delay of Centrifugal BTG Centrifugal Compressor Project at MPL

Some people who received this message don't often get email from ram.prakash@atlascopco.com. Learn why this is important

[EXTERNAL sender, Exercise caution..!]

Dear sir

We regret for the delay and apologies for the same , Kindly note we are exploring all the possibilities to complete the supply and execute the project.

We have discussed internally and taken the compressor portion alone from present Po under techsol.

Note to convince the technical queries we have selected the option of Soft starter to overcome all the queries. please note we have accepted most of all technical queries of soft starter raised during our technical meeting held at our works in pune on Mar last week along with soft starter vendor.

After submission in wrench we have received additional comments on soft starter which we need discussion for closure. Once we received MDCC for compressor portion we will work with your commercial team in amending the PO taking the compressor portion alone from
Techsol name to Atlas Copco India . Please bear with us by next week we close the above point.

As per PO balance cooling tower and pump which is already supplied, PLC, LT panel, erection shall be keep in Techsol name.

Regarding erection and supply of PLC and LT Panel will discuss with Techsol and come back with final dates by Next week. Please do provide us time till next week before 13Jun 2024.

If required we will have joint meeting to close all the pending points.

Please provide us this additional time and support us will come back after discussing internally with our engineering and finance team also with Tech sol and provide you with our plans and date of completion.

Thanking you and assuring you our best services always

Regards
Ramprakash

From: Chatterjee Subhra <subhrac@tatapower.com>
Sent: Saturday, June 8, 2024 3:54 PM
To: K V Ramprakash <ram.prakash@atlascopco.com>
Cc: Ranjan Vijayant <ranjanv@tatapower.com>; Mishra Naveen Kumar <nmishra@tatapower.com>; Butola Yogendra <yogendra.butola@tatapower.com>; Tandon Sudhakar <sudhakar.tandon@tatapower.com>; Ramrayka P

<p.ramrayka@tatapower.com>; Kumar Sanjay <sanjayk@tatapower.com>; Surodh Dey <sdey@tatapower.com>; Sao Nilima <nilimasao@tatapower.com>; Dixit Piyush <piyush.dixit@tatapower.com>; Vaghasiya Dipti <diptivaghasiya@tatapower.com>; Tangudu Ravi <ravi.tangudu@tatapower.com>; Shah Ketan <ketan.shah@tatapower.com>; Garg Mayank <mayank.garg@tatapower.com>; Kaushik Gaurav <gaurav.kaushik@tatapower.com>; Mondal Priya Ranjan <prmondal@tatapower.com>; Mahato Kartik <kartik.mahato@tatapower.com>; Mishra Shekhar <shekhar.mishra@tatapower.com>; Milind Mehta <milind.mehta@atlascopco.com>; Anil Dave <anil.dave@atlascopco.com>; Sumeet Dasadhikari <sumeet.dasadhikari@atlascopco.com>; Souparno Roy <souparno.roy@atlascopco.com>

Subject: Inordinate Delay of Centrifugal BTG Centrifugal Compressor Project at MPL

Dear Sir,

*Centrifugal Compressor Project for BTG area of MPL is presently **running in 21st.month since placement of PO in September'2022** as against its original date of commissioning in July'2023 delayed by over 11 months and counting. There are many reasons for the delay of this project but one of the prominent reasons is incorrect specification of equipment selection at vendors-end as against the original specification requirement as per PO and this was not limited to few major equipments but for all equipments and even for components level.*

*Even after 21 months from PO placement still three of the major equipments like **Soft-Starter, PLC Panel and LT Panel are still pending for drawing and documents clearing**. In line with the attached latest mail communication, your channel partner **M/s.Techsol had recently requested for specification of LT Panel from MPL after 21 months from PO placement** whereas this document is a part of the original PO copy and had been discussed several times in the past. Situation cannot be worser than the above condition where vendor is asking for resubmission of equipment specification nearly 2 years after awarding of PO, This demonstrate that vendor is very casual, unwilling and still unaware about the basic specification requirement of the equipment to be delivered.*

*Nearly similar case is with PLC Panel, initial drawings and documents submitted on 'Wrench' portal 12 months before (12th.June'2023) after 9 months from date of awarding PO (September'2022). Since then even after several meetings with M/s.Techsol and their sub-vendor, rejection of drawings with comments from Tata Power Corporate Engineering still it is pending at M/s.Techsol end. As far as **latest email received from M/s.Techsol along with PLC documents, none of the points have been complied as against the original specification of PO and its status is remains unchanged in last 12 months**. So even after nearly 2 years of PO placement PLC drawings have not been submitted as per specification and hence not approved, so further approval and subsequent manufacturing, delivery and commissioning timeline cannot be ascertained at this time.*

*Site installation of delivered items has not been started as on date and only Cooling Tower vendor has been recently mobilized. Erection of other supplied items like Cooling Water Pumps and Air-Receiver are still pending and no action has been initiated even after several reminders and requests. **Supply of many C-Class items are pending like structural support materials, pipelines, valves, cables and cable trays etc. which are very important for overall completion of the project and not delivered in last 21 months since PO placement.***

*M/s.Techsol has failed in every aspect and becomes one of the major reasons behind inordinate delay of this project. They are basically a single person organization without any engineering 'back-up and very weak in financial strength. Communication with this vendor is itself a very tedious task and remain un-responsive in all form of communications like phone-call, Whats-app and emails. They are not at-all a **competent vendor to handle such a multi-package oriented, multidimensional project requiring strong co-ordination skill and techno-economical strength**. Whatever drawing and documents submitted by M/s.Techsol in Tata Power 'Wrench' portal most of them gets rejected due to incomplete information, mis-matched specification and incomplete documentation. They are still struggling with understanding of specification of the equipments only, after 21 months of PO award. This for sure this project cannot be completed by M/s.Techsol and need to be immediately taken-over by Atlas-Copco on urgent basis to complete the project in next 3 months timeline.*

Request you to forward your decision in this regard at the earliest.

Regards,
Subhra Sundar Chatterjee
Head MMD - MPL
Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
Tel: 5665 Mobile: 9234550668

Disclaimer:- Information contained and transmitted by this email is confidential and proprietary to The Tata Power Company Ltd. and is included for use only by the addressee. If you are not the intended recipient, you are notified that any dissemination or copying of this email or contents therein is strictly prohibited. If this message is not intended for you, then you are requested to delete this email immediately and notify the originator.

> **Caution:** Do you know this email is safe? Be cautious with links and attachments.

Ref: ELGI/KOL/OFSAC/MPL/AB/02
Date: 10 January 2022

To,
Maithon Power Limited.
Taluka Maithon, Dhanbad,
Jharkhand 828205 , India

Kind Attn: Mr. Priya Ranjan Mondal (Group Head - MMD, MPL)

Sub: Confirmation regarding obsolesce of NH-265 BTG Compressor Model and its spares.

Dear Sir,

With respect to the above mentioned subject and reference, Please note that Elgi-Hitachi collaboration started in 1998 and the agreement and expired in Dec'17. Supplying NH 265-8 Airend , is running through rough waters as we see no support from Hitachi & there is no response. Guarantee & Performance of NH 265-8 Air Ends is in big trouble due to supply inconsistency & long delivery lead times of more than 1 year on part of Hitachi. Any incident of Airend failure in future will also be impacted because of this. These machines cannot be retrofitted with OF Airends and the only option is to replace the complete machine with OF series compressors.

We are attaching the ELGI Hitachi agreement termination letter for your active consideration.

In case of any further information / clarification, please revert to us.

For ELGI EQUIPMENTS LTD

ELGI EQUIPMENTS LIMITED KOLKATA 700 156

Anjan Bose
Area Manger-Direct Sales – OFSAC (East)
M: +91 9790397656

Enclo : as stated

Ref: ELGI/KOL/OFSAC/MPL/AB/02
Date: 10 January 2022

To,
Maithon Power Limited.
Taluka Maithon, Dhanbad,
Jharkhand 828205 , India

Kind Attn: Mr. Priya Ranjan Mondal (Group Head - MMD, MPL)

Sub: Confirmation regarding obsolesce of NH-265 BTG Compressor Model and its spares.

Dear Sir,

With respect to the above mentioned subject and reference, Please note that Elgi-Hitachi collaboration started in 1998 and the agreement and expired in Dec'17. Supplying NH 265-8 Airend , is running through rough waters as we see no support from Hitachi & there is no response. Guarantee & Performance of NH 265-8 Air Ends is in big trouble due to supply inconsistency & long delivery lead times of more than 1 year on part of Hitachi. Any incident of Airend failure in future will also be impacted because of this. These machines cannot be retrofitted with OF Airends and the only option is to replace the complete machine with OF series compressors.

We are attaching the ELGI Hitachi agreement termination letter for your active consideration.

In case of any further information / clarification, please revert to us.

For ELGI EQUIPMENTS LTD

ELGI EQUIPMENTS LIMITED KOLKATA 700 156

Anjan Bose
Area Manger-Direct Sales – OFSAC (East)
M: +91 9790397656

Enclo : as stated

GE
Power Conversion

To,

10th January 2022

Mr. Amit Patil

Group Head - EMD
Maithon Power Ltd.,
Works: Villàge Dambhui, P.O. Barbindia,
P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India

Ref: Maithon Power Company. LCI Equipment (Drg No. 3-660-00-50281) for 12 Pulse 3.3MW ID Fan.

Sub: Technology Obsolescence Letter

Dear Sir,

In reference to the above mentioned LCI equipment installed in Maithon Power Company, the original LCI technology is from GE (OEM).

The said technology is Obsolete and not supported by OEM.

Your Sincerely,

Renjith Nair

Director (Sales)
GE Power Conversion India Private Limited
renjith.nair1@ge.com

©COPYRIGHT 2013 GENERAL ELECTRIC COMPANY AND/OR ITS AFFILIATES. All rights reserved.

GE
Power Conversion

GE Power Conversion India Private Limited,
Plot no.29 (SP),7th Floor, Thiru Vi Ka Industrial Estate,
Ekkatuthangal, Guindy, Chennai – 600032, Tamil Nadu, India
T +91 44 4968 0236
F +91 44 4968 0901
www.ge.com

Letter No. GE/TP-MPL/OC/CC/222/2022
Dt.15.11.2022

To,

M/s Maithon Power Ltd
Dambhui, PO Barbendia, T,828205,
Dhanbad District. Jharkhand, India

Kind Attention: Mr. Sanjay Kumar, Head – EMD, MPL Electrical Maintenance.

Ref: Your PO / Contract Number: 7500001868 Dated: 01.03.2022

Project Details: LCI Drive Control upgrade of ID Fan Motors at MPL

Sub: Current delivery challenge due to global component crisis.

Dear Sir / Madam,

This is with reference to the above-mentioned PO / Contract / WO.

We are issuing this present letter pursuant to clause No. 40.4 & 40.5 read with 40.1 & 39.1 of the GCC to the said PO. There is prevalent ongoing War Risk and political tension in the region where we are dependent for our critical component / raw material supply, which could be deemed as War Risk.

Due to these current geopolitical situations and circumstances which are beyond our reasonable control, GE is facing uncontrollable and huge capacity reduction and severe shortage of essential raw materials & Semi-conductor devices, which are impacting our project execution and thereby resulting in unexpected delay in supplies related to our project.

Despite concerted and diligent efforts taken by GE to handle and manage the delivery situation, impacted by the reason above stated, we find that our approved and proven suppliers are unable to expedite and provide binding delivery dates for the critical materials and components that been awarded for the current project. This is directly impacting our project deliverable to you. This makes reliable planning considerably more difficult, irrespective of the high price demand, and we anticipate that our deliveries could get delayed beyond our project milestones approximately for about 150 days, due to circumstances beyond our control.

Therefore, in light of clauses 40.4 & 40.5, we request you to propose a mutually agreeable solution for the situation on hand.

©COPYRIGHT 2013 GENERAL ELECTRIC COMPANY AND/OR ITS AFFILIATES. All rights reserved.

GE
Power Conversion

GE is continuously working towards improving the situation, however in compliance of our obligation under contract we are issuing this advance intimation.

We are ready to get into a discussion meeting with you at your convenient time and date to arrive at mutually agreeable solution.

Thanks & Best Regards,



Siba Narayan Mohanty.
Lead Project Manager.

For GE Power Conversion Ind Pvt Ltd

©COPYRIGHT 2013 GENERAL ELECTRIC COMPANY AND/OR ITS AFFILIATES. All rights reserved.

Kumar Rabish

From: Mohanty, Sibanarayan (GE Power Portfolio) <sibanarayan.mohanty@ge.com>
Sent: 02 January 2023 19:30
To: Deshmukh Prashant; Patil Amit; Kumar Sanjay
Cc: Ramasamy, Balamurugan (GE Power Portfolio); Ramanathan, Venkataramanan (GE Power Portfolio); Nair, Renjith (GE Power Portfolio)
Subject: TATA Maithon_LCI Drive Upgrade_ Anticipated delay in project execution due to circumstances beyond GE's reasonable control and request for delivery extension_ Reg.

[EXTERNAL sender, Exercise caution..!]

Ref: Your PO / Contract Number: 7500001868 Dated: 01.03.2022
Project Details: LCI Drive Control upgrade of ID Fan Motors at MPL

Dear Sir,

This is with reference to the above-mentioned PO. We herewith would like to bring to your kind attention that due to prevailing circumstances beyond GE's reasonable control, caused by severe global shortage of essential raw materials and semi-conductor components, which are adversely impacting our supply chains and thereby resulting in unexpected delay in supplies related to our project execution.

GE is particularly keen in ensuring the use of proven materials and components, in order to provide our customers with the right and reliable solution always. Despite concerted and diligent efforts that GE continues to put in place to handle and manage the delivery situation, we find that our approved and proven suppliers are unable to expedite and provide binding and aligned support on critical materials and components to meet the project lead time due to prevailing marketplace conditions. This is seen to impact our project deliverable as per schedule agreed with you. Reliable planning in the present circumstances is turning considerably difficult, irrespective of factoring in the high price demand, due to these circumstances, which are genuinely beyond our control.

Referring to the meeting discussion with your good team on 20 December 2022, we request you and are willing to agree on an arrangement to accommodate I/C activities during intermediate shutdowns. We will continue to put concerted efforts and aim to minimize the shutdown time. Other details as to planning and schedule can be mutually agreed upon between us hereupon.

Hence, we request your kindly take note of these abnormal circumstances beyond GE's reasonable control and extend the delivery of the above PO till 30th April 2023 without any liability to GE in terms of delay. We assure GE's continued support to manage these circumstances to our best possible extent.

Looking forward for your acknowledgement, consideration and extended support in this regard.

Further to the above, we are ready to get into a discussion meeting with you at your convenient time and date to arrive at mutually agreeable solution.

Thanking You.

Best Regards

Siba Narayan Mohanty.
Lead Project Manager.

GE Power Conversion
M +91 73587 77282

O +91 44 49680420

sibanarayan.mohanty@ge.com

Plot No.29(SP), Thiru Vi Ka Industrial Estate.
Ekkatuthangal, Guindy.
Chennai 600 032. India.

GE imagination at work

ANNEXURE P/14C (COLLY.)

Minutes of the Meeting held on 27.10.2022 regarding the rescheduling of annual overhauling of Unit#I of Maithon Power Ltd

List of Participants	
KSEBL :	M/s.Maithon Power Ltd (MPL)
1.V.R.Hari, IRS,Director(Finance& H RM)	1.Sudip Dash (Head, Commercial & Regulation)
2.Dr.Anand. S.R,Director(T,SO,P & S)	2.Sudhakar Taudon (Chief O &M Services)
3.Viju Rajan John, Chief Engineer(T-SO)	
4.Jayaraj.V, Chief Engineer(Commercial &Tariff)	
5.Rajan. M.P, DyCE(Commercial & TRAC)	
6.Anitha. K, EE, Commercial	
7.Gertrude K. G,AEE,MO (T-SO)	
8.Hiba S, AEE, Commercial	

The meeting commenced at 2:30pm with the Director (Finance & HRM) in Chair and Co-chaired by the Director(T, SO, P & S). The Chair welcomed all the participants to the meeting. The agenda of the meeting was to discuss the rescheduling of annual overhauling of Unit # I of Maithon Power Ltd which is presently scheduled for 45 days from 15.01.2023 to 28.02.2023.

The summer months of the State is from the middle of February to middle of June. During these periods, the power demand is very high and KSEBL is forced to manage summer demands through Medium Term power purchase, short term power purchase and swap proposals in addition to the long term contracts of KSEBL. The Director (T, SO, P & S) pointed out that the long term contracts of KSEBL including the PPA-1 and PPA-2 with Maithon Power Ltd are very valuable and inevitable for KSEBL for meeting the summer demand from middle of February to middle of June. Hence the Chair requested MPL to commence the annual overhauling work of Unit# I, either 15 days before the present scheduled date of 15th January 2023, so that the annual overhauling work can be completed before 15th February 2023, or postpone the work after June 2023.

In response to KSEBL's request, MPL informed that the entire supply chain of the OEM/spares suppliers has been adversely impacted due to the pandemic which

spread over the last two years and hence receiving the requite spares for the annual overhauling before mid-January is impossible. Further delaying the annual overhauling to July 2023 shall have a detrimental effect on the performance and the reliability of the Unit as the last annual overhauling of Unit# I was carried out in February 2021. Under these circumstances, MPL is forced to schedule the annual overhauling of Unit# I for 45 days from 15th January 2023.However, MPL will try to complete the annual overhauling of the Unit at the earliest by February 2023 and also assured that from next financial year onwards, MPL will complete the overhauling of the units within the month of January.

On the matter of imported coal for blending purposes, MPL informed that sufficient domestic coal for power generation is available with MPL and hence at the point of time there is no need of importing coal for blending.

The Chair thanked the representatives of MPL for maintaining a good cordial relationship with KSEBL.

Meeting came to a close at 03:00pm

Director (Finance &HRM), KSEBL

Office of Chairperson
Central Electricity Authority

Consequent to the review meeting chaired by the Hon'ble Minister of Power & NRE to meet the Power demand in the Country on 7 November 2023 at 3.00 PM, the following actions are required to be taken to meet the demand during November 2023 to June 2024:-

(i) CPSUs (NTPC, DVC) need to ensure the availability of coal. Any shortfall in domestic coal needs to be supplemented through import of coal.

[Action: NTPC, DVC, CEA]

(ii) No planned maintenance during March 2024 to May 2024.

[Action: Member(GO&D/CE(GM)/RPCs]

(iii) Forced outage and partial outage to be brought down from around 25 GW to 15 GW. Monitoring for forced outage for early restoration needs to be done periodically. All the generating stations need to be advised to maintain spare parts, so that the restoration can be done quickly.

[Action: Member(GO&D/CE(GM)]

(iv) All Gencos, including IPPs and Central generating stations must be advised to generate at least 85% PLF and maintain full availability on a daily basis. Any surplus power, i.e. the difference between declared capacity and the scheduled capacity, must be sold in the day-ahead market and any remaining quantity not cleared in the day-ahead market, must be sold in RTM.

[Action: Member(GO&D/CE(GM)]

(v) The new units which are getting commissioned in any State or the firm share that the State will be getting from any Central generating stations, needs to be counted in the availability. If State is found to be having surplus power, the power from the unallocated quantity of Central generating stations may be reduced and allocated to other needy States, which is falling short of their capacity.

[Action: Member(GO&D/CE(GM)]

(vi) A State-wise chart may be prepared giving demand of the State, capacity commissioned, power surplus or deficit status, and de-allocation/reallocation from unallocated power of Central generating stations.

[Action: Member(GO&D/CE(GM)]

(vii) The allocation from unallocated quantity to the State is to be made judiciously and given only to the deficit State after the State has utilized

power from their own units or tied-up power from IPPs or Gas based power plants/imported coal based power plants. Unallocated power is to be allocated only to the State which are having deficit. Any surplus in allocated power may be sold by the Central generating stations in the power exchanges.

[Action: Member(GO&D/CE(GM)]

(viii) Measures to be taken in load shifting from evening hours to solar hours – After assessing the capacity addition in solar and wind, advisory may be issued for shifting of all agricultural load or any other load to solar hours.

[Action: Member(GO&D/CE(GM)]

(ix) At present Grid-India has feasibility for monitoring all Inter State generating stations. In order to have implementation of rule which is getting notified, Grid-India must monitor all the power plants, i.e. Inter-State generating stations as well as Intra-State generating stations (State owned generating stations and IPPs) with respect to the declared capacity, scheduled capacity, coal generation, power sold in the power exchanges. Since the data pertaining to declared capacity, actual generation from the generating units of the State are, at present, not available with RLDC and NLDC, arrangements needs to be made to get these information by linking SLDCs to RLDCs. This needs to be completed within 15 days, i.e. by 22 November 2023, by Grid-India.

[Action: Grid-India/Member(GO&D)]

(x) A letter may be written to the States giving advisory to use all the surplus capacity and also sell the surplus capacity in the power exchanges. This will help the other State in meeting the demand ensuring that there is no load shedding, also ensuring financial viability of the generating stations/Discoms, if the power is sold in the power exchanges etc.

[Action: Member(GO&D/CE(GM)]

(xi) Generating companies to take all measures at the earliest and latest by February 2024, so that they are able to declare full generating capacity and ensure that there is no partial outage. Thus all the maintenance work in such plants must be completed latest by February 2024. All the new coal generation capacity must be monitored. A list of such capacities is to be given to Hon'ble Minister of Power & NRE and Secretary(Power) also.

[Action: Member(Thermal)/PCE-II/CE(TP&RM)]

(xii) The performance of newly commissioned coal based generating units is to be monitored.

[Action: Member(Thermal) / CE(OPM)]

(xiii) A meeting may also be held with CMD, BHEL on expeditious completion of balance of plant work or expeditious commissioning of new thermal power stations.

[Action: Member(Thermal)/CE(TPM)]

(xiv) Supply of coal to the power plants needs to be monitored, such that all States get fair amount of coal under a uniform policy. Categorisation of these plants may be done under ICB, pithead plants, non-pithead plants, plants which are getting coal supply from their captive mines. Coal Distribution Policy needs to be worked out and shown to Hon'ble Minister of Power & NRE.

[Action: Member(Thermal)]

(xv) All the solar and wind projects, which are likely to be commissioned during 2023-24 and 2024-25 need to be expedited and monitored every month in CEA. The list is to be obtained from MNRE.

[Action: Member(Plg.) / CE(RPM)]

(xvi) Implementation of time-of-the-day(ToD) tariff also needs to be monitored, which will help in demand shifting. There cannot be a situation wherein there is a load shedding and also some plants are backing down. If such a situation is happening, it must be closely monitored by Grid-India.

[Action: Member(E&C)/Member(GO&D)/Grid-India]

(Ghanshyam Prasad)
Chairperson

ANNEXURE P/15

NATIONAL AMBIENT AIR QUALITY STANDARDS
CENTRAL POLLUTION CONTROL BOARD
NOTIFICATION

New Delhi, the 18th November, 2009

No.B-29016/20/90/PCI-L—In exercise of the powers conferred by Sub-section (2) (h) of section 16 of the Air (Prevention and Control of Pollution) Act, 1981 (Act No. 14 of 1981), and in super session of the Notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998, the Central Pollution Control Board hereby notify the National Ambient Air Quality Standards with immediate effect, namely:-

NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time Weighted average	Concentration in Ambient Air		Methods of Measurement
			Industrial, Residential, Rural and Other Area	Ecologically sensitive area (notified by Central Govt.)	
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual*	50	20	• Improved West and Geake • Ultraviolet fluorescence
		24 hours**	80	80	
2	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual*	40	30	• Modified Jacob & Hochheiser (Na-Arsenite) • Chemiluminescence
		24 hours**	80	80	
3	Particulate Matter (size less than 10 µm) or $PM_{10}\mu g/m^3$	Annual*	60	60	• Gravimetric • TOEM • Beta attenuation
		24 hours**	100	100	
4	Particulate Matter (size less than 2.5 microns) or $PM_{2.5}$ $\mu g/m^3$	Annual*	40	40	• Gravimetric • TOEM • Beta attenuation
		24 hours**	60	60	
5	Ozone (O_3) $\mu g/m^3$	8 hours **	100	100	• UV photometric • Chemiluminescence • Chemical method
		1 hour **	180	180	
6	Lead (Pb) $\mu g/m^3$	Annual*	0.5	0.5	• ASS / ICP method after sampling on EPM 2000 or equivalent filter paper • ED – XRF using Teflon filter
		24 hours**	1.0	1.0	

(1)	(2)	(3)	(4)	(5)	(6)
7	Carbon Monoxide (CO) mg/m^3	8 hours**	2	2	Non Dispersive Infra RED (NDIR) Spectroscopy
		1 hour**	4	4	
8	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	• Chemiluminescence • Indophenol blue method
		24 hours**	400	400	
9	Benzene (C_6H_6) $\mu g/m^3$	Annual*	5	5	• Gas chromatography based continuous analyser • Adsorption and desorption followed by GC analysis
10	Benzo (a) Pyrene (BaP) – particulate phase only ng/m^3	Annual*	1	1	Solvent extraction followed by HPLC / GC analysis
11	Arsenic (As) ng/m^3	Annual*	6	6	AAS / ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni) ng/m^3	Annual*	20	20	AAS / ICP method after sampling on EPM 2000 or equivalent filter paper

***** Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

****** 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note: Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

June 13, 2018

Dear John,

As a valued Series 5000 Silica/Phosphate Analyzer service customer, we would like to thank you for your continued business and provide you with an update on the status of this instrument. After a long history of production, which ended in 2013, there are now critical components that we can no longer source. These part shortages require that we make some changes to our service offerings.

Because we can no longer offer full repair coverage, the Field Service Partnership is being discontinued. Active Field Service Partnerships with expiration dates prior to October 1, 2018 will be renewed for one more year.

We will continue to supply reagents and maintenance parts, as well as the following service options to help you maintain functionality of your Series 5000 analyzer:

- Preventative Maintenance Partnerships
- Billable repair service on a best-effort basis while part supplies remain

We encourage you to plan for upgrading your Series 5000 analyzer to avoid extended downtime should repair not be possible. If upgrading is an option, Hach would like to support you in this transition by offering a discount on a new analyzer purchased with a service agreement.



Hach 5500sc Silica and Phosphate Analyzers:

- Require only two liters of reagent for 90 days of continuous run time– twice as long as the Series 5000
- Help you avoid downtime with predictive diagnostic tools, including Hach's proprietary Prognosys technology
- Use an improved bottle and cap design for clean, fast, and easy reagent changes
- Allow for easy verification to give you confidence in your readings

10% off a 5500sc Silica or Phosphate Analyzer purchased with a service agreement:
Offer code 8M97EP

Contact your Hach Service Sales team member at 800-227-4224 x6178
or contract_support@hach.com for additional information.

ANNEXURE P/17

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
सूचना प्रौद्योगिकी एवं साइबर सुरक्षा प्रभाग
Information Technology & Cyber Security Division
****

विषय : CEA (Cyber Security in Power Sector) Guidelines, 2021.

CEA is mandated to prepare 'Guidelines on Cyber Security' in Power Sector under the provision of regulation (10) of the Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019. Guidelines on Cyber Security in Power Sector incorporating the cardinal principles has been prepared by CEA. In compliance to the provision of the above regulation, **CEA (Cyber Security in Power Sector) Guidelines, 2021** are issued for compliance by all entities listed in the clause 2.3 (Applicability of the Guidelines) of the guidelines.

Encl: Guidelines on Cyber Security

07/10/21
(V.K Mishra)
Secretary CEA

CEA (Cyber Security in Power Sector) Guidelines, 2021

1.0 Background

1.1 Cyber intrusion attempts and Cyber-attacks in any critical sector are carried out with a malicious intent. In Power Sector it's either to compromise the Power Supply System or to render the grid operation in-secure. Any such compromise, may result in mal-operations of equipments, equipment damages or even in a cascading grid brownout/blackout. The much hyped air gap myth between IT and OT Systems now stands shattered. The artificial air gap created by deploying firewalls between any IT and OT System can be jumped by any insider or an outsider through social engineering. Cyber-attacks are staged through tactics & techniques of Initial Access, Execution, Persistence, Privilege Escalation, Defence Evasion, Command and Control, Exfiltration. After gaining the entry inside the system through privilege escalation, the control of IT network and operations of OT systems can be taken over even remotely by any cyber adversary. The gain of sensitive operational data through such intrusions may help the Nation/State sponsored or non-sponsored adversaries and cyber attackers to design more sinister and advanced cyber-attacks.

1.2 Government of India has set up the Indian Computer Emergency Response Team (CERT-In) for Early Warning and Response to cyber security incidents and to have collaboration at National and International level for information sharing on mitigation of cyber threats. CERT-In regularly issues advisories on safeguarding computer systems and publishes Security Guidelines which are widely circulated for compliances. All Central Government Ministries/ Departments and State/Union Territory Governments have been advised to conduct cyber security audit of their entire Cyber Infrastructure including websites at regular interval through CERT-In empanelled Auditors so as to identify gaps and appropriate corrective actions to be taken in cyber security practices. CERT-In extends supports to enable Responsible Entity in conducting cyber security mock drills and in assessment of their preparation to withstand cyber-attacks. The Responsible Entity must submit Reports of Cyber Audit of cyber security controls, architecture, vulnerability management, network security and periodic cyber security drills to sectoral CERT as well as CERT-In. Team of experts shall review these reports and shortcomings if any in the compliances shall be flagged by them. CERT-In on regular basis also conducts workshops and training programs to enhance Cyber awareness of all Stakeholders.

1.3 Ministry of Power has created 6(six) sectoral CERTs namely Thermal, Hydro, Transmission, Grid Operation, RE and Distribution for ensuring cyber security in Indian Power Sector. Each Sectoral CERT has prepared their sub-sector specific model Cyber Crisis Management Plan(C-CMP) for countering cyber-attacks and cyber terrorism. Each Sectoral CERT has circulated their model C-CMPs for preparation and implementation of organization specific C-CMP by each of their Constituent Utility.

1.4 All Responsible Entities, Service Providers, Equipment Suppliers/Vendors and Consultants engaged in Power Sector are equally responsible for ensuring cyber security of the Indian Power Supply System. They are to act timely upon each threat intelligence,

advisories and other inputs received from authenticated sources, for continuous improvement in their cyber security posture.

1.5 In the current Indian scenario though many cyber security directives and guidelines exists, but none of them are power sector specific. Ministry of Power has directed CEA to prepare Regulation on Cyber Security in Power Sector. And as an interim measures CEA has been directed to issue Guideline on Cyber Security in Power Sector, under the provision of Regulation 10 on Cyber Security in the "Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019".

1.6 The Guidelines on Cyber Security, in the form of Articles written below, requires mandatory Compliance by all Responsible Entities. The Guidelines shall come into effect from the date of issue by Central Electricity Authority, New Delhi.

2.0 Hereby the Guidelines on Cyber Security are drawn in the form of Articles for compliance by the Requester as well as User under the following provision of Regulation 10 on Cyber Security, in the "Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019".

"The requester and the user shall comply with cyber security guidelines issued by the Central Government, from time to time, and the technical standards for communication system in Power Sector laid down by the Authority."

2.1 **Objective of issuing Guideline**:

a) Creating cyber security awareness
b) Creating a secure cyber ecosystem,
c) Creating a cyber-assurance framework,
d) Strengthening the regulatory framework,
e) Creating mechanisms for security threat early warning, vulnerability management and response to security threats,
f) Securing remote operations and services,
g) Protection and resilience of critical information infrastructure,
h) Reducing cyber supply chain risks,
i) Encouraging use of open standards,
j) Promotion of research and development in cyber security,
k) Human resource development in the domain of Cyber Security,
l) Developing effective public private partnerships,
m) Information sharing and cooperation
n) Operationalization of the National Cyber Security Policy

2.2 Within the text of these Articles, '**Responsible Entity'** shall mean all:

a) Transmission Utilities as well as Transmission Licensees,
b) Load despatch centres (State, Regional and National),
c) Generation utilities (Hydro, Thermal, Nuclear, RE),
d) Distribution Utilities
e) Generation Aggregators,
f) Trading Exchanges,
g) Regional Power Committees, and
h) Regulatory Commissions.

2.3 **Applicability:**

All Responsible Entities as well as System Integrators, Equipment Manufacturers, Suppliers/Vendors, Service Providers, IT Hardware and Software OEMs engaged in the Indian Power Supply System.

2.4 **Scope:**

2.4.1 **Control Systems for System Operation and Operation Management.**

a) Grid Control and Management Systems,
b) Power Plant Control Systems,
c) Central Systems used to monitor and control of distributed generation and loads e.g. virtual power plants, storage management, central control rooms for hydroelectric plants, photovoltaic/wind power installations,
d) Systems for fault management and work force management,
e) Metering and measurement management systems,
f) Data archiving systems,
g) Parameterisation, configuration and programming systems,
h) Supporting systems required for operation of the above mentioned systems,

2.4.2 **Communication System.**

a) Routers switches and firewalls,
b) Communication technology-related network components,
c) Wireless digital systems.
d) Control Centre to Control Centre Communications for data exchange on ICCP. **(IEC 61850/60850-5/TASE.2/)**

2.4.3 **Secondary, Automation and Tele control technologies**

a) Control and Automation components,
b) Control and field devices,
c) Tele control devices,
d) Programmable logic controllers / Remote Terminal Units, including digital sensor and actuators elements,
e) Protection devices,
f) Safety components,
g) Digital measurement and metering installations,
h) Synchronisation devices,
i) Excitation Systems,

3.0 Definition of Terms:

1. **Access Management**: shall mean set of policies and procedures of the Responsible Entity for allowing Personnel, devices and IoT to securely perform a broad range of operational, maintenance, and asset management tasks either on site or remotely as laid down in Clause 5.2.5 of IS 16335.
2. **Accreditation:** shall mean the process of verifying that an organisation is capable of conducting the tests and assessments against a product/process that are required to be certified.

3. **Accreditation Body:** shall mean an organisation that has been accredited to verify the credentials and capabilities of the organisations that wish to become a certification body.
4. **Act:** shall mean the Information Technology Act, 2000 (21 of 2000)
5. **Asset**: shall mean anything that has value to the organization.
6. **Certification:** shall mean the process of verifying that a product has been manufactured in conformance with a set of predefined standards and/or regulations by an organisation, that is accredited to conduct the certification process
7. **Certification Body:** shall mean an organisation that has been accredited by an accreditation body to certify products / process against a certification scheme.
8. **Certification Scheme:** shall mean the processes, paperwork, tools, and documentation that define how a product or manufacturer is certified
9. **Chief Information Security Officer:** shall means the designated employee of Senior management level directly reporting to Managing Director/Chief Executive Officer/Secretary of the Responsible Entity, having knowledge of Information Security and related issues, responsible for cyber security efforts and initiatives including planning, developing, maintaining, reviewing and implementation of Information Security Policies
10. **Critical Assets:** shall mean the facilities, systems and equipment which, if destroyed, degraded or otherwise declared unavailable, would affect the reliability or operability of the Power Supply System.
11. **Critical System:** shall mean cyber assets essential to the reliable operation of critical asset. Critical System consists of those cyber assets that have at least one of the following characteristics:
    a) The cyber asset uses a routable protocol to communicate outside the electronic security perimeter.
    b) The cyber asset uses a routable protocol within a control centre.
    c) The cyber asset is dial-up accessible.
12. **Critical Information Infrastructure*:*** shall mean Critical Information Infrastructure as defined in explanation of sub-section (1) of Section 70 of the Act.
13. **Cyber Assets**: shall mean the programmable electronic devices, including the hardware, software and data in those devices that are connected over a network, such as LAN, WAN and HAN.
14. **Cyber Crisis Management Plan:** shall mean a framework for dealing with cyber related incidents for a coordinated, multi-disciplinary and broad-based approach for rapid identification, information exchange, swift response and remedial actions to mitigate and recover from malicious cyber related incidents impacting critical processes.
15. **Cyber Security Breach**: shall mean any cyber incident or cyber security violation that results in unauthorized or illegitimate access or use by a person as well as an entity, of data, applications, services, networks and/or devices through bypass of the underlying cyber security protocols, policies and mechanisms resulting in the compromise of the confidentiality, integrity or availability of data/information maintained in a computer resource or cyber asset.
16. **Cyber Security Incident:** shall mean any real or suspected adverse cyber security event that violates, explicitly or implicitly, cyber security policy of Responsible Entity resulting in unauthorized access, denial of service or disruption, unauthorized use of computer resource for processing or storage of information or changes to data or information

without authorization, leading to harm to the power grid or its critical sub-sectoral elements Generation, Transmission and Distribution.

17. **Cyber Security Policy:** shall mean documented set of business rules and processes for protecting information, computer resources, networks, devices, Industrial Control Systems and other OT resources.
18. **Electronic Security Perimeter:** shall mean the logical border surrounding a network to which the Cyber Systems of Power Supply System are connected using a routable protocol.
19. **Information Security Division:** shall mean a division accountable for cyber security and protection of the Critical System of the Responsible Entity.
20. **Protected System:** shall mean any computer, computer system or computer network of the Responsible Entity notified under section 70 of the Act, in the official gazette by appropriate Government.
21. **Security Architecture:** shall mean a framework and guidance to implement and operate a system using the appropriate security controls with the goal to maintain the system's quality attributes like confidentiality, integrity, availability, accountability and assurance.
22. **Vulnerability:** shall mean intrinsic properties of something resulting in susceptibility to a risk source that can lead to an event with a consequence
23. **Vulnerability Assessment:** shall mean a process of identifying and quantifying vulnerabilities

4.0 Standards

Reference	Description
ISO/IEC 15408	Common Criteria Certification Standard
ISO/IEC 17011	General requirements for accreditation bodies accrediting conformity assessment bodies
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
ISO/IEC 21827	Systems Security Engineering - Capability Maturity Model (SSE-CMM)
ISO/IEC 24748-1	Systems and software engineering — Life cycle management — Part 1: Guidelines for life cycle management.
ISO 27001/2	Information Security Management
ISO/ IEC 27019	Information technology — Security techniques — Information Security controls for the energy utility industry
ISO/IEC 61508	Functional Safety of Electrical / Electronic / Programmable Electronic Safety-related Systems
IEC 61850	Communication networks and systems for power utility automation
IEC 62351	Standards for Securing Power System Communications
IEC 62443	Cyber Security for Industrial Control Systems
IS 16335	Power Control Systems – Security Requirements.

5.0 Abbreviations

	Abbreviations	Description
a)	BES	Bulk Electric System

b)	CDAC	Centre for Development of Advanced Computing
c)	CEA	Central Electricity Authority
d)	CERC	Central Electricity Regulatory Commission
e)	CERT	Computer Emergency Response Team
f)	CERT-In	Indian Computer Emergency Response Team
g)	CII	Critical Information Infrastructure
h)	CISO	Chief Information Security Officer
i)	CSK	Cyber Swachhta Kendra
j)	COTS	Commercial off-the Shelf
k)	ESP	Electronic Security perimeter
l)	ICS	Industrial Control Systems
m)	ICT	Information and Communications Technology
n)	IEC	International Electro Technical Commission
o)	ISAC	Information Sharing and Analysis Centre
p)	ISD	Information Security Division
q)	ISO	International Organization for Standardization
r)	ISMS	Information Security Management System
s)	IT	Information Technology
t)	FAT	Factory Acceptance Test
u)	NABL	National Accreditation Board for Testing and Calibration Laboratories
v)	NCIIPC	National Critical Information Infrastructure Protection Centre
w)	NLDC	National Load Dispatch Centre
x)	NPTI	National Power Training Institute
y)	NSCS	National Security Council Secretariat
z)	OEM	Original Equipment Manufacturer
aa)	OT	Operational Technology
bb)	RLDC	Regional Load Dispatch Centres
cc)	SAT	Site Acceptance Test
dd)	SERC	State Electricity Regulatory Commission
ee)	SCADA	Supervisory Control and Data Acquisition Systems
ff)	SIEM	Security Information and Event Management
gg)	SLA	Service Level Agreement
hh)	SLDC	State Load Dispatch Centre
ii)	QCI	Quality Council of India



CEA (Cyber Security in Power Sector) Guidelines, 2021

Article 1. Cyber Security Policy.

a. Cardinal Principles: The Responsible entity will strictly adhere to following cardinal principles while framing cyber security policy:

i. There is hard isolation of their OT Systems from any internet facing IT system.
ii. May keep only one of their IT systems with internet facing at any of their site/location if required which is isolated from all OT zones and kept in a separate room under the security and control of CISO.
iii. Downloading/Uploading of any data/information from their internet facing IT system is done only through an identifiable whitelisted device followed by scanning of both for any vulnerability/malware as per the SOP laid down and for all such activities digital logs are maintained and retained under the custody of CISO for at least 6 months. The log shall be readily to carry out the forensic analysis if asked by investigation agency.
iv. List of whitelisted IP addresses for each firewall is maintained by CISO and each firewall is configured for allowing communication with the whitelisted IP addresses only.
v. Communication between OT equipment/systems is done through the secure channel preferably of POWERTEL through the fibre optic cable. Security configuration of the communication channel is also to be ensured.
vi. All ICT based equipment/system deployed in infrastructure/system mandatorily CII are sourced from the list of the "Trusted Sources" as and when drawn by MoP/CEA.

b. The Responsible Entity shall be ISO/IEC 27001 certified (including sector specific controls as per ISO/IEC 27019).
c. The Responsible Entity shall have a Cyber Security Policy drawn upon the guidelines issued by NCIIPC.
d. The Responsible Entity shall ensure annual review of their Cyber Security Policy by subject matter expert and changes shall be made therein only after obtaining the due approval from Board of Directors.
e. The process of Access Management for all Cyber Assets owned or under control of the Responsible Entity shall be detailed in the Cyber Security Policy.
f. The Cyber Security Policy shall leverage state-of-art cyber security technologies and relevant processes at multiple layers to mitigate the cyber security risks.
g. The Responsible Entity shall be solely responsible to get Cyber Security Policy implemented through its Information Security Division (ISD).
h. The CISO shall record the reason(s) for exemption required, if any, in case, unable to comply with any of the provision(s) of the Cyber Security Policy. Any exception shall be allowed only after an approval of provisions of compensatory control(s) to mitigate residual cyber security risks.

i. The CISO shall record the exemptions sought in statement of applicability controls, while getting the ISO 27001 certified. All exemptions and its justification need to be in conformance with Cyber Security Policy of the Responsible Entity.
j. The Responsible Entity shall allocate sufficient Annual budget for enhancing cyber security posture, enhanced year over year.
k. The Responsible Entity shall work in collaboration with other Industry Stakeholders as well as Academia to promote R&D activity in the domain of cyber security.
l. The Responsible Entity shall ensure that cyber security issues are taken up as agenda items in their Board meetings once in every three months.

Article 2 Appointment of CISO.

a) The Responsible Entity shall mandatorily appoint a CISO and shall confirm to qualification, if any, **laid** by Quality Council of India (QCI). In absence, the work of CISO shall be looked upon by Alternate CISO. In case qualification for appointment of Alternate CISO has been relaxed for reasons recorded thereof, Alternate CISO has to mandatorily acquire the minimum required cyber security skill sets within six months from the date of his appointment.
b) The Responsible Entity shall regularly update details of CISO and Alternate CISO, with the Sectoral CERT, as well as on ISAC-Power Portal.
c) Roles and Responsibility of CISOs shall be as laid by CERT-In and ring-fenced to ensure cyber security of the Cyber Assets of the Responsible Entity.

Article 3: Identification of Critical Information Infrastructure (CII).

a) The Responsible Entity shall submit to NCIIPC through Sectoral CERT, details of Cyber Assets which uses a routable protocol to communicate outside the Electronic Security Perimeter drawn by the Responsible Entity or a routable protocol within a control centre and dial-up accessible Cyber Assets, within 30 days from the date of their commissioning in the System.
b) The Responsible Entity shall submit details of Critical Business Processes and underlying information infrastructure along with mapped impact and Risk Profile to NCIIPC and shall get their CIIs identified in consultation with NCIIPC. The process of the notification/declaration by Appropriate Government shall follow thereafter.
c) The Responsible Entity shall review their declared/notified CIIs at least once a year to examine changes if any in the functional dependencies, protocols and technologies or upon any change in security architecture. The Responsible Entity shall review their declared/notified CIIs once in every 6 months, in case if NCIIPC has directed them to constitute an Information Security Steering Committee.
d) The Responsible Entity shall ensure that all cyber assets of their identified/notified CIIs are recorded in the asset register and considered for risk assessment as well as for finalization of controls in statement of applicability.

Article 4. Electronic Security Perimeter

a) The Responsible Entity shall identify and document the Electronic Security Perimeter(s) and all Access Points to the perimeter(s).



b) The Responsible Entity shall follow procedure of identifying "Electronic Security Perimeter" in case of distributed and/or hybrid information infrastructure, as per IEC 62443 / IS16335 (as amended from time to time).
c) The Responsible Entity shall ensure that every Critical System resides within an Electronic Security Perimeter.
d) The Responsible Entity shall perform a cyber-Vulnerability Assessment of each electronic Access Points to the Electronic Security Perimeter(s) at least once in every 6 (six) months and/or after any change in Security Architecture.
e) The Responsible Entity shall ensure that all critical, high and medium vulnerabilities identified as a result of cyber Vulnerability Assessment shall be closed and verified for the effective closure.

Article 5. Cyber Security Requirements

a) The Responsible Entity shall have an Information Security Division (ISD), headed by CISO.
b) The Responsible Entity shall ensure that the ISD must be functional on 24x7x365 basis and is manned by sufficient numbers of Engineers having valid certificate of successful completion of course on cyber security of Power Sector from the Training Institutes designated by CEA.
c) The Responsible Entity shall ensure that ISD
   1) has on-boarded Cyber Swachhta Kendra(CSK) of CERT-In, if they have public IPs.
   2) has timely acted upon the advisories, guidelines and directive of NCIIPC, CSK, CERT-In and Sectoral CERTs,
   3) has deployed an Intrusion Detection System and Intrusion Prevention System capable of identifying behavioural anomaly in both IT as well as OT Systems.
   4) shares reports on incident response and targeted malware samples with CERT-In,
   5) updates the firmware/software with the digitally signed OEM validated patches only.
   6) enables only those ports and services that are required for normal operations. In case of any emergency the procedure as laid in Access management be followed.
   7) maintains firewall logs for the last 6 months duration. Firewall logs shall be analysed and all critical and high severity comments shall be addressed for effective closure.
   8) retains document of FAT, SAT test results and report/ certificate of cyber tests carried out for compliance of Government Orders and Cyber Security Audit.*
   9) maintains all cyber logs and cyber forensic records of any incident for at least** 90 days.

      * FAT, SAT must include comprehensive cyber security tests of the component/equipment/system to be delivered/delivered at site.
      ** 90 days from date of the commissioning of the system/recovery from any incident, whichever is later.

d) The Responsible Entity shall routinely audit and test security properties of the Critical System and must act upon, in case if any new vulnerabilities is identified through testing or by the equipment manufacturer.

e) The Responsible Entity shall design a secure architecture for control system appropriate for their process control environment*.
f) All State Load Dispatch Centres(SLDCs) shall comply with the directions issued by the National Load Dispatch Centre(NLDC) as well as Regional Load Dispatch Centres(RLDCs) U/s 29 (1) of the Electricity Act, 2003 to ensure stability and cyber security of grid operation and achieve efficiency in the grid operation. In case of any non-compliance, the Head of SLDC shall be responsible and shall be liable for Penalty as per the provision of CERC/SERC.

*There are so many different types of systems in existence and so many possible solutions, it is important that the selection process ensures that the level of protection is commensurate with the business risk and the Responsible Entity shall not rely on one single security measure for its defence. *(Reference IEC/TR62351-10* Edition1.0 2012-10 *Power systems management and associated information exchange –Data and communications security – Part 10: Security architecture guidelines).*

Article 6 Cyber Risk Assessment and Mitigation Plan

a) The Responsible Entity shall document in their Cyber Security Policy a Cyber Risk Assessment and Mitigation Plans drawn upon the best practises being followed in the Power Sector, and the same shall be approved by Board of Directors.
b) The Cyber Risk Assessment and Mitigation Plans shall clearly define the matrix for assessing the cyber risk of both IT and OT environment and risk acceptance criteria.
c) The Cyber Risk Assessment Plan shall be capable to demonstrate that repeated cyber security risk assessment delivers consistent, valid and comparable results.
d) The review of cyber risk assessment shall be carried out at least once in a Quarter. The actionable of risk treatment and mitigation shall be tracked in this review for their effectiveness.
e) The CISO shall be responsible for implementation and regular review, on the basis of internal and external feedbacks, of the Cyber Risk Assessment and Mitigation Plans.

Article 7 Phasing out of Legacy System

a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.
b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors.
c) The CISO shall ensure that till equipments/systems nearing end life or left without support from OEM are not replaced, their cyber security is hardened and ensured through additional controls provisioned in consultation with the OEM or alternate Supplier(s)*.
*e.g. Use of CDAC developed AppSamvid and whitelisting of applications installed may be explored across all legacy systems.
d) The Responsible Entity shall document in their Cyber Security Policy a Standard Operating Procedure for safe and secure disposal of outlived or legacy devices.

Article 8. Cyber Security Training.

a) The Responsible Entity shall establish, document, implement, and maintain an annual cyber security training program for personnel having authorized cyber or authorized physical access (unescorted or escorted) to their Critical Systems.
b) The Responsible Entity shall review annually their cyber security training program and shall update it whenever necessary. Annual Review shall record evaluation of the effectiveness of the trainings held.
c) The Responsible Entity shall ensure that Cyber Security training program designed for their IT as well as OT O&M Personnel must include following topics and as per their functional requirements and security concerns additional topics shall be added:
   1) User authentication and authorization.
   2) Cyber Security and Protection mechanisms of IT/OT/ICS Systems.
   3) Introduction to various standards i.e. ISO/IEC:15408, ISO/IEC:24748-1, ISO: 27001, ISO: 27002, ISO 27019, IS 16335, IEC/ISO:62443.
   4) Training on implementation of ISO/IEC 27001 and awareness on IEC 62443.
   5) Vulnerability Assessment in the Critical System.
   6) Monitoring and preserving of electronic logs of access of Critical Assets.
   7) Detecting cyber-attacks on SCADA and ICS systems
   8) The handling of Critical System during cyber crisis.
   9) Action plans and procedures to recover or re-establish normal functioning of Critical Assets and access thereto following a Cyber Security Incident.
   10) Hands on SCADA operation at any of the Regional Load Dispatch Centre.
   11) Handling of risks involved in the procurement of COTS Products.

d) All Personnel engaged in O&M of IT & OT Systems shall mandatorily undergo courses on cyber security of Power Sector from any of the training institute designated by CEA, immediately within 90 days from the notification of CEA Guidelines on Cyber Security in Power Sector.
e) The Responsible Entity shall ensure that none of their newly hired or the current Personnel have access to the Critical System, prior to the satisfactory completion of cyber security training programme from the Training Institutes designated in India, except in specified circumstances such as cyber crisis or an emergency.
f) NPTI in consultation with CEA shall identify and design domain specific courses on Cyber Security for different target groups. The "Governing Board for PSO Training and Certification" shall approve the content, duration etc of these courses and shall review it Annually. NPTI shall conduct these courses at all of their branches on regular basis and shall maintain the list of the Participants successfully completing the course.

Article 9 Cyber Supply Chain Risk Management

a) The Responsible Entity shall ensure that, as and when Ministry of Power, Government of India notifies the Model Contractual Clauses on cyber security, these clauses are included in their every Bid invited for procurement of any ICT based components/equipments/System to be used for Power System.
b) The Responsible Entity shall ensure that all the Communicable Intelligent Equipments and the Service Level Agreements (SLAs) for their Critical Systems shall be sourced from the list of the "Trusted Sources" as and when drawn by MoP/CEA.

c) The Responsible Entity shall ensure that, in case, for the any Communicable Intelligent Devices, if no Trusted Source has been identified, then the successful bidder in compliance with the provisions made in MoP order dated 2.7.2020 and any other relevant MoP order has got the product cyber tested for any kind of embedded malware/Trojan/cyber threat and for adherence to Indian Standards at the designated lab.

d) The Responsible Entity shall ensure that the essential cyber security tests are carried out successfully during FAT, SAT as detailed in **Annexure A.** The equipment/System besides for functionality shall also be tested in the factory for vulnerabilities, design flaws, parts being counterfeit or tainted, so as to minimize problems during on-site-testing and installation. Cyber Security Conformance Testing are to be carried out in the designated Lab as listed in **Annexure-I of MoP Order No. 12/13/2020-T&R dt. 8th June, 2021(Order at Annexure-B).**

e) The Responsible Entity shall ensure that the Equipment/System supplied by the successful bidder shall accompany with a certificate[$, #] obtained by OEM from a certification body accredited to assess devices and process for conformances to IEC 62443-4 standards during design and manufacture. The Responsible Entity shall accept the certificate submitted along with the supplied Equipment/System only if it's in line with the Testing Protocol as notified by Ministry of Power, Government of India, from time to time.

f) The Responsible Entity in compliance to the requirement of Article 9(e) shall also accept, till the setting up of an adequate certification facility in the India, a digitally signed self-declaration of conformance to the IEC 62443-4 standards during design and manufacture of the equipment/system, if submitted by the OEM.

g) The Responsible Entity shall dispose all unserviceable or obsolete Communicable Intelligent Devices as per the procedure laid in their Cyber Risk Assessment and Mitigation Plans which shall be in line with the prevailing best practices.

$ The National & International certification may be specified in the tender for critical systems/sub-systems being procured by the Responsible Entity.

Certification Schemes:
Embedded Device Security Assurance Certification is for an individual product,
System Security Assurance Certification is for a set of products in a system (possibly from different vendors)
Security Development Lifecycle Assurance Certification is for the development processes that a manufacturer uses for developing products.

Article 10 Cyber Security Incident Report and Response Plan

a) The CISO of the Responsible Entity shall report in the formats prescribed by CERT-In, all Cyber Security Incidents, classified as reportable events.

b) Root cause analysis for all reportable events shall be carried out and corrective action taken, so as to ensure that any re-occurrence of such event can be managed with ease.

c) The Responsible Entity shall mandatorily define in their Cyber Security Policy, criteria(s) identified on the basis of impact analysis, for declaring the occurrence of

Cyber Security Incident(s) as a Cyber Crisis in the System owned or controlled by them.

d) The Responsible Entity shall mandatorily designate an Officer along with his/her standby by name and designation and empower them to declare an occurrence of the incident(s) as "Cyber Crisis". The contact details of these Officers shall be updated in the C-CMP within 15 days of changes if any due to transfer or superannuation etc.
e) The CISO shall ensure that during any Cyber Security Incident, ISD monitors and minutely records every details of cyber security events and incidents in both IT as well as the OT System owned or controlled by the Responsible Entity.
f) The CISO shall ensure that each cyber incident is handled strictly as per Cyber Security Incident Response Plan detailed in the latest C-CMP approved by the Board of Directors.
g) The Responsible Entity shall ensure that the efficacy of the Cyber Security Incident Response Plan is tested annually through mock drill(s) carried out, if feasible, as simulation exercise(s) or as table top exercise(s) with wider participation of their employees, in consultation with CERT-In and sectoral CERT. In case if any shortcoming is observed in the Cyber Security Incident Response Plan suitable changes shall be made in it.
h) The Responsible Entity shall ensure that the CISO compiles details of incident detection, incident handling, learnings from each incident and damage claims made if any and shall report to CERT-In as well as upload information on ISAC-Power Portal.

Article 11 Cyber Crisis Management Plan(C-CMP)

a) The Responsible Entity shall prepare a Cyber Crisis Management Plan and submit to their sectoral-CERT for review with intimation to Ministry of Power/CISO-MoP. Responsible Entity shall update their C-CMP on the basis of comments made by sectoral-CERT and then submit for vetting to CERT-In. The C-CMP shall be updated once again to include the observations made by CERT-In before seeking approval of Board of Directors for implementation of C-CMP.
b) The Responsible Entity shall ensure that the C-CMP is reviewed at least annually. The CISO shall ensure that all changes are made in C-CMP only with the due approval of Board of Directors and the changes made in C-CMP have been communicated through a verifiable means to all the concerned Personnel of the Responsible Entity.
c) The CISOs shall be the custodian of all the cyber security related documents including Cyber Crisis Management Plan, Risk Treatment Plan, Statement of Applicability of controls, and compliance to regulator's requirement.
d) The CISO shall be accountable for ensuring enforcement of C-CMP by Information Security Division of the Responsible Entity, during a cyber-crisis, as and when declared by the designated Officer. (refer Article 10(d))

Article 12: Sabotage Reporting%

a) The Responsible Entity shall incorporate procedure for identifying and reporting of sabotage in their Cyber Security Policy within 30 days from issue of the Guidelines, or grant of licence under the appropriate legal provisions to the Responsible Entity.
b) The CISO shall be held liable for non-reporting of identified sabotage(s) as per procedure laid for identifying and reporting of sabotage in the Cyber Security Policy of the Responsible Entity.

c) The CISO shall prepare a detailed report on disturbances or unusual occurrences, identified, suspected or determined to be caused by sabotage in the Critical System of the Responsible Entity, and shall submit the report to the Sectoral CERT as well as to CERT-In within 24 hours of its occurrence.
d) The CISO shall submit to NCIIPC within 24 hours of occurrence the report on every sabotage classified as cyber incidents(s) on "Protected System".
e) The CISO upon occurrence on every sabotage shall take custody of all log records as well as digital forensic records of affected Cyber Assets, Intrusion Detection System, Intrusion Protection System, SIEM and shall preserve them for at least 90 days and shall make them available as and when called upon for investigation by the concerned Agencies.

%Disturbances or unusual occurrences, suspected or determined to be caused by sabotage.
Sabotage e.g. can be a forced intrusion in un-manned/manned facility and taking control of operation of Critical System through a communicating device.

Article 13 Security and Testing of Cyber Assets

a) The Responsible Entity shall ensure security of all in-service phase as well as standby Cyber Assets through regular firmware/Software updates and patching, Vulnerability management, Penetration testing (of combined installations), securing configuration, supplementing security controls. CISO shall maintain details of update version of each firmware and software and their certification if received from OEMs.
b) The Responsible Entity shall carry out regularly Vulnerability Assessment of all Cyber Assets owned or under their control. If a Cyber Asset is found vulnerable to any exploits or upon any patch updates or major configuration changes, then further Penetration Testing may be carried out offline or in a suitably configured laboratory test-bed to determine other vulnerabilities that may have not been identified so far.
c) The Responsible Entity shall specify security requirement and evaluation criteria during each phase of their procurement Process.
d) The Responsible Entity shall ensure that all Cyber Assets being procured shall conform to the type tests as mentioned in the specification for type testing listed in the bid document. Type test reports of tests conducted in NABL accredited Labs or internationally accredited labs (with in last 5 years from the date of bid opening) shall be mandated to be submitted along with bid. In case, the submitted Type Test reports are not as per specification, the re-tests shall be conducted without any cost implication to the Responsible Entity.
e) The Responsible Entity shall ensure that all Communicable devices are tested for communication protocol as per the ISO/IEC/IS standards listed in **MoP Order No. 12/13/2020-T&R dated 8th June, 2021(Annexure-B).**
f) The Responsible Entity shall ensure that all Critical Systems designed with Open Source Software are adequately cyber secured.
g) The Responsible Entity as a best practise upon any incidence of Cyber Security Breach shall carry out cyber security tests at any lab designated for cyber testing by Ministry of Power. These tests shall be similar to Pre Commissioning Security Test and those essential for carrying out Post Incident Forensics Analysis.

Article 14 Cyber Security Audit

a) The Responsible Entity shall implement Information Security Management System (ISMS) covering all its Critical Systems.
b) The Responsible Entity shall through a CERT-In Empanelled Cyber Security OT Auditor shall get their IT as well as OT System audited at least once in every 6 (six) months and shall close all critical and high vulnerabilities within a period of one month and medium as well as low non-conformity before the next audit. Effective closure of all non-conformities shall be verified during the next audit.
c) The Cyber Security Audit shall be as per ISO/IEC 27001 along with sector specific standard ISO/IEC 27019, IS 16335 and other guidelines issued by appropriate Authority if any. These mentioned standards shall be current with all amendments if any and in case if any standard is superseded, the new standard shall be applicable. CISO shall ensure immediate closure of non-conformance, based on the criticality and by means all non-conformances are to be closed before the next audit.
d) The Responsible Entity shall ensure that CISO has all the required systems and documents in place, as mandated by NSCS for base line cyber security audit.

Annexure – A

FAT & SAT

1. During FAT stage, the customer has to verify all types test reports / certificates including Communication protocol and security conformance tests of the devices offered for FAT.
2. FAT of SCADA involves testing as a whole system in the integrated scale down set up. For SCADA, Indian standard IS 15953: 2011 "SCADA System for Power System Applications" provides definition and guidelines for the specification, performance analysis and application of SCADA systems for use in electrical utilities (for transmission & Distribution) including guidance on Tests and inspections.
3. The SAT will be done at customer site as per the SAT document mutually agreed by buyer and supplier. For SAT also, guidance from IS 15953: 2011need to be applied.
4. IEC 61850-10-3 Communication Networks and Systems For Power Utility Automation-Functional testing of IEC 61850 systems (in draft stage - CDTR) covers testing of applications within substations covering

    a. A methodical approach to the verification and validation of a substation solution
    b. The use of IEC 61850 resources for testing in Edition 2.1
    c. Recommended testing practices for different use cases
    d. Definition of the process for testing of IEC 61850 based devices and systems using communications instead of hard wired system interfaces (ex. GOOSE and SV instead of hardwired interfaces)
    e. Use cases related to protection and control functions verification and testing.

    This standard may be used as a guidelines for FAT & SAT for Substation Automation System (SAS) based on IEC 61850.

Annexure - B

Annexure – 1

List of designated laboratories for cyber security conformance testing

Table -A. Field Equipment /Operational Technology (OT)

Sl. No.	Equipment	Communication Protocol Conformance Standards	Protocol Security Conformance Standards	Designated Laboratories
1	Remote Terminal Units (RTUs) & PLCs with IEC communications protocols	IEC 60870-5 -101 / IEC 60870-5 -104 (Test Details Annexure 2)	IEC 60870-5- 7 Security extension & IEC 62351 series (specifically IEC 62351-100 parts 1 & 3) (Test Details Annexure-2	Central Power Research Institute (CPRI), Prof Sir C V Raman Road, Sadashivanagar P O, Bengaluru – 560080, Karnataka
2	Intelligent Electronic Equipment / Numerical Protection Relays / Bay Control Units / Bay Protection Units, Gateways, Transformer Tap controller/ changer, etc. with IEC 61850 communication protocol	IEC 61850 – 5 to IEC 61850 – 10 (Test Details Annexure 2)		CPRI
3	Smart meters with IEC 62056 communication protocols	IEC 62056 series / DLMS & IS 15959 series and IS 16444 series (Test details Annexure 2)	IEC 62056 series / DLMS & IS 15959 series and IS 16444 series (Test Details Annexure 2)	1. CPRI 2. Electrical Research and Development Association (ERDA), ERDA Road, GIDC, Makarpura, Vadodara - 390 010 Gujarat 3. Yadav Measurements Pvt. Ltd. (YMPL) 373-375, RIICO Bhamashah Industrial Area Kaladwas 313003 Udaipur – Rajasthan

Information Technology (IT) Equipment (Main / Backup / Disaster recovery (DR) Control Centre / Substation control centre IT equipment)

All IT products procured /supplied shall have a valid Certificate of Common Criteria as per ISO/IEC 15408 issued by signatories of the Common Criteria Recognition Agreement (CCRA) (www.commoncriteriaportal.org).

Import/procurement/supplied from vendors sourcing from prior reference countries, the Certificate for Common Criteria shall be from Government Laboratories in India according to the IC3S scheme operated by Ministry of Electronics and Information Technology, which is a signatory to CCRA.

https://www.commoncriteria-india.gov.in/

Annexure - 2

Details of tests for various identified products

Remote Terminal Units (RTUs) (Sl. No. 1 of Table – A of Annexure – 1)

Test protocol:

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

Reference standards

1) IEC 60870-5-101 & IEC 60870-5-104 as applicable

2) IEC 60870-5-7 Telecontrol equipment and systems - Part 5-7: Transmission protocols - Security extensions to IEC 60870-5-101 and IEC 60870-5-104 protocols (applying IEC 62351)

3) IEC 62351-100-1 & IEC 62351-100-3 and other cross referenced standards.

Test cases

Extract from standard (IEC 62351-100-1)

The conformance test cases are divided into four clauses:

- Clause 5: Verification of configuration parameters. This clause contains the configuration parameters affecting the message contents and/or the protocol behaviour.
- Clause 6: Verification of communication. The goal of this clause is to verify that Device Under Test (DUT) is able to implement the security extension messages as described in IEC TS 60870-5-7.
- Clause 7: Verification of procedures. The goal of this clause is to verify that DUT is able to execute the security extension procedures as described in IEC TS 62351-5.
- Clause 8: Test result chart. This clause contains the results of the test cases listed in Clauses 6 and 7 for each supported value of the configuration parameters listed in Clause 5.

The test cases are organized in tables. They are numbered; their numbering syntax is: Subclause number (where the Table is located) + test case number.

In the column 'reference' each test case has a direct reference to IEC TS 62351-5 or IEC TS 60870-5-7 where the clause under test is defined.

Test cases are mandatory depending on the description in the column 'Required'. The following situations are possible:

M= Mandatory test case. The test is referencing a clause that is mandatory in IEC TS 62351-5 or IEC TS 60870-5-7.

Protocol Information Conformance Statement (PICS) x, x = Mandatory test case if the functionality is enabled in the PICS (by marking the applicable check box), with a reference to the section number of the PICS (x.x).

Conformance testing of security extension procedures

The security extension procedures can be summarized as follows:

- User management
- Update key maintenance
- Session key maintenance
- Challenge/Reply authentication
- Aggressive Mode authentication

Extract from standard (IEC 62351-100-3)

IEC 62351-3 defines the requirements related to the authentication/encryption protocol, procedures and methods to be implemented at TCP/IP (transport) level.

The conformance test cases are divided into three clauses:

≠ Clause 5: Verification of configuration parameters. This clause contains the parameters specified by the standards referencing IEC 62351-3 (see IEC 62351-3:2014/AMD1:2018, Clause 7) and affecting the protocol behaviour.

≠ Clause 6: Verification of IEC 62351-3 requirements. The goal of this clause is to verify that DUT is conformant to the requirements of the IEC 62351-3.

≠ Clause 7: Test result chart. This clause contains the results of the test cases listed in Clause 6 for each supported value of the configuration parameters listed in Clause 5.

The test cases are organized in tables. They are numbered, their numbering syntax is: Subclause number (where the table is located) + test case number.

In the column ‘Reference’ each test case has a direct reference to IEC 62351-3 where the clause under test is defined. PICS or Protocol Implementation eXtra Information for Testing (PIXIT) could be found in the “Reference” column for some test cases whenever the execution of the test case shall take into account specific parameter values declared in the PICS or PIXIT of the DUT.

Test cases are mandatory depending on the description in the column ‘Required’. The following situations are possible:

M = Mandatory test case. The test is referencing to a clause that is mandatory in IEC 62351-3.

PICS

or

PIXIT = Mandatory test case if the functionality is enabled in the PICS or PIXIT by marking the applicable check box or declaring the applicable value.

Intelligent Electronic Devices (IEDs) (Sl. No. 2 of Table – A of Annexure – 1)

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

Reference standards

IEC 61850 series

Specifically IEC 61850-5, IEC 61850-6, IEC 61850-7, IEC 61850-8, IEC 61850-9 and IEC 61850-10

Test cases

Communication protocol conformance as per IEC 61850 -10. This part of standard defines methods and abstract test cases for conformance testing of client, server and sampled values devices used in power utility automation systems, the methods and abstract test cases for conformance testing of engineering tools used in power utility automation systems, and the metrics to be measured within devices according to the requirements defined in IEC 61850-5. Further this part of standard specifies standard techniques for testing of conformance of client, server and sampled value devices and engineering tools, as well as specific measurement techniques to be applied when declaring performance parameters. The use of these techniques will enhance the ability of the system integrator to integrate IEDs easily, operate IEDs correctly, and support the applications as intended.

Smart Meters (Sl. No. 3 of Table – A of Annexure – 1)

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

IEC 62056 series of standards (Electricity metering data exchange – The DLMS/COSEM suite) specifies details of communication protocol requirements, conformance testing and security requirements. The Part 5-3 (DLMS/COSEM application layer) specifies the DLMS/COSEM application layer in terms of structure, services and protocols for DLMS/COSEM clients and servers, and defines rules to specify the DLMS/COSEM communication profiles. It defines services for establishing and releasing application associations, and data communication services for accessing the methods and attributes of COSEM interface objects, defined in IEC 62056-6-2 using either logical name (LN) or short name (SN) referencing.

Clause 5 and sub clauses specifies security requirements. It cover security concepts, Identification and authentication, Cryptographic algorithms, Cryptographic keys – overview, Key used with symmetric key algorithms, Keys used with public key algorithms and Applying cryptographic protection.

Note: All above referred standards shall be latest with amendments if any at the time of submission of sample(s) for testing.

Annexure – 3

Testing Criteria

1) Supply from Trusted Sources

The sample size shall be as specified by CEA as per the approved criteria for Trusted Vendors

2) Supply from other than trusted vendors

The sample size shall be shall be 5% of the supply lot / ordered quantity (minimum one). The manufacturer shall submit request to the Nodal agency along with vendor's / manufacturer's certifications for supply chain management system practices and secure product development process implementations based on any one or more of standards ISO / IEC 27036, ISO / IEC 20243, IEC 62443 for verification.

After scrutiny of vendor's / manufacturer's certifications the supplier / utilities shall be asked to submit product to the designated laboratory for communication and cyber security conformance testing.

The supply lot shall stand rejected on failure to comply with the test requirements.

3) Supply from prior reference countries

The utility shall obtain prior permission from the Government of India for importing the product / system from prior reference countries.

The sample size shall be shall be 10 % of the supply lot / ordered quantity (minimum one). The manufacturer shall submit request to the Nodal agency along with vendor's / manufacturer's certifications for supply chain management system practices and secure product development process implementations based on any one or more of standards ISO / IEC 27036, ISO / IEC 20243, IEC 62443 for verification.

After scrutiny of vendor's / manufacturer's certifications the supplier / utilities shall be asked to submit product to the designated Government / Government controlled Autonomous laboratory for type tests (Annexure – 4) and communication & cyber security conformance testing.

The supply lot shall stand rejected on failure to comply with the test requirements.

Annexure – 4

Type Tests

Products imported from prior reference countries shall also undergo type testing as per following standards in addition to communication protocol and security conformance testing at the designated Government / Government controlled Autonomous laboratory:

Type test standards for RTUs

1. IEC 60870-1-2:1989 Telecontrol equipment and systems. Part 1: General considerations. Section Two: Guide for specifications.
2. IEC 60870-2-1:1995 Telecontrol equipment and systems - Part 2: Operating conditions - Section 1: Power supply and electromagnetic compatibility.
3. EC 60870-2-2:1996 Telecontrol equipment and systems - Part 2: Operating conditions -Section 2: Environmental conditions (climatic, mechanical and other non-electrical influences).
4. IEC 60870-3:1989 Telecontrol equipment and systems. Part 3: Interfaces (electrical characteristics)

Type test standard for IEDs / Numerical Protection Relays / Bay controls units

1. IEC 61850-3: 2013, Ed. 2 Communication networks and systems for power utility automation – Part 3: General requirements.

Type test standards for Smart meters

1. IS 16444: 2015 AC static direct connected watthour smart meter class 1 and 2 – Specification.
2. IS 16444 Part 2: 2017 AC static transformer operated watthour and var - Hour smart meters, class 0.2 S, 0.5 S and 1.0 S: Part 2 specification transformer operated smart meters.

Note:

1. All above referred standards shall be latest with amendments if any at the time of submission of sample(s) for testing.
2. Type tests generally covers functionality, environmental, mechanical, EMI/ EMC and electrical safety related tests.

ANNEXURE P/18

Emerson Automation Solutions
Intelligent Platforms Pvt. Ltd.,
(Formerly known as GE Intelligent Platforms Pvt. Ltd.,)
CIN: U72200KA1997PTC022158
Building No.8, Ground Floor
Velankani Tech Park, No.43
Electronic City Phase I,
Hosur Road, Bangalore-560100
Karnataka, India
www.emersonprocess.co.in
T +91 80 42515300-04
F +91 80 42515305-06

Genius LAN/Product Status/20210512 12th May 2021

Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC),
Works: Village Dambhui, P.O. Barbindia, P.S. Nirsa,
District Dhanbad 828 205, Jharkhand, India

.

Kind attn : **Mr. Prince Kumar Singh- Group Head-C&I Maintenance**
Subject : **Discontinuance notice for Genius Bus Controller and Path forward**

Thank you for the continued patronage over so many years. We understand that your esteemed organization has been using Emerson's (Formerly GE IP) automation technologies and solutions for various critical processes/applications.

GENIUS was the first intelligent, rugged, distributed I/O system for PLC systems. It was introduced in 1985 and was the first with extensive diagnostics and easy setup over a proprietary network. It quickly gained global acceptance in applications such as Oil & Gas, Metal, Power, Mining, Water, etc. Over the years we evolved our I/O offering bringing forward many of the GENIUS capabilities and marrying it with the latest technology and providing advanced functionality in more cost-efficient form factors. Controlling the I/O, the GENIUS Bus Controllers became the standard. Due to technological advances and obsolescence of various components, we declared Genius Bus Controller product family as mature on 1st January 2014. Genius Bus Controller parts are not available for sale anymore as this product has been moved to discontinued stage on 1st October 2017.

Our goal in evolving our technology is protect your investment – whether it is existing wiring, your application logic, etc. Emerson's Intelligent Platforms provides excellent upgrade path for your application to modern technology. We can convert your control, GENIUS LAN, and Genius I/O to multicore high-performance platform with an open protocol **Profinet** over high speed ethernet communication. All local and remote genius LAN can be migrated to open protocol Profinet. We can convert applications ranging from the simple to the highly complex. Minimum downtime, minimum effort, minimum cost – we provide the easiest upgrade path available!
Key Benefits of Migration to **Profinet**:

1. Proven, tested control with advanced security built-in
2. Open standard I/O connectivity with PROFINET over high-speed Ethernet
3. High performance and flexible high availability
4. Programming and data connections are easily transferred into new system
5. Advanced functionality through use of Proficy Machine Edition programming and configuration tools
6. System can be updated in just a few hours and in steps, minimizing downtime
7. High availability systems often can change over without stopping

We strongly recommend you upgrade Genius LAN to open protocol **Profinet** over high speed ethernet communication.

For and on behalf of M/s. Emerson Automation Solutions Intelligent Platforms Pvt. Ltd.,





Neelesh Dabadghao
Associate Director – Sales
9822225221
Neelesh.Dabadghao@Emerson.com



Emerson Automation Solutions
Intelligent Platforms Pvt. Ltd.,
(Formerly known as GE Intelligent Platforms Pvt. Ltd.,)
CIN: U72200KA1997PTC022158
Building No.8, Ground Floor
Velankani Tech Park, No.43
Electronic City Phase I,
Hosur Road, Bangalore-560100
Karnataka, India
www.emersonprocess.co.in
T +91 80 42515300-04
F +91 80 42515305-06

Genius LAN/Product Status/20210512 12th May 2021

Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC),
Works: Village Dambhui, P.O. Barbindia, P.S. Nirsa,
District Dhanbad 828 205, Jharkhand, India

.
Kind attn : **Mr. Prince Kumar Singh- Group Head-C&I Maintenance**
Subject : **Discontinuance notice for Genius Bus Controller and Path forward**

Thank you for the continued patronage over so many years. We understand that your esteemed organization has been using Emerson's (Formerly GE IP) automation technologies and solutions for various critical processes/applications.

GENIUS was the first intelligent, rugged, distributed I/O system for PLC systems. It was introduced in 1985 and was the first with extensive diagnostics and easy setup over a proprietary network. It quickly gained global acceptance in applications such as Oil & Gas, Metal, Power, Mining, Water, etc. Over the years we evolved our I/O offering bringing forward many of the GENIUS capabilities and marrying it with the latest technology and providing advanced functionality in more cost-efficient form factors. Controlling the I/O, the GENIUS Bus Controllers became the standard. Due to technological advances and obsolescence of various components, we declared Genius Bus Controller product family as mature on 1st January 2014. Genius Bus Controller parts are not available for sale anymore as this product has been moved to discontinued stage on 1st October 2017.

Our goal in evolving our technology is protect your investment – whether it is existing wiring, your application logic, etc. Emerson's Intelligent Platforms provides excellent upgrade path for your application to modern technology. We can convert your control, GENIUS LAN, and Genius I/O to multicore high-performance platform with an open protocol **Profinet** over high speed ethernet communication. All local and remote genius LAN can be migrated to open protocol Profinet. We can convert applications ranging from the simple to the highly complex. Minimum downtime, minimum effort, minimum cost – we provide the easiest upgrade path available!
Key Benefits of Migration to **Profinet**:

1. Proven, tested control with advanced security built-in
2. Open standard I/O connectivity with PROFINET over high-speed Ethernet
3. High performance and flexible high availability
4. Programming and data connections are easily transferred into new system
5. Advanced functionality through use of Proficy Machine Edition programming and configuration tools
6. System can be updated in just a few hours and in steps, minimizing downtime
7. High availability systems often can change over without stopping

We strongly recommend you upgrade Genius LAN to open protocol **Profinet** over high speed ethernet communication.

For and on behalf of M/s. Emerson Automation Solutions Intelligent Platforms Pvt. Ltd.,





Neelesh Dabadghao
Associate Director – Sales
9822225221
Neelesh.Dabadghao@Emerson.com

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

सी.जी.-डी.एल.-अ.-24092020-221952
CG-DL-E-24092020-221952

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 2941] नई दिल्ली, बृहस्पतिवार, सितम्बर 24, 2020/आश्विन 2, 1942
No. 2941] NEW DELHI, THURSDAY, SEPTEMBER 24, 2020/ASVINA 2, 1942

जल संसाधन, नदी विकास और गंगा संरक्षण विभाग

(केंद्रीय भूमि जल प्राधिकरण)

अधिसूचना

नई दिल्ली, 24 सितम्बर, 2020

का.आ. 3289(अ).—जबकि,1985 की सिविल रिट याचिका 4677, एमसी. मेहता बनाम भारत संघ में पारित दिनांक 10 दिसंबर, 1996 के माननीय उच्चतम न्यायालय के आदेश के माध्यम से इसके दिशा-निर्देशों पर केंद्र सरकार ने भूमि जल प्रबंधन और विकास के विनियमन और नियंत्रण के उद्देश्यों से और कतिपय शक्तियों का प्रयोग करने और उससे संबंधित कतिपय कार्यों को करने के लिए पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 5 के तहत शक्तियों का प्रयोग करने के लिए दिनांक 14 जनवरी, 1997 की अधिसूचना सं.का.आ. 38(अ) के माध्यम से केंद्रीय भूमि जल प्राधिकरण (इसके बाद इसे "प्राधिकरण" के रूप में कहा गया है) गठित किया है।

और जबकि प्राधिकरण उद्योगों, अथवा आधारभूत परियोजनाओं अथवा खनन परियोजनाओं इत्यादि के लिए भूजल निष्कर्षण के लिए "अनापत्ति प्रमाणपत्र" जारी करके भूजल विकास और प्रबंधन को विनियमित करता रहा है और बाइस राज्यों और दो संबंधित संघ शासित क्षेत्रों में, जहां पर भूजल विकास संबंधित राज्य सरकारों तथा संघ शासित प्रशासनों द्वारा विनियमित नहीं किया जा रहा है, समय-समय पर इस संबंध में इसने दिशा-निर्देश तैयार किये थे।

और जबकि, कुछ राज्य सरकारों अथवा, संघ शासित क्षेत्रों ने विधान अधिनियमित किए हैं और भूजल विकास और प्रबंधन को विनियमित करनेकेलिए विनियामक दिशा-निर्देश अथवा आदेश जारी किए हैं।

और जबकि, माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली ने 2014 की ओ.ए. सं. 204/205/206 में दिनांक 15 अप्रैल 2015 के आदेश के माध्यम से प्राधिकरण को निर्देश जारी किए हैं कि वह सुनिश्चित करें कि ऐसे किसी भी व्यक्ति जो भूजल निष्कर्षण के लिए ट्यूबवेल, अथवा कोई अन्य साधन संचालित कर रहा है, को प्राधिकरण से अनुमति प्राप्त करनी

Authority as the case may be. The entire process of grant of No Objection Certificate shall be online through a web based application system.

Water management plans shall be prepared by all the State Ground Water Authorities/ Organizations for all Over-exploited, Critical and Semi-critical assessment units starting with Over-exploited units. Water management plans shall be reviewed and updated periodically. Water management plans, data on water availability and scarcity and policy framed in this regard shall be placed on the websites of Central Ground Water Authority/ State Ground Water Authority.

1.0 Exemptions from seeking No Objection Certificate:

Following categories of consumers shall be exempted from seeking No Objection Certificate for ground water extraction:

(i) Individual domestic consumers in both rural and urban areas for drinking water and domestic uses.

(ii) Rural drinking water supply schemes.

(iii) Armed Forces Establishments and Central Armed Police Forces establishments in both rural and urban areas.

(iv) Agricultural activities.

(v) Micro and small Enterprises drawing ground water less than 10 cum/day.

1.1 Registration of Drilling Rigs

State / Ut Governments shall be responsible for registering drilling rigs operating within their jurisdiction and for maintaining the database of wells drilled by them. Appropriate link shall be provided in CGWA portal for making the data available to CGWA.

2.0 Drinking & Domestic use for Residential apartments/ Group Housing Societies/ Government water supply agencies in urban areas

For grant of No Objection Certificate for ground water extraction, the project proponent has to furnish the details as per the guidelines issued by the CGWA in proper format as available in CGWA website. No Objection Certificate for new /existing wells shall be granted only in such cases where the local Government water supply agency is unable to supply requisite amount of water in the area.

No Objection Certificate shall be granted subject to the following specific conditions:

i) Installation of Sewage Treatment Plants shall be mandatory for all residential apartments/ Group Housing Societies where ground water requirement is more than 20 m^3/day. The water from Sewage Treatment Plants shall be utilized for toilet flushing, car washing, gardening etc.

ii) The No Objection Certificate shall be valid for a period of five years from the date of issue or till such time local Government water supply is provided to the project area, whichever is earlier. In case the project proponent receives water supply from the concerned local Government Water Supply Agency during the validity of the No Objection Certificate, intimation regarding availability of public water supply shall be sent by the project proponent to CGWA and No Objection Certificate will be cancelled by the Authority. In other cases, the project proponent will apply for renewal of No Objection Certificate, ninety days before the expiry of No Objection Certificate.

iii) Proponents shall be liable to pay ground water abstraction charges for the quantum of ground water proposed to be extracted, as per rates mentioned in Table 5.1.

Documents to be submitted with the application

a) Details of water requirement computed as per National Building Code, 2016 **(Annexure I)**, taking into account recycling/ reuse of treated water for flushing etc.

b) Affidavit on non-judicial stamp paper of Rs. 10/- by the applicant, confirming non/ inadequate availability of public water supply in case of users requiring ground water up to 10 m^3/ day for drinking/ domestic use.

c) Certificate of non-availability of water from local government water supply agency in cases requiring ground water in excess of 10 m^3/ day for drinking/ domestic use. Government water supply agencies

MAITHON POWER LIMITED

MPL/FY 18/ 1007-011

July 14, 2017

The Project Head
Damodar Valley Corporation
Combined Building
Maithon- 828207
Dist: Dhanbad, JH ,

Sub: Request for provision of Direct Drinking Water Line Connection to MPL Township

Respected Sir,

You are kindly aware that Maithon Power Limited (MPL) has constructed its employee township "Anandam" in Area No. 6 of the DVC Colony. The said township is consisting of 96 numbers of residential units. Employees of MPL are residing in the above accommodation along with their family members. The above township have been constructed in 2012 and ever since the employees and families are residing there. The total water requirement of this township is being temporarily met through underground boring water. In view of the Government's present guideline we would like to put up our application for a permanent water supply line from the DVC's water treatment system. We are ready to pay the applicable charges of water as per your standing commercial rates / allied terms and conditions.

This application may please be treated as our formal application for supply of potable water supply to employee-township.

Thanking you,

Yours faithfully,

For Maithon Power Limited

M Rahman 14/7/2017

M Siddiqur Rahman
Head- Project Planning & Coordination

MPL
MAITHON POWER LIMITED

Ref: MPL/FY 18/ 1708 05

Date: 31st August, 2017

The Chief Engineer (Civil),

Damodar Valley Corporation,

Combined Building,

P.O. Maithon Dam,

District: - Dhanbad,

Jharkhand.

Sub: Request for provision of direct water line connection to MPL Township

Ref: to our earlier communication: - MPL/FY18 /1007-011 Date: - July 14th 2017.

Dear Sir,

This is in continuation of our earlier communication referred above.

In this connection we had detailed discussion with your good office and Depty Chief Engineer (hydro) DVC Maithon, today. As suggested by your good office, we have worked out the total water requirement for our ANANDAM Township as below.

Subject	Quantity	Remarks/ reference
Maximum accommodation	100	(considering no of residential units + accommodation of misc. service providers)
No of average occupancy	4	
Per capita consumption/ day (including mess, Gardening and washing etc.)	200liter/ day	As per the Bureau of Indian Standards, IS: 1172-1993, a minimum water supply of 200 litres per capita per day (lpcd) should be provided for domestic consumption with full flushing systems.
Total (Maximum daily water requirement)	80,000liter/day	(100X4X200)// (May please contact undersigned should any further discussion required on above.)

MPL
MAITHON POWER LIMITED

Thanking you,

Yours truly,

For Maithon Power Limited,

M S Rahman

Head- Projects.

Cc: Project Head - DVC Maithon

A Joint Venture of **TATA POWER** & DVC
Registered Office : Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400 009, Tel: 91 22 67171232
Works : Village Dambhui, P.O.Barbindia, P.S.Nirsa, District Dhanbad 828 205, Jharkhand
Tel: +91 6540 278001/50 Fax: +91 6540 278040/ +91 8860075658
Corporate Identity Number (CIN) : U74899MH2000PLC267297, **Website Address :** www.tatapower.com/mpl

MAITHON POWER LIMITED

MPL/FY19/1806007

Date: 07-06-2018

To,
The Project Head,
Damodar Valley Corporation,
Combined Building,
Maithon - 828207.
Dist. Dhanbad, JH.

Subject: Request for provision of Direct Drinking Water Line Connection to MPL Township.

Dear Sir,

Please refer to our earlier letter in this subject with reference number MPL / FY 18 / 1007 - 011. In this context we would like to draw your kind attention to the following facts:

You are kindly aware that Maithon Power Limited (MPL) has constructed its employee township "Anandam" in area no. 6 of the DVC colony. The said township is consisting of 96 numbers of residential units. Employees of MPL are residing in the above accommodation along with their family members. The above township have been constructed in 2012 and ever since the employees and families are residing there. The total water requirement of this township is being temporarily met through underground boring water. In view of the Government's present guideline we like to put up our application for a permanent water supply line from the DVC's water treatment system. We are ready to pay the applicable charges of water as per your standing commercial rates/allied terms and conditions.

This application may please be treated as our formal application for supply of potable water supply to employee-township

Thanking you.

Yours Truly,

For Maithon Power Limited,

(M S Rahman)

Head - Project Planning & Coordination.

MAITHON POWER LIMITED

MPL/FY 18/ 1007-011

July 14, 2017

The Project Head
Damodar Valley Corporation
Combined Building
Maithon- 828207
Dist: Dhanbad, JH ,

Sub: Request for provision of Direct Drinking Water Line Connection to MPL Township

Respected Sir,

You are kindly aware that Maithon Power Limited (MPL) has constructed its employee township "Anandam" in Area No. 6 of the DVC Colony. The said township is consisting of 96 numbers of residential units. Employees of MPL are residing in the above accommodation along with their family members. The above township have been constructed in 2012 and ever since the employees and families are residing there. The total water requirement of this township is being temporarily met through underground boring water. In view of the Government's present guideline we would like to put up our application for a permanent water supply line from the DVC's water treatment system. We are ready to pay the applicable charges of water as per your standing commercial rates / allied terms and conditions.

This application may please be treated as our formal application for supply of potable water supply to employee-township.

Thanking you,

Yours faithfully,

For Maithon Power Limited

M Rahman 14/7/2017

M Siddiqur Rahman
Head- Project Planning & Coordination

MPL
MAITHON POWER LIMITED

Ref: MPL/FY 18/ 1708 05

Date: 31st August, 2017

The Chief Engineer (Civil),

Damodar Valley Corporation,

Combined Building,

P.O. Maithon Dam,

District: - Dhanbad,

Jharkhand.

Sub: Request for provision of direct water line connection to MPL Township

Ref: to our earlier communication: - MPL/FY18 /1007-011 Date: - July 14th 2017.

Dear Sir,

This is in continuation of our earlier communication referred above.

In this connection we had detailed discussion with your good office and Depty Chief Engineer (hydro) DVC Maithon, today. As suggested by your good office, we have worked out the total water requirement for our ANANDAM Township as below.

Subject	Quantity	Remarks/ reference
Maximum accommodation	100	(considering no of residential units + accommodation of misc. service providers)
No of average occupancy	4	
Per capita consumption/ day (including mess, Gardening and washing etc.)	200liter/ day	As per the Bureau of Indian Standards, IS: 1172-1993, a minimum water supply of 200 litres per capita per day (lpcd) should be provided for domestic consumption with full flushing systems.
Total (Maximum daily water requirement)	80,000liter/day	(100X4X200)// (May please contact undersigned should any further discussion required on above.)

MPL
MAITHON POWER LIMITED

Thanking you,

Yours truly,

For Maithon Power Limited,

M S Rahman

Head- Projects.

Cc: Project Head - DVC Maithon

MPL

MAITHON POWER LIMITED

1420

Ref: MPL/FY19/ 18 08 100

Date: 25th August, 2018

The Deputy Chief Engineer (Civil),/Exe. Eng. (Civil) ACD

Damodar Valley Corporation,

Combined Building, P.O. Maithon Dam,

District: - Dhanbad, Jharkhand.

OFFICE OF THE S.E. CIRCLE-II D.V.C., MAITHON
No. 309
Date 25.8.18

Sub: Submission of Engineering note and drawing for Water supply scheme for MPL Township from water treatment plant, DVC.

Ref: 1. MPL/FY18 /17 08 05 Date: - 31st August 2017.

2. MPL/FY18 /10 07 011 Date: - 14th July 2017

3. MPL/FY19/18 06 007 Date: - 7th June 2018

Dear Sir,

With reference to the above letters we are hereby sending the following documents for Water supply scheme for MPL Township from water treatment plant at millennium park, DVC:

- Water supply scheme for MPL Township from DVC water treatment plant.
- Proposed pump house location and pipe routing
- Typical detail of support for drinking water pipeline

Thanking you,

Yours truly,

For Maithon Power Limited,

25/08/2018

M S Rahman

Head- Project

25.08.18

MAITHON POWER LIMITED

Ref: MPL/FY19/18 11 31

Date: 27.11.2018

To
Executive Engineer (Civil) ACD,
Damodar Valley Corporation,
Maithon, Dhanbad, Jharkhand - 828207

Ref: 1. MPL/FY 19/18 08 100 Dated 25th August 2018.
2. MPL/FY 19/18 06 007 Dated 7th June 2018.
3. MPL/FY 18/17 08 05 Dated 31st August 2017.
4. MPL/FY 18/17 07 11 Dated 14th July 2017.

Dear Sir,

Sub: Meeting Request on Completion of joint site inspection for water supply scheme for MPL Township from Water treatment plant, DVC.

With reference to the above correspondence and on completion of joint site inspection of MPL & DVC team we are request you for a meeting on Wednesday, 28th November 2018.

May kindly confirm.

We have already submitted necessary drawing, documents and technical specification etc.

Thanking you

Yours truly
For Maithon Power Limited

27/11/2018

(M S Rahman)
Head - Project, Planning & Coordination.

MAITHON POWER LIMITED

Ref: MPL/FY 19/1901 020

Date: 12.01.2019

To
Deputy Chief Engineer (Civil)
Damodar Valley Corporation,
Maithon, Dhanbad, Jharkhand - 828207

Ref: 1. Meeting held in the chamber of Deputy Chief Engineer Civil on 28th November 2018
2. Earlier communications on the Subject topic
a) MPL/FY 19/18 08 100 Dated 25th August 2018.
b) MPL/FY 19/18 06 007 Dated 7th June 2018.
c) MPL/FY 18/17 08 05 Dated 31st August 2017.
d) MPL/FY 18/17 07 11 Dated 14th July 2017.

Dear Sir,

Sub: MPL's Request for providing drinking water connection to Employee Township from DVC water treatment plant.

We refer to the above correspondence in the subject issue and latest meeting held in the office of Dy. CE Civil, DVC Maithon attended by MPL team on 28th November 2018.

In this regard we would further inform you that queries raised from DVC side like:

- All the construction related to pump house and pipe laying etc. shall be in the scope of MPL.
- Daily operation and maintenance shall be in the scope of MPL and necessary gate pass to be provided by DVC.
- In case of any damage in existing system the same will be repaired by MPL.
- Total land area involved in this case will be used 1316 m² (1300 meter length and 1 meter width for pipe line & Pump House area 4m X 4m) as ROW for laying of pipe.
- Specification of pumps will be 15 KW 3 phase horizontal centrifugal type with necessary piping, footvalve and priming arrangement etc.

In view of all the above submission we request once again to cordially supporting us in providing the treated water supply to our Township. We once again agree to pay the standard commercial charges of water prevailing in DVC.

Thanking you

Yours truly
For Maithon Power Limited

16/01/2019

(M S Rahman)
Head - Project, Planning & Coordination.

MAITHON POWER LIMITED

Ref: MPL/FY 20/2009 027

Date: 24.09.2019

To
CE - I (Electrical), CSO & Head of Projects
Damodar Valley Corporation,
Maithon, Dhanbad, Jharkhand - 828207.

Ref: 1. Meeting held in the chamber of Deputy Chief Engineer Civil on 28th November 2018
2. Earlier communications on the Subject topic
a) MPL/FY 19/1901 020 Dated 12th January 2019
b) MPL/FY 19/18 08 100 Dated 25th August 2018.
c) MPL/FY 19/18 06 007 Dated 7th June 2018.
d) MPL/FY 18/17 08 05 Dated 31st August 2017.
e) MPL/FY 18/17 07 11 Dated 14th July 2017.

Dear Sir,

Subject: MPL's Request for providing drinking water connection to Employee Township from DVC water treatment plant.

We refer to the above correspondence in the subject issue and latest meeting held in the office of Dy. CE Civil, DVC Maithon attended by MPL team on 28th November 2018.

In this regard we would further inform you the following:

- MPL had requested DVC for the supply of drinking water connection at its Township in area no 6 of DVC Colony.
- A detailed project report was prepared and submitted explaining the above project which was found acceptable by the DVC authority.
- MPL had requested DVC to inform about the all-inclusive commercial rates for supply of potable drinking water.
- MPL had attended a number of meetings at various levels of DVC Maithon for availing this facility on payment basis. However MPL is yet to receive any updates from DVC on the above request.

In view of all the above submission we request once again to support us in providing the treated water supply to our Township. We once again agree to pay the standard commercial charges of water prevailing in DVC.

Thanking you

Yours truly
For Maithon Power Limited

24/09/2019

(M S Rahman)
Head - Project, Planning & Coordination.

Damodar Valley Corporation
Office of the Manager Reservoir Operations
Maithan Dam, Dhanbad
Jharkhand-828 207

No.: MRO/Water Tariff Cell/ MPL/D /330 Dated- 15-May-2023

To
The Authorized Signatory,
Shri Vijayant Ranjan
Chief Executive Officer & Chief ER (Generation)
M/S Maithon Power Limited
P.O.- Maithon, Dist.- Dhanbad, Pin- 828207

Sub.: Execution of Agreement for Water withdrawal of 80 KL per day of treated Water for M/S Maithon Power Limited, P.O.- Maithon, Dist.- Dhanbad, Pin- 828207

Dear Sir,

Enclosed, please find here with a copy of the Agreement for drawal of 80 KL per day of treated Water executed on 15.05.2023 between Damodar Valley Corporation & M/S Maithon Power Limited, for your record.

Yours faithfully,

Rakesh Ranjan 15/05/2023
(Rakesh Ranjan)
Sr. Divisional Engineer (Civil),
Water Tariff Cell, MRO'S Office, DVC, Maithon

Dated. 15-May-2023

वरीय प्रभागीय अभियंता (सि०)
Sr. Divisional Engineer (C)
जल राजस्व सेल / Water Tariff Cell
प्रबंधक जलाशय परिचालन कार्यालय
Off. of the Manager Reservoir Operation
मैथन/D.V.C. Maithon

DAMODAR VALLEY CORPORATION

AGREEMENT

EXECUTED ON 15/05/2023

BETWEEN

DAMODAR VALLEY CORPORATION

AND

MAITHON POWER LIMITED

For Supply of TREATED WATER

FOR

ANANDAM TOWNSHIP

AT

Maithon

FROM

DVC Water Treatment Plant at Maithon

FOR

Domestic use

Allocated Quantity-80 KL Per Day

Government of Jharkhand

Receipt of Online Payment of Stamp Duty

NON JUDICIAL

Receipt Number : 0889ffb9acc628e73150
Receipt Date : 13-May-2023 09:41:59 am
Receipt Amount : 100/-
Amount In Words : One Hundred Rupees Only
Document Type : Agreement or Memorandum of an Agreement
District Name : Dhanbad
Stamp Duty Paid By : MPL
Purpose of stamp duty paid : AGREEMENT
First Party Name : DVC MAITHON
Second Party Name : MPL
GRN Number : 2317163342

NOTARY DHANBAD

-: This stamp paper can be verified in the jharnibandhan site through receipt number :-

This is integral part of Agreement executed between Damodar Valley Corporation AND MPL for drinking water at Anandam Township, Maithon.

This Receipt is to be used as proof of payment of stamp duty only for one document.The use of the same receipt as proof of payment of stamp duty in another document through reprint,photo copy or other means is penal offence under section-62 of Indian Stamp Act,1899

इस रसीद का उपयोग केवल एक ही दस्तावेज पर मुद्रांक शुल्क का भुगतान के प्रमाण हेतु ही किया जा सकता है। पुन: प्रिन्ट कर अथवा फोटो कॉपी आदि द्वारा इसी रसीद का दुसरे दस्तावेज पर मुद्रांक शुल्क का भुगतान के प्रमाण हेतु उपयोग भारतीय मुद्रांक अधिनियम, 1899 की धारा 62 अन्तर्गत दण्डनीय अपराध है।

13 MAY 2023

SATYENDRA PANDIT NOTARY Reg No 7987/10 Govt of India DHANBAD, JHARKHAND

P-4

AGREEMENT

Supply of Treated water
For
Domestic Use

This Agreement is made on this 15th May Day of 2023

BETWEEN

DAMODAR VALLEY CORPORATION, a Corporation constituted under the Damodar Valley Corporation Act being Act No. XIV of 1948 (hereinafter referred to as "the said Act") and having its Headquarters of DVC Towers, VIP Road, Kolkata -700 054 in the state of West Bengal (hereinafter to as "**the First Party**", which term shall unless excluded by or repugnant to the subject or context include its successors-in-interest and assigns) of the ONE PART

AND

M/S. MAITHON POWER LIMITED, a Limited Company having their registered office at Corporate Centre,34 Sant Tukaram Road, Carnac Bunder, Mumbai 400009 in the state of Maharashtra (Hereinafter referred to as "**the Second Party**" which term shall unless excluded by or repugnant to the subject or context include its successors-in-interest and/or permitted assigns) of OTHER PART.

AND WHEREAS the Second Party has requested the First Party under cover of its letter No. MPL/FY18/1007-011 dated 14th July 2017, letter No MPL/FY19/1806-007 dated 7th June 2018, letter no MPL/FY19/1808-100 dated 25th August 2018, letter no MPL/FY19/1811-31 dated 27th November 2018, letter no MPL/FY19/1901-020 dated 12th January 2019 and letter no. MPL/FY20/2009-027 dated 24th April 2019 annexed hereto, to allow it to construct, operate and/or maintain the water supply scheme and to allow it to have a supply of water from Water Treatment Plant of First Party at Maithon For their drinking water requirement at their Anandam Township at Maithon in accordance with the approved plan and drawing forwarded by Chief Engineer (Civil), DVC, Maithon under cover of his letter No. AS/PS/F-14/1674 dated 27th April 2022 and Letter No. MRO/Water Management/197 dated 18.04.2023 for (domestic) purpose as laid down in the relevant provisions of the said act.

AND WHEREAS the First Party has agreed to such construction, operation and/or maintenance of the water supply scheme by the Second Party and has further agreed to such supply of water to the Second Party for an initial period of five years as referred to in Clause- 16 here-in-under on the terms and conditions as hereinafter appearing.

Rakesh Ranjan

P- 2/14

NOW THIS AGREEMENT WITNESSTH AND IT IS HEREBY DECLARED AND AGREED AS FOLLOWS: -

01. (a) PERMISSION:

(i) The "First Party" hereby grants to the "Second Party" the permission to construct, operate and/or maintain the said water supply scheme in accordance with the Plan and Drawing annexed hereto ("said Plan and Drawing") and to extract such quantities of water from Water treatment plant of DVC at Maithon for the purpose of domestic use as the "Second Party" may require up to **80KL per day treated drinking water** at the point in the Damodar Valley indicated in the said plan and Drawing annexed hereto and in the manner hereinafter mentioned provided the "Second Party" desiring to increase or decrease the quantity of water to be extracted as permitted aforesaid the "First Party" may require the "Second Party" to give the "First Party" Three(03) months` notice in writing and approach First Party stating the quantity of water required and the "First Party" after receipt of approval of First Party will permit the additional drawal of water depending on the condition prevailing at that time provided further that failure on the part of 'the First Party' will not be construed as breach of this Agreement. The allocation shall, in no way, be utilized /misused by 'the Second Party' by sale of water to any other consumer or its sister concern (or any agency on its behalf) for any purpose whatsoever. In the event of any such act, the same will be construed as breach of the terms and conditions of this agreement on the part of 'the Second Party` as specified in clause-17.

01. (b) **PERMISSION:**

(i) The "First Party" is seized and possessed of and is otherwise well and sufficiently entitled to the plots of land measuring 14165.31 square feet of First Party land, more particularly described in the drawing hereto annexed (hereinafter referred to as "said land"), hereby grants to the "Second Party" the right to use/build at its own cost the pump house supporting structures and approach route and also lay down pipes and other works on the said land.

(ii) These structures and pumping installations shall be the property of the "Second Party" and shall be maintained by them.

(iii) The "Second Party" shall apply to the "First Party" for extension of the license-period of the temporarily allotted piece of said land for permissive possession/occupation for the specific use as mentioned hereinabove in Cl. 01. (b).(i) before expiry of every license-period/term of 11 (eleven) months ("license period") as per the subsisting rules & regulations for temporary use/permissive possession/occupation. The "Second Party" hereby agrees to comply with all the existing terms and conditions as may be decided by the First Party from time to time and agrees to pay the license fee as may be revised time to time without raising any dispute in this regard.

(iv) For the temporary use/occupation of the said 14165.35 square feet of First Party land, the Second Party shall pay the "First Party" a license fee of Rs. 3,70,565/- {(Rs. 1,69,984/- for security Deposit for 11 months excluding GST and Rs. 2,00,581/- for advance payment for 11 months including GST)} @ rate decided by Corporation Memorandum No.Sectt./LA/Rent/2017/540 dated 29.09.2022 per term of 11 (eleven) months from the date of permissive possession/occupation of the said land is made over to the `Second Party`. **The payment Rs. 3,70,565/-has been paid by the MPL on dated 27.04.2023 (@ Rate of Rs.12 per square feet per 11(elven) month period as rate decided by the Corporation).**

The aforesaid license-period and the rate of license fee may be altered and /or revised and/or enhanced as per discretion of 'the FIRST PARTY' and 'the SECOND PARTY' agrees to

Rakesh Rajan

P- 3/14

make the payments as per the revised rate as and when made applicable. The Security Deposit (SD) equivalent to 11 months licence fee to be paid by the licensee in advance. However, Government Departments are exempted from payment of security deposit. The security deposit shall be refundable to the licensee only after expiry of licence period.

(v) The "Second Party" shall not be entitled to transfer or let out the said land to others without the consent of the "First Party".

(vi) The "First Party" shall not put up any structure of its own on the said land without the consent of the "Second Party" which shall not be unnecessarily withheld.

(vii) On the termination of the tenure of the temporary use and occupation period, the "Second Party" shall quit, vacate and deliver peaceful possession of the said land by removing the pumping and piping works built thereon and restoring it to its original condition at his own cost.

(viii) Neatness and cleanliness of the area occupied should be observed by the "Second Party"

02. **APPROVAL OF PLAN & DRAWING INSPECTION:**

The installation of the "Second Party" required for extraction of water at the point on the First Party indicated in the said plan and Drawing shall be duly approved by the "First Party" before erection provided the "First Party" or its representatives duly authorized in that behalf shall, from time to time, and at all times be entitled to enter such installations of the "Second Party" for inspection.

03. **(a) EXCESS DRAWAL:**

No drawal in excess of the water, as permitted shall be made by "the Second Party" without obtaining the specific prior written permission/approval of First Party and subject to such terms and conditions as "the First Party" may like to impose. Notwithstanding, whatever is mentioned in this agreement regarding excess drawl, it is hereby agreed and accepted by the Second Party that, for the quantities of water consumed in excess of the approved monthly drawal and for any other unauthorized drawl of water, sanctioned quantum will be charged **@ Rs 16.78/KL normal rate plus over drawal/unauthorized drawal in excess of sanctioned drawal on monthly basis will be charged @ 2 (Two) times the normal rate.**

(b) LESS DRAWAL:

The less drawal of water by 10% or more of the agreement quantity during any 5 (five) consecutive years will automatically call for revision of the agreement quantity. The revised agreement quantity will be reduced to average of preceding 5 yrs' actual drawal, without making any further reference to the Second Party incorporating the actual average drawal. However, the Second Party may opt to apply to First Party for increase the quantity as per provision under Clause -1(a) hereinabove.

04. **MODE OF MEASUREMENT & METERS:**

For the purpose of measurement of the quantity of water extracted, the "Second Party" shall under this Agreement, with the prior Approval of the First Party, install at such points as may be indicated by 'the First Party', as many meters or as equal to the different type or types of uses of water so as to register the quantity of water for the purpose of determining the water drawal pattern (excess/less drawal) of the Second Party in such units of measurement as may be adopted by "the First Party" from time to time provided that for the purpose of checking the accuracy of the meter/meters installed by "the Second Party", "the First Party" may install check meters or other mutually agreed upon check measures and "the Second Party" shall provide all facilities such as logbook etc. required by "the First Party" for such installation or such check.

It shall be responsibility of the 'Second Party' to repair/rectify/replacement of meter/meters within a period of 30 days from the date of detection of the fault by either

Rakesh Ranjan

P- 4/14

Party. And that 'the Second Party' has to submit a report certified by the representative of the First Party every year regarding their compliance with proper and satisfactory functioning of meter with proper logging of meter readings which will be given due importance during periodic review of water utilization by First Party. Non-compliance of above may be tantamount to cancellation of water allotment.

The reading of the meters referred to above shall be jointly taken by the accredited representative of the Second Party and First Party on/or as near as practicable to the last day of each English calendar month or as decided by the First Party and the reading so taken shall be recorded in a register, shall be binding, final and conclusive between the Second Party and the First Party as to the quantity of water drawl by the Second Party , provided that in the event of any meter being found defective and the quantity of drawal of water during the period when the meter was defective shall be determined, unless otherwise mutually agreed as detailed in clause – 6 & 10 here-in-under.

05. **SEALING OF METERS:**

All meters referred to in the above-mentioned Clause - 04 excepting the ones with automatic recorder on charts if any, shall be properly sealed on behalf of both the parties hereto and shall not be interfered with by either Party except in the presence of the other Party or its representatives duly authorized in that behalf.

06. **METER READING, INSPECTION & BASIS OF PAYMENT:**

The Control Valve House housing the meter/meters of 'the Second Party' shall remain in the custody of 'the Second Party' and 'the First Party' through its representative duly authorized in that behalf shall at all times be entitled to enter the said Control Valve **House** and inspect the meter/meters.

Provided further that if this meter/meters installed by 'the Second Party' for recording the quantity of water is/are out of order, the quantity of water extracted may be assessed by taking the average of the quantity extracted during the preceding 3 (three) months as per the reading of the meter/meters, provided further that nothing as aforesaid shall prevent the respective parties from arriving at a mutual settlement as regard the quantity of water extracted during the above period for the purpose of ascertaining excess/less drawal by the Second Party.

07. **QUANTITY OF WATER CONSUMED OR EXTRACTED:**

The Registers of meter reading referred to in the above-mentioned Clause- 04 or the assessed quantity of water mutually agreed upon by and between both the parties hereto or the average of the quantity of water extracted during the three months as aforesaid or computed by taking the difference between the direct recording and main meter shall be the prima facie evidence of the quantity of water extracted by 'the Second Party'.

08. **PROPRIETARY RIGHT OF METERS AND UPKEEPMENT:**

Meters as mentioned in the above-mentioned Clause -04 shall be the property of 'the Second Party' and 'the Second Party' shall be liable for the upkeepment of the meter and for carrying out test once a year or more to the satisfaction of the First Party about the accuracy of such meter/meters.

09. **ACCURACY OF METERS:**

In the event of any dispute or difference between 'the First Party' and the Second Party as to the sufficiency or accuracy or state of repair or condition of the said meter or as to the quantity of water extracted through such meter, such difference or dispute shall be referred to and determined by an Engineer to be appointed by both the parties hereto.

10. **BASIS OF ASSESSMENT IN ABSENCE OF METER:**

(a) It is accepted and agreed by the 'Second Party' that the total quantity of consumption of water for the month shall be computed by the First Party on the basis of allocation of water

Rakesh Rajan

P- 5/14

by First Party and the bills shall be raised on such quantity as referred to in Schedule-I & II. However, the Second Party is required to install and commission the meter(s) up to the satisfaction of the First Party for ascertaining excess/less drawal as referred to in clause 3. (a) & 3. (b) hereinabove.

(b) If at any time the meters installed for measurement of water extracted shall at any time, cease to register correctly or be removed for repair, calibration etc., then for the period until the said meters shall have been repaired replaced or otherwise adjusted as to register the quantity of water passing through it correctly, the quantity shall be computed as per proviso of clause 06 hereinabove. The First Party, however, shall be entitled to charge and 'the Second Party' shall be liable to pay for such quantity of water as mentioned in Schedule-II and the bills shall be continued to be raised by First Party based on the permitted quantity as mentioned hereinabove.

Notwithstanding the bills shall be raised as per provisions contained in preceding cl. 10. (a). The Second Party shall make every endeavor to get the meter repaired and installed to the satisfaction of the First Party within a period of 1(one) month.

11. BILLS & PAYMENTS:

(a) Bills & Tariff:

The price for supply of water shall be charged to the 'Second Party' in accordance with Schedule-I & the First Party's 'Schedule of Rates' as given in Schedule-II and other conditions in force from time to time, provided that any levy such as any Surcharge, GST/Sales Tax, or any another amount by whatever other name called known or made by the First Party, the state Government or any other competent authorities on quantity of water allocated to the 'the Second Party' under this agreement. shall be paid by 'the Second Party'.

(b) Security Deposit:

The First Party may require the Second Party to deposit a Security Amount Rs. 1,20,816/- equivalent to water charges for three calendar months, considering quantity allocated in KL as specified in Clause- 1(a) and given in the schedule –I annexed hereto and or as modified as per clause-13 here-in-under and as per the prevailing water rate mentioned in schedule of rates in Schedule-II (**The MPL has paid Security amount of Rs. 1,20,816/- on Dated 27.04.2023**). The Second Party shall have to pay altered security amount if the quantity of allocation is changed by First Party as per the terms of this agreement and as and when the water rates are revised and notified to the Second Party from time to time during the tenure of this agreement. In the event of termination of this agreement such security deposit shall be refunded after adjustment of dues, if any, to the Second Party without any interest thereon.

(c) Periodicity of Billing:

Bills will be raised to the Second Party monthly/quarterly based on allocation in KL by First Party or as decided by the First Party as the case may be. It will be the responsibility of Second Party to make the aforesaid payment within the due date without raising any dispute in this regard.

(d) Mode of payment:

The 'Second Party' shall pay the bill amount to the First Party's office at Kolkata by RTGS/Cheque/Demand Draft drawn on Kolkata Branch of any Nationalized Bank, payable to Chief Accounts Officer, DVC, Kolkata within 30 days from the date of issue of the bill. The license fee, however, is to be paid by the Second Party as per terms mentioned in Clause- 1 (b).

Provisional Billing for disputed bills:

In the case of any disputed bill(s) and or non-receipt/delayed receipt of bill, the Second Party shall collect the duplicate bill from the office of First Party and make the payment

Rakesh Ranjan

Sr. Divisional Engineer

P-6/14

immediately. However, Delay Payment Surcharge, if applicable, as mentioned here-in-under in clause 11. (f) shall have to be borne by the Second Party. In case of disputed bills, the Second Party shall continue to pay full amount as per the bill raised by the First Party. The necessary adjustment shall be done by the First Party on resolution of dispute and/or differences.

(e) **Delay Payment Surcharge:**

If 'the Second Party' fails to make the payment of any bill amount within the due date, the Second Party shall pay the surcharge of 2.0 % per month on the amount of the bill from the due date of payment to the date of receipt of such amount in First Party's office at Kolkata/in First Party's Account which shall be treated as date of payment. The rate of Delay Payment Surcharge is however liable to revision from such date as the First Party may decide with prior notice of one month in writing to the Second Party.

(f) **Default in payment:**

In the event any bill remaining unpaid for 60 days from the date of issue of the bill, the First Party shall give the Second Party **7(Seven)** days' clear notice in writing of its intention to discontinue the supply of water and on the expiry of such period if the payment has not been received, 'the First Party' may forthwith discontinue supply of water to the Second Party till the period the default continues. Such discontinuance of supply shall not be deemed as breach on the part of the First Party to comply with any of the terms of this Agreement and shall not relieve the Second Party of its obligations and liabilities under the Agreement.

(g) **Resolution of Dispute on Bill Amount:**

In the event of any dispute on the amount of the bill the Second Party shall submit the in details indicating the reason/reasons for such dispute and the aforesaid dispute/disputes normally shall be resolved by mutual discussion and/or mutual exchange of written documents between the Second Party and the First Party through authorized representative within **30 (thirty) days** from the date of receipt of such reference made by the Second Party to 'the First Party'.

12. **MODE OF SUPPLY UNDER NORMAL & ABNORMAL CONDITION:**

Save as provided herein clause 1(a)(i)(80KL) which, however, need not be continuous, throughout 24 hours, shall be available to 'the Second Party' provided that in case of draught or other unforeseen circumstances, force majeure or any other cause over which the First Party has no control, the First Party shall not be responsible for any diminution or discontinuance of supply on such occasions, but it shall restore the normal conditions of supply as soon as it reasonably can be done to the extent possible.

"The First Party" shall not be considered to be in default or in breach in supplying agreed quantity of Treated water due to causes beyond the control of the "The First Party" such as acts of God, Natural Calamities, Civil Wars, Fire, Draught, Riot and acts of unsurpassed power AND maintenance of WTP.

13. **VALIDITY PERIOD OF QUANTUM OF WATER ALLOCATION:**

Notwithstanding whatever is stated herein above, the allocated quantum of water for drawal by 'the Second Party' i.e. initial allocation of quantity (in MGD/Cusec/KL) by First Party shall remain valid for INITIAL AGREEMENT period of 5 **(five)** years.

Rakesh Rajan

14. **RULES & REGULATION:**

'The Second Party' agrees to conform to and abide by all rules and regulations made by the First Party including guidelines for water allocation set by First Party now in force

P-7/14

and/or which may from time to time be made by the First Party consistent with this agreement relating to the extraction of water from the First Party's sources within the statutory limit of the said Act.

Notwithstanding whatever is stated in Clause-13 above, the review committee for allocation of water shall have prerogative to review periodically to reflect and incorporate the changes which take place in the realm of Water Resource Management.

Notwithstanding that the First Party may not have acted on some previous breach, defaults or event of like nature on the part of the Second Party, it shall be lawful for the First Party to enforce the terms and conditions of these presents in the event of a subsequent breach, default or event of like nature in all matters related to withdrawal of Treated water by 'the Second Party'.

Any waiver by 'the First Party' of any breach of the terms and conditions of this agreement by the Second Party shall not constitute waiver of any subsequent breach of any other terms or conditions of this agreement.

15. **DISPUTE OR DIFFERENCE & ARBITRATION**:

Any dispute(s) or difference(s) arising out of or in connection with the agreement at any time between the 'First Party' and the 'Second Party' shall to the extent possible be settled amicably between the parties.

In the event of any dispute(s) or difference(s) whatsoever arising under the agreement or in connection therewith including any question relating to existence, meaning and interpretation of the agreement or any alleged breach thereof is not settled amicably between the Parties, the affected Party must promptly give the other Party written notice identifying and giving details of the dispute or difference. If the dispute is not amicably resolved within 30 (thirty) days of the delivery of the written request as provided hereabove, the dispute or difference may, at the option of either Party, be resolved through arbitration conducted by a sole arbitrator mutually appointed by the Parties in accordance with the Arbitration and Conciliation Act, 1996, as amended from time to time and any statutory enactment The decision/judgment of the Sole Arbitrator shall be final and binding on both the parties. The cost of Arbitration shall equally be borne by both the parties. The venue of Arbitration shall be at Kolkata.

All suits arising out of dispute(s) or difference(s) between the 'First Party' and the 'Second Party' are subject to jurisdiction of Court in the City of Kolkata.

16. **TENNURE OF AGREEMENT OR VALIDITY:**

This agreement shall subject as hereinbefore provided be and remain in force for a period of **5 (five)** years initially from the date of commencement of supply under this Agreement and thereafter shall continue uninterruptedly under the existing terms and conditions until determined by either Party after the expiration of the fifth or any subsequent year on giving **3 (Three) months'** prior notice in writing of such intention and at the expiration of such notice this Agreement shall absolutely cease and determine but without prejudice to the rights and remedies, if any, of either Party which may have accrued or arisen hereunder in the meantime and provided that the Second Party shall on giving the First Party **3 (three)** months' prior notice in writing of such intention be at liberty at any time after the expiration of the fifth or any subsequent year to terminate this Agreement by making payment of the charges equal to water charges for one year as per Schedule of Rates (Annexed as Schedule-II) in force at that time.

17. **TERMINATION:**

If 'the '**Second Party'** commits any breach of the terms and conditions of this agreement or if there is any default on the part of **'the Second Party'**, **'the First Party'** will be at liberty to terminate this agreement upon one months' notice to 'the

P-8/14

Second Party' without prejudice to the rights and remedies, if any, which may have accrued or arisen thereunder.

18. **REMARKS**

1) The license for land would be valid for the period of 11 (eleven) months only. The renewal of license may be allowed after every 11 months' subject to satisfactory performance and on written request by the Second Party as per terms & conditions prevailing at the time of renewal.
2) The license fee @₹12/- per sq. ft. for 11 (eleven) months to be realized for allotment of 14165.31 sq. ft. vacant land within Maithon Colony area in terms of OM No. No.Sectt./LA/Rent/2017/540 dated 29.09.2022 and Office order No. M-PL/HR/Genl-1/1773 dated 02.03.2023.
3) Applicable GST shall be paid by the Second Party in addition to the above license fee.
4) All payments shall be made to First Party in advance failing which delay payment surcharge @2% per month or part thereof shall be payable by the Second Party on the outstanding amount.

5) Other terms and conditions:

a) First Party reserves the right to revise the terms & conditions as well as other relevant issues as and when required.

b) After allotment of land to the Second Party on license to use basis, they shall start the necessary work within three months of allotment, otherwise the allotment is liable to be cancelled.

c) The consumption of electricity/ water, if necessary, will be on chargeable basis as per applicable rate of First Party. However, the Second Party will provide electric meter and cable and apply for connection of power from First Party at existing commercial rate.

d) The execution of work shall be done without hindering any traffic movement.

e) The Second Party shall be responsible for safety during construction

f) In case any accident occurs during and after the construction work or other any associated activities undertaken by Second Party, it shall be the sole responsibility of the Second Party and in case of injury, the compensation as calculated/ directed by the State Government Authorities shall be paid by Second Party to the victim or his/her heir, in accordance with the statutory provisions.

g) Second Party shall shift the infrastructure at their own cost in case the shifting is necessary for First Party / public utility purpose as and when instructed by First Party.

h) If any damage is caused to any existing structure of First Party during & after completion of this Project, it will have to be rehabilitated and/or constructed immediately by Second Party at their own cost.

i) Second Party will take all steps for protection of environment and ensure maintenance of ecosystem and will also take steps to control pollution caused on account of their interventions during and after execution of the Projects.

Rakesh Rajan

p- 9/14

IN WITNESS WHEREOF THE PARTIES TO THESE PRESENTS HAVE HERE UNTO PUT THEIR REPECTIVE HANDS AND SEALS EACH THE DAY AND YEAR FIRST ABOVE WRITTEN.

The Agreement along with Schedule of rates would come into effect on and from the date of commencement of water supply.

15/5/23

SIGNED, SEALED AND DELIVERED

FOR AND ON BEHALF OF

DAMODAR VALLEY CORPORATION

कार्यपालक निदेशक (सिविल) एवं परियोजना प्रधान
Executive Director (Civil) & Project Head
दा०धा०नि०, मैथन, धनबाद
Registered Office:

WITNESS

1.

2. Rakesh Ranjan

अधीक्षण अभियंता (अ०)
Superintending Engineer (C.)
जल प्रशुल्क कक्ष / Water Tariff Cell
प्रबंधक जलाशय प्रचालन कार्यालय
Off. of the Manager Reservoir Operation
दा०धा०नि० मैथन/D.V.C. Maithon

वरीय प्रमंडलीय अभियंता (अ०)
Sr. Divisional Engineer (C.)
जल प्रशुल्क कक्ष / Water Tariff Cell
प्रबंधक जलाशय प्रचालन कार्यालय
Off. of the Manager Reservoir Operation
दा०धा०नि० मैथन/D.V.C. Maithon

(Name & Address)

Chanjan

SIGNED AND DELIVERED

FOR AND ON BEHALF OF MPL

MAITHON POWER LIMITED
MAITHON

WITNESS

1. Shekhar Mishra

2. Shambhu Kumar

(Name & Address)

p-10/14

ANNEXURE - 'A'

SCHEDULE- I

[Referred to in Clause-1(a)]

Quantity of Water allocated by First Party for drawal by M/s MAITHON POWER LIMITED from DVC water treatment Plant at Maithon to Second party's Anandam Township: 80 KL/day

From day of ..... and ..... the date of commencement of water drawal: ---------- KL.

[N.B.: The quantity of Treated water allocation as revised by First Party from time to time as per the proviso of the agreement shall from an integral part of this agreement]

SCHEDULE- II

[Referred to in Clause-11]

SCHEDULE OF RATES

FOR

DOMESTIC WATER SUPPLY

Source Of Drawal	
	Rate per KL
WTP	Rs 16.78

Note: 1) The Water Supply Bills shall be raised on the basis of allocated quantity as for all the consumers with the above tariff.

N.B.: Revised rate will be applicable as and when notified by the First Party.

CHIEF ENGINEER
For and on behalf of
DAMODAR VALLEY CORPORATION

कार्यपालक निदेशक (सिविल) एवं परियोजना प्रधान
Executive Director (Civil) & Project Head
दा०घा०नि०, मैथन, धनबाद
DVC, Maithon

P- 11/14

DETAILS OF THE COMPANY

ANNEXURE - 'B'

A. DETAILS OF APPLICANT:

01.Name in Capital Letters	: Vijayant Ranjan
02.Designation	: Chief Executive Officer & Chief ER (Generation)
03.Relationship with Intending Consumer	:
04.Complete Postal Address	: Village Dambhui, PO: Barbendia, PS: Nirsa, District: Dhanbad 828205 Jharkhand
05.Telephone No.	:
06.FAX No.	:
07.E.Mail Address	: ranjanv@tatapower.com

B. DETAILS OF THE WATER CONSUMER:

01. Details of Registered Office:

Registered Office	**Postal Address: Corporate Centre, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400009**
	Telephone No. : 02267171232
	FAX No. :
	Email Address :

02. Details of Contact Person:

NAME: Supratik Mukherji	
Contact Person	**Postal Address:** Maithon Power Limited Village Dambhui, PO: Barbendia, PS: Nirsa, District: Dhanbad 828205 Jharkhand
	Telephone No. : 9234550659
	FAX No. :
	Email Address : supratik@tatapower.com

03. Complete Billing Address:

Billing Address	**Postal Address:** Chief Financial Officer, Maithon Power Limited Village Dambhui, PO: Barbendia, PS: Nirsa, District: Dhanbad 828205 Jharkhand
	Telephone No. :
	FAX No. :
	Email Address : mpl@tatapower.com

p. 12/14

C. DETAILS OF PROJECT/UNIT/PUMP LOCATION ETC.:

01.	Name of the Village/Place	**:WTP Maithon**
02.	Plot no.	:
03.	Dag No.	:
04.	Mouza Name & No.	:
05.	J.L. No.	:
06.	Police Station Name & No.	:
07.	Name of Post Office with PIN	:
08.	District	:
09.	Postal Address of the Plant/ Unit site	:
10.	Point of Water Withdrawal/	
	Telephone No.	:
	FAX No.	:
	E.Mail Address	:
11.	Location of Water Treatment Plant	
12.	Location of Pumping Station	
13.	Number of pumps installed	
14.	Capacity of pumps	
15.	Location of water meter	
16.	Location of Intake point	
17.	Quantum of water withdrawal in KL/Day (approved by First Party)	**80 KL PER DAY**
18.	Date of Commencement of water withdrawal from pumping station (to be filled up later)	

D. DETAILS OF TREATED WATER USAGE:

(Attach Separate sheet, if necessary, giving details):

(1) .....DOMESTIC.....

Ranjan ✓

.....

Signature with full name of person signing the Agreement & Stamp/ Seal of Company

P- 13/14

DAMODAR VALLEY CORPORATION
CHIEF ENGINEER (CIVIL)
P.O-MAITHON DAM,
DHANBAD, JHARKHAND -828207
Tel No. (06540) 279402/279683/279445; Fax No. 06540-274313

ANNEXURES

ENCLOSURES FORMING THE PART OF THE AGREEMENT: -

Annexure (1) to (4) mentioned below and annexed hereto shall form an integral part of this Agreement: -

(1) ANNEXURE-'A'	:	Schedule -I & Schedule -II
(2) ANNEXURE-'B'	:	Detail of the Company
(3) ANNEXURE-'C'	:	1) Letter No. MPL/FY18/1007-011 dated 14.07.2017 2) Letter No. MPL/FY19/1806-007 dated 07.06.2018 3) Letter No. MPL/FY19/1808-100 dated 25.08.2018 4) Letter No. MPL/FY19/1811-31 dated 27.11.2018 5) Letter No. MPL/FY19/1901-020 dated 12.01.2019 6) Letter No. MPL/FY20/2009-027 dated 24.04.2019 of Maithon Power Limited 7) MRO/Water Management/197 dated 18.04.2023 8)MRO/WATER TARIFF CELL/320 dated 21.04.2023 9) OM No. No.Sectt./LA/Rent/2017/540 dated 29.09.2022 10)Office order No.M-PL/HR/Genl-1/1773 dated 02.03.2023.
(4) ANNEXURE-'D'	:	Letter No AS/PS/F-14/1674 dated 27.04.2022 of Additional Secretary DVC

CHIEF ENGINEER
For and on behalf of
DAMODAR VALLEY CORPORATION

Executive Director (Civil) & Project Head
दा०घा०नि०, मैथन, धनबाद
DVC, Maithon

MAITHON POWER LIMITED

MPL/FY 18/ 1007-011

July 14, 2017

The Project Head
Damodar Valley Corporation
Combined Building
Maithon- 828207
Dist: Dhanbad, JH ,

Sub: Request for provision of Direct Drinking Water Line Connection to MPL Township

Respected Sir,

You are kindly aware that Maithon Power Limited (MPL) has constructed its employee township "Anandam" in Area No. 6 of the DVC Colony. The said township is consisting of 96 numbers of residential units. Employees of MPL are residing in the above accommodation along with their family members. The above township have been constructed in 2012 and ever since the employees and families are residing there. The total water requirement of this township is being temporarily met through underground boring water. In view of the Government's present guideline we would like to put up our application for a permanent water supply line from the DVC's water treatment system. We are ready to pay the applicable charges of water as per your standing commercial rates / allied terms and conditions.

This application may please be treated as our formal application for supply of potable water supply to employee-township.

Thanking you,

Yours faithfully,

For Maithon Power Limited

M Rahman 14/7/2017

M Siddiqur Rahman
Head- Project Planning & Coordination

MAITHON POWER LIMITED

MPL/FY19/1806007

Date: 07-06-2018

To,
The Project Head,
Damodar Valley Corporation,
Combined Building,
Maithon - 828207.
Dist. Dhanbad, JH.

Subject: Request for provision of Direct Drinking Water Line Connection to MPL Township.

Dear Sir,

Please refer to our earlier letter in this subject with reference number MPL / FY 18 / 1007 - 011. In this context we would like to draw your kind attention to the following facts:

You are kindly aware that Maithon Power Limited (MPL) has constructed its employee township "Anandam" in area no. 6 of the DVC colony. The said township is consisting of 96 numbers of residential units. Employees of MPL are residing in the above accommodation along with their family members. The above township have been constructed in 2012 and ever since the employees and families are residing there. The total water requirement of this township is being temporarily met through underground boring water. In view of the Government's present guideline we like to put up our application for a permanent water supply line from the DVC's water treatment system. We are ready to pay the applicable charges of water as per your standing commercial rates/allied terms and conditions.

This application may please be treated as our formal application for supply of potable water supply to employee-township

Thanking you.

Yours Truly,

For Maithon Power Limited,

(M S Rahman)

Head - Project Planning & Coordination.

MPL

Ref: MPL/FY19/ 18 08 100

Date: 25th August, 2018

The Deputy Chief Engineer (Civil),/ Exec. Eng. (civil) ACD
Damodar Valley Corporation,
Combined Building, P.O. Maithon Dam,
District: - Dhanbad, Jharkhand.

OFFICE OF THE S.E. CIRCLE-II D.V.C. MAITHON
No. 309
Date 25.8.18

Sub: Submission of Engineering note and drawing for Water supply scheme for MPL Township from water treatment plant, DVC.

Ref: 1. MPL/FY18 /17 08 05 Date: - 31st August 2017

2. MPL/FY18 /10 07 011 Date: - 14th July 2017

3. MPL/FY19/18 06 007 Date: - 7th June 2018

Dear Sir,

With reference to the above letters we are hereby sending the following documents for Water supply scheme for MPL Township from water treatment plant at millennium park, DVC:

- Water supply scheme for MPL Township from DVC water treatment plant.
- Proposed pump house location and pipe routing
- Typical detail of support for drinking water pipeline

Thanking you,

Yours truly,

For Maithon Power Limited,

25/08/2018

M S Rahman

Head- Project

25.08.18

MPL
MAITHON POWER LIMITED

Ref: MPL/FY19/18 11 31

Date: 27.11.2018

To
Executive Engineer (Civil) ACD,
Damodar Valley Corporation,
Maithon, Dhanbad, Jharkhand - 828207

Ref: 1. MPL/FY 19/18 08 100 Dated 25th August 2018.
2. MPL/FY 19/18 06 007 Dated 7th June 2018.
3. MPL/FY 18/17 08 05 Dated 31st August 2017.
4. MPL/FY 18/17 07 11 Dated 14th July 2017.

Dear Sir,

Sub: Meeting Request on Completion of joint site inspection for water supply scheme for MPL Township from Water treatment plant, DVC.

With reference to the above correspondence and on completion of joint site inspection of MPL & DVC team we are request you for a meeting on Wednesday, 28th November 2018.

May kindly confirm.

We have already submitted necessary drawing, documents and technical specification etc.

Thanking you

Yours truly
For Maithon Power Limited

27/11/2018

(M S Rahman)
Head - Project, Planning & Coordination.

MPL
MAITHON POWER LIMITED

Ref: MPL/FY 19/1901 020 Date: 12.01.2019

To
Deputy Chief Engineer (Civil)
Damodar Valley Corporation,
Maithon, Dhanbad, Jharkhand - 828207

Ref: 1. Meeting held in the chamber of Deputy Chief Engineer Civil on 28th November 2018
2. Earlier communications on the Subject topic
a) MPL/FY 19/18 08 100 Dated 25th August 2018.
b) MPL/FY 19/18 06 007 Dated 7th June 2018.
c) MPL/FY 18/17 08 05 Dated 31st August 2017.
d) MPL/FY 18/17 07 11 Dated 14th July 2017.

Dear Sir,

Sub: MPL's Request for providing drinking water connection to Employee Township from DVC water treatment plant.

We refer to the above correspondence in the subject issue and latest meeting held in the office of Dy. CE Civil, DVC Maithon attended by MPL team on 28th November 2018.
In this regard we would further inform you that queries raised from DVC side like:

- All the construction related to pump house and pipe laying etc. shall be in the scope of MPL.
- Daily operation and maintenance shall be in the scope of MPL and necessary gate pass to be provided by DVC.
- In case of any damage in existing system the same will be repaired by MPL.
- Total land area involved in this case will be used 1316 m² (1300 meter length and 1 meter width for pipe line & Pump House area 4m X 4m) as ROW for laying of pipe.
- Specification of pumps will be 15 KW 3 phase horizontal centrifugal type with necessary piping, footvalve and priming arrangement etc.

In view of all the above submission we request once again to cordially supporting us in providing the treated water supply to our Township. We once again agree to pay the standard commercial charges of water prevailing in DVC.

Thanking you

Yours truly
For Maithon Power Limited

16/01/2019

(M S Rahman)
Head - Project, Planning & Coordination.

MPL
MAITHON POWER LIMITED

Ref: MPL/FY 20/2009 027

Date: 24.09.2019

To
CE - I (Electrical), CSO & Head of Projects
Damodar Valley Corporation,
Maithon, Dhanbad, Jharkhand - 828207.

Ref: 1. Meeting held in the chamber of Deputy Chief Engineer Civil on 28th November 2018
2. Earlier communications on the Subject topic
a) MPL/FY 19/1901 020 Dated 12th January 2019
b) MPL/FY 19/18 08 100 Dated 25th August 2018.
c) MPL/FY 19/18 06 007 Dated 7th June 2018.
d) MPL/FY 18/17 08 05 Dated 31st August 2017.
e) MPL/FY 18/17 07 11 Dated 14th July 2017.

Dear Sir,

Subject: MPL's Request for providing drinking water connection to Employee Township from DVC water treatment plant.

We refer to the above correspondence in the subject issue and latest meeting held in the office of Dy. CE Civil, DVC Maithon attended by MPL team on 28th November 2018.

In this regard we would further inform you the following:

- MPL had requested DVC for the supply of drinking water connection at its Township in area no 6 of DVC Colony.
- A detailed project report was prepared and submitted explaining the above project which was found acceptable by the DVC authority.
- MPL had requested DVC to inform about the all-inclusive commercial rates for supply of potable drinking water.
- MPL had attended a number of meetings at various levels of DVC Maithon for availing this facility on payment basis. However MPL is yet to receive any updates from DVC on the above request.

In view of all the above submission we request once again to support us in providing the treated water supply to our Township. We once again agree to pay the standard commercial charges of water prevailing in DVC.

Thanking you

Yours truly
For Maithon Power Limited

24/09/2019

(M S Rahman)
Head - Project, Planning & Coordination.

ANNEXURE P/21

Press Information Bureau
Government of India
Ministry of Water Resources

31-July-2014 15:19 IST

National Water Policy

The objective of the National Water Policy, 2012 is to assess the existing situation and to propose a framework for a plan of action with a unified national perspective. In order to achieve the objective of the Policy, a number of recommendations have been made therein for conservation, development and improved management of water resources of the country. The salient features of the National Water Policy, 2012 are annexed. Implementation of these recommendations involves coordinated and continuing efforts on the part of the concerned Ministries / Departments of Central Government and the State Governments. Copies of the National Water Policy, 2012 have been forwarded to all State Governments / Union Territories and the concerned Ministries / Departments of the Central Government for appropriate action.

The salient features of national water policy (2012) are as follows:

1. Emphasis on the need for a national water framework law, comprehensive legislation for optimum development of inter-State rivers and river valleys.

2. Water, after meeting the pre-emptive needs for safe drinking water and sanitation, achieving food security, supporting poor people dependent on agriculture for their livelihood and high priority allocation for minimum eco-system needs, be treated as economic good so as to promote its conservation and efficient use.

3. Ecological needs of the river should be determined recognizing that river flows are characterized by low or no flows, small floods (freshets), large floods and flow variability and should accommodate development needs. A portion of river flows should be kept aside to meet ecological needs ensuring that the proportional low and high flow releases correspond in time closely to the natural flow regime.

4. Adaptation strategies in view of climate change for designing and management of water resources structures and review of acceptability criteria has been emphasized.

5. A system to evolve benchmarks for water uses for different purposes, i.e., water footprints, and water auditing be developed to ensure efficient use of water. Project financing has been suggested as a tool to incentivize efficient & economic use of water.

6. Setting up of Water Regulatory Authority has been recommended. Incentivization of recycle and re-use has been recommended.

7. Water Users Associations should be given statutory powers to collect and retain a portion of water charges, manage the volumetric quantum of water allotted to them and maintain the distribution system in their jurisdiction.

8. Removal of large disparity in stipulations for water supply in urban areas and in rural areas has been recommended.

9. Water resources projects and services should be managed with community participation. Wherever the State Governments or local governing bodies so decide, the private sector can be encouraged to become a service provider in public private partnership model to meet agreed terms of service delivery, including penalties for failure.

10. Adequate grants to the States to update technology, design practices, planning and management practices, preparation of annual water balances and accounts for the site and basin, preparation of hydrologic balances for water systems, and benchmarking and performance evaluation etc.

This was stated by Union Minister of State for Water Resources, River Development and Ganga Rejuvenation Shri Santosh Kumar Gangwar in a written reply in Lok Sabha today.

Samir/jk



ANNEXURE P/22A

Minutes of meeting between MPL and BHEL, Trichy on 11/11/16 and 12/11/16 regarding the issues of alarm temperature setting (Div. Panel, LTSH, Superheater & Reheater zones), overheating failures/inspection findings and way forward to ensure reliability and efficiency of the Boilers

Members Present

MPL	**BHEL Trichy**
Mr. S H Pandey	Mr. S Chandrasekaran
Mr. Rohit Shukla	Mr. S Thiagarajan
	Mr. T Balamurugan Murali
	Mr. Manish Kumar Raj
	Mr. D Balaji
	Mr. A Niruthiya Priyan

a. MPL shared the details of two failures of Reheater due to overheating (Apr'16 & Sept'16), Inspection findings of high internal oxide scale on tube 1 (T22 section) in Reheater rear on Panels towards Right hand side of the boiler and temperature trends of LTSH, Div. Panel, RH and SH tubes with BHEL Trichy.

b. MPL expressed their concern that findings of high internal oxide scale thickness in such a short span of time i.e. 32000-36000 hrs is something abnormal and matter of serious concern for reliability of Reheater tubes.

c. MPL shared the temperature profile findings and stated that temperatures are comparatively higher on Right hand side of the boiler. Secondly, the difference between one Thermocouple tag to another tag is higher in the range of 50-80 deg C for Div. Panel, PSH and LTSH zones. It was expressed that for Reheater the difference between the tags was very high i.e. around 115 deg C.

BHEL responded that within tubes of the same assembly difference is expected, however for same tube across Panels only slight variation is expected.

MPL said that the difference of >100 deg C in Reheater is for same tube i.e. tube 3 considered across Panels. Hence, the operating data shows different results with what had been anticipated in design. BHEL responded that they will get back regarding this in two weeks time.

d. Regarding the alarm setting Reheater, MPL stated that the setting of Alarm of 631 deg C is very high for Reheater zones where the MOC is T91 in the penthouse as well in some section of Outlet coils in the fired zone. MPL also shared that T91 tubes are restricted to a max of 610

12/11/16 12/11/16 12/11/16 12.11.16 (S. THIAGARAJAN)

12/11/16 SHPandey

deg C purely based on oxidation strength point of view even though the allowable temperature could be higher based on mechanical strength. This is also very well elaborated in various literatures like EPRI. MPL stated that limiting temperature should have been taken as 610 deg C while setting alarm considering long term operation and reliability of the tubes.

BHEL stated that as per BHEL's philosophy T91 is restricted to 649 deg C and T22 to a temperature of 593 deg C based on oxidation point of view.

e. MPL shared their methodology of working out proposed alarm temperatures for different zones in which a delta of 30 deg C between heated and unheated part for convective zone and 50 deg C for radiant zone and Thermocouple error of 1% has been considered. MPL requested BHEL for their views on this methodology.

BHEL responded that the alarm value is derived based on a proprietary calculations done through software. According to this max metal temperature considering all imbalances, all operating conditions etc. is arrived at and then alarm is derived which is different for different tubes. The value of alarm for the hottest tube amongst all tubes considering acceptable temperatures in different MOC's is set as the alarm. This is the practice followed by BHEL for all the boilers including 500MW/600MW/OTSC Boilers.

MPL insisted that still there would be a delta temperature difference between the heated and unheated part, hence alarms should have been set in such a way that at alarm value in penthouse, the tube in the heated section would be approaching the max allowable temp for that material with some margin in hand. Hence, MPL requested BHEL to re-look at the alarms once again. BHEL replied that alarm temperature can be set at lower value if required.

f. MPL also raised a query regarding zones like Div. Panel and Platen SH which have T22 tubes in the penthouse that whether T22 max allowable temp. limits based on mechanical strength or oxidation temp. whichever is lower would govern the alarm limits or not?

BHEL responded that based on mechanical strength it would govern, however oxidation strength is not considered as it is in the non-fired zone.

MPL insisted that operating above oxidation limits even in unfired zones will lead to rapid oxide scale formation and ultimately wall loss.

g. MPL put up some points for discussion (mail dtd. 11/11/16) and response from BHEL based on the temperature patterns, failures and inspection findings to which BHEL responded to revert back in 3 weeks time. Secondly, BHEL will revert on observations on MPL presentation.

h. MPL requested BHEL for inputs regarding the root cause of failures, long term solution like tube replacement with a higher metallurgy, setting of alarm values and any other action points which would ensure reliability of the Units in the long run.

12/11/16.

12/11/16

12/11/16

12.11.16

(S.THIAGARAJAN)

j. MPL will send 4 no. cut tube samples of U#2, cut during outage, to BHEL for verifying any whitish deposit causing failure in Reheater Inlet. BHEL stated that they have experienced some whitish deposit causing failure due to overheating in some other plant.

k. MPL requested BHEL regarding their views on inspection checks to be done on failed tube Panel 58 tube 11 in Inlet and Panel 58 tube 1 in outlet as there is a high possibility that section of tube not replaced might also have run hot and faced some deterioration. BHEL responded inspection of non-replaced part to be done for replacement decision.

l. MPL requested revised operating guideline as recommendation in view of details shared of current operating scenario and coal fired for averting overheating failures.

m. In view of current observations based on operation and current coal firing (within the range of design limits) , BHEL recommended replacement of T22 tube by T91 for tube 1 for all Panels in Reheater rear as indicated in the sketch.

n. BHEL recommended closing of all SADC dampers of non-working coal compartments assuming they are always 5% open in virtue of stoppers. Windbox to furnace dP of 80-100mm should be maintained at 80-100% load conditions.

o. BHEL stated that if alarms are coming in steady state, it is by virtue of coal properties. In view of this coal properties shall be forwarded to BHEL for further review and analysis.

p. Minimum thickness required for tubes of different sections shall be shared by BHEL as maintenance guideline within 10 days.

q. BHEL recommended to share operating combination (each data TMCR, 525MW, 80%, 60% load, lowest load operated with top mill for atleast 4 hrs steady state load, 5 snapshots) for deciding additional thermocouples on Reheater.

r. BHEL will revert on delta temp difference between heated and un-heated part for hottest tube of different zones (LTSH, Div Panel, PSH and RH). BHEL will revert back in 3 weeks

12/11/16.

12/11/16

12/11/16.

12/11/16.

12.11.16

(S. THIAGARAJAN)

MINUTES OF MEETING BETWEEN MPL AND BHEL, TRICHY ON 13-14TH JUNE'18 REGARDING REHEATER TUBE FAILURES & INSPECTION FINDINGS FOR ENSURING RELIABILITY OF BOILER

Members Present

MPL	BHEL
Mr. S H Pandey	Mr. P S Biruli
Mr. Rohit Shukla	Mr. D Chattopadhyay
	Mr. S Thiagarajan
	Mr. Pankaj Yadav
	Mr. Sunil Kumar
	Mr. Niruthiya Priyan

a. MPL presented the failure history, inspection findings of Re-heater zone, economiser and LTSH tube failures along with the operational data and details of coal fired to M/s. BHEL.

b. BHEL stated that major root cause resulting in overheating is delayed combustion on account of deviations in Coal Characteristics towards the worst side of the designed coal resulting in temperature excursions during start-up and load variation. During discussions the following measures were suggested by BHEL for increased reliability of the Boiler:

Operational measures

- Before planned transitions of load/mill changeover, spray on RHS to be given in Re-heater and spray on LHS to be given on Final Superheater. Final Superheater has criss-cross arrangement and spray on LHS in Final Superheater will reduce temperature on RHS of Final Superheater. This was suggested to decrease heat pickup in Reheater on RHS.
- Windbox DP should be maintained at 70mmwc. Revised curve for DP will be furnished by BHEL.
- Commissioning of Furnace temperature probe.
- Differential biasing of burner tilt between LHS and RHS.

Corrective measures:

- Acromat Thermocouples to be installed on 2-3 tubes of CRH preferably tube 2 or 3 on RHS for monitoring of metal temp. during start-ups and load variations.

Acromat details were furnished by BHEL. Measurement of same tube should be made available in penthouse at HRH outlet.

- Up-gradation of HRH from T22/T91 to SS347H as recommended by BHEL earlier. Priority wise 23 Panels on RHS to be considered first.
- A brief guideline for Tube plugging to increase flow is also under review by M/s BHEL. This shall be further studied for further recommendation, particularly for tubes running hot/ above alarm temperature. M/s BHEL shall revert back by 25th June'18.
- CRH tubes on RHS from tube 2 to 6 (counting from front) to be checked for Internal oxide scale measurements on upstream and downstream of CRH front and rear bend respectively. The bottom section of CRH, with a similar Priority order wise, 23 Panels on RHS to be considered for replacement and upgradation using SS347H material tubes, as this impact is also visible as part of affected sections.
- MPL presented the failure history, inspection findings for the Economiser banks, and LTSH Tubes. BHEL stated that major root cause resulting in erosion in LTSH and Economiser banks also on account of Coal Characteristics and properties. Since MPL is required to continually required to operate with the coal properties having higher ash content i.e. towards worst side of the designed coal, as per availability in the local region, additional care may be exercised to ensure replacement of above economiser and LTSH sections, at least once in next 4 years, followed by scheduled periodic maintenance to maintain the safety and reliability of boiler operation for plant generation.
- Over a period within 10 years, and plant approaching half-life period of design operation, plant will also be required to take up extensive replacement of internals for crushers, Coal mill internals and gear box including replacement of Burner assemblies in a phased manner of next 4 years' time.

In case of MPL Plant operating with varying load demand, as per grid demand, MPL, is advised to take help of our PS-SSBG group for requirement of flexibilising of Maithon plant for best basket of solutions mitigating the operational issues for flexible plant operations.

MPL

BHEL

ANNEXURE P/23A

Sl no	Leakage date	Location	Rectify date	Total working day's	Area effected
1	22.11.2014	ESP#2 near(ESH-61)	27.11.2014	05 day's	All ESP#2 area
2	17.08.2015	ESP#1 hopper area near (ESH-52)	30.08.2015	13 day's	All ESP#1 and ESP#2 area
3	18.12.2015	chlorine plant front side	19.12.2015	01 day	ETP,ChlorineCWPH,Canteen, Store,GT#1
4	17.06.2016	ESP#2 near(ESH-61)	19.06.2016	02 day	All ESP#2 area
5	26.06.2016	CHP (MR#2) near DV no -03	28.06.2016	02day	ER#1 to Track hopper and Staiker reclaimer
6	10.08.2016	MR#01 back side near DV no- 01	13.08.2016	03 day's	Track hopper coal fidding side
7	19.08.2016	JNT 01&02 middle side	19.09.2016	30 day's	ESP#1 & 2,Boiler#1 & 2 and JNT#1 to JNT#4A
8	01.09.2016	MR#2 near DV no-04 (CHP)	02.09.2016	01 day	ER#1 to Track hopper and Staiker reclaimer
9	08.09.2016	H2 plant back side near first turn	17.10.2016	40 day's	Only two isolation valve isolate
10	10.10.2016	ER#3 near conveyor belt in side	12.10.2016	02day	ER#1 to Track hopper and Staiker reclaimer
11	17.10.2016	fule and oil area near gate	30.10.17	13 day	All FO area
12	18.10.2016	MR#2 near DV no-04 (CHP)	28.10.17	10 day	ER#1 to Track hopper and Staiker reclaimer
13	19.10.2016	ESP Hopper area near booster P.H.	02.11.17	14 day	All ESP#1 and ESP#2 area
14	20.02.17	Near ESH-2 fire pump house	24.02.17	4 day	All pump stop
15	16.02.17	ESP#1 near chemni	22.02.17	6 day	All ESP#1 and ESP#2 area
16	22.08.17	Near ER#2	02.09.17	11 day	ESP#1 & 2,Boiler#1 & 2 and JNT#1 to JNT#4A
17	18.09.17	Track hopper	30.09.17	12 day	ER#1 to Track hopper and Staiker reclaimer
18	13.11.17	Near ESH-2 fire pump house	28.11.17	15 day	All pump stop
19	25.07.18	Near Boiler#1 area and Booster pump	31.07.18	6 days	ESP#1 & 2,Boiler#1 & 2 and JNT#1 to JNT#4A
20	05.09.18	MR#1 coal feeding side	08.09.18	3 days	Track hopper coal fidding side
21	31.08.18	HP area Beb-3 monitor and Hydrant lir	01.09.18	1 day	Only Bed -3 line
22	29.08.18	Boiler#1 Near PA Fan 1#A	25.09.18	28 days	ESP#1 & 2,Boiler#1 & 2 and JNT#1 to JNT#4A
23	09.09.18	ESP#2 area Near ID fan 1#B	02.10.18	23 days	ESP#2 area
24	17.09.18	Near Cooling Towar#1	03.11.18	47 day	ETP,ChlorineCWPH,Canteen, Store,GT#1
25	23.11.18	Bed no-3 near Staiker reclaimer	24.11.18	1 day	Staiker reclaimer abd Bed-3



26	07.12.18	DM plant cornner side near ESH-10	20.12.18	13 day	Chlorine plant,MPL store ,Technical Building,Mpl canteen and ZLD plant
27	21.12.18	Track Hopper near DV-2	22.12.18	1 day	Track Hopper
28	22.12.18	Bed -3	23.12.18	1 day	Staiker reclaimer
29	18.02.19	Coal mile 1E nera DV-41	20.02.19	2 day	Boiler#1 & 2 Booster Line
30	27.02.19	Near booster pump	07.03.19	8 day	Only Booster pump line
31	13.03.19	Near FO area unloding point	14.03.19	1 day	Fo area
32	04.04.19	Track hopper near DV-2	12.04.19	8 day	Track Hopper
33	20.05.19	ESP#1 near water monitor-10	28.05.19	3 day	All ESP #1 area.
34	01.06.19	ESP#1 near ESH-55	02.06.19	1 day	All ESP #1 area.
35	10.10.19	Chlorine Plant	12.10.19	1 day	Chlorine Plant
36	13.10.19	Near Chiller plant	31.10.19	18 day	Boiler#1 and TG#1
37	15.11.19	RO Plant	27.02.2020	104 day	Only lekage line
38	30.11.19	ESP 2	08.01.2020	39 day	ESP#1 & 2 area.
39	04.12.19	Boiler 1 near lift	24.01.2020	51 day	All booster line boiler#1 & 2.
40	15.11.19	Staiker reclaimer	12.12.19	27 day	Staiker reclaimer
41	15.02.2020	Track hopper	24.02.2020	9 day	Track hopper
42	12.03.20	FOPH Unloading Point	17.03.20	5 day	FO Area

43	09.06.20	Staiker reclaimer	10.06.20	1 day	Staiker reclaimer
44	16.06.20	Chlorine Plant	20.06.20	1 day	Chlorine plabt and switch gera room
45	10.07.20	ESP#1	12.07.20	1 day	ESP#1 area.
46	19.07.20	Chiller plant	26.08.20	1 day	Only booster line
48	29.07.20	PA fan# 1A	01.08.20	1 day	ESP# 1 & 2 area
49	15.10.20	Near crusher house	18.10.20	1 day	ER#1 to track hopper
50	15.11.20	Boiler#2 near Mill#A	06.01.21	1 day	Boiler# 1 & 2 booster line
51	13.02.21	Between ESP#1 & ESP#2	23.02.21	1 day	ESP#2 area
52	29.03.2021	C.W.P.H	02.04.2021	1 day	All pump stop at 8:25 AM to 14:30 PM
53	28.04.2021	Bed-3	30.04.2021	1 day	Staiker reclaimer
54	28.06.2021	ESP#1 near isolation valve	09.07.2021	1 day	ESP#1 area.
55	26.07.2021	ESP#2 near Pass-A	29.07.2021	1 day	ESP#2 area.
56	30.07.2021	Coal rejection area	31.07.2021	1 day	ESP# 1 & ESP# 2 area.
57	16.11.2021	Near FOPH	24.11.2021	1 day	FO area
58	20.01.2022	ESP#2 near ID fan#2A	25.01.2022	1 day	ESP #2 area
59	01.06.2022	DM plant near HCL tank	03.06.2022	1 day	All plant due to all pump stop at 9:20AM to 14 PM

60	04.07.2022	Near clarify water pump house	12.07.2022	1 day	All pump stop at 9:00 AM to 13:48 PM due to under ground lekage arresting work done near fire pump hose
61	29.04.2023	Track hopper	01.05.2023	1 day	Track hopper
62	30.04.2023	DM plant	03.05.2023	1 day	All pump stop at 9:30 AM to 13:15 PM due to under ground lekage arresting work done near DM plant
63	03.06.2023	Bed-5	06.06.2023	1 day	Staiker reclaimer
64	18.06.2023	Near fire pump house	25.06.2023	1 day	All pump stop at 9:00 Am to 12:50 PM due underground leakage work near fire pump house
65	20.06.2023	Staiker reclaimer	25.06.2023	1 day	Staiker reclaimer
66	04.09.23	FO area	05.09.23	1 day	FO area
67	21.10.23	AHP backside(Way to Chlorine turning)	22.10.23	2 day	ETP,Chlorine ,CWPH,Canteen, Store,GT#1
68	6.11.23	Track Hopper (MR#2)	11.11.23	4 days	Track Hopper
69	20.11.23	GT#2	22.11.23	2 days	GT#2 area.
70	24.11.23	ER#1 Entry Gate	28.11.23	3 days	ER#1 area

ANNEXURE P/23B

CONFIDENTIAL REPORT

REPORT

OF

SAFETY AUDIT

CONDUCTED AT

MPL
MAITHON POWER LIMITED

MAITHON POWER LIMITED

(A JOINT VENTURE COMPANY OF TATA POWER & DVC)

DHANBAD, JHARKHAND

16th – 19th MARCH 2021

BY

NATIONAL SAFETY COUNCIL

98-A, Sector 15, Institutional Area,
CBD Belapur, Navi Mumbai-400 614
Tel. 022-27579924/5/6/7, Fax: 022-27577351,
Email: safetyaudit@nsc.org.in, Website: www.nsc.org.in

ACKNOWLEDGEMENT

The National Safety Council would like to thank the Management of Maithon Power Limited, Dhanbad, Jharkhand in general, and Shri Vijay V. Namjoshi, Chief Generation & Occupier and Shri Ramesh Jha, Chief Executive Officer & Factory Manager in particular, for inviting and providing excellent co-operation to the team in carrying out the Safety Audit from 16th – 19th March, 2021.

The excellent coordination by Shri Abhijit Pandey, Lead Engineer – Safety under guidance of Shri A. K, Manna, Safety Head and Senior executives from all departments immensely helped the audit team in completing the safety audit within the time available. The audit team would like to thank all of them.

The courtesy and hospitality extended to the audit team by the Management of Maithon Power Limited, Dhanbad during the field visit for the audit is sincerely acknowledged.

- National Safety Council

CONTENTS

Sr. No.	TITLE	PAGE NO.
PART – 1	**INTRODUCTION**	**1**
1.1	The Background	1
1.2	About the Organisation	1
1.3	Scope of Work	2
1.4	The Objectives	3
1.5	Methodology	3
1.6	Opening Meeting	3
1.7	Study of Documents & Records	4
1.8	Departments / Sites Visited	4
1.9	Concluding Meeting	5
1.10	Audit Report	5
1.11	Disclaimer	5
PART – 2	**EXECUTIVE SUMMARY**	**6**
PART – 3	**SAFETY AND HEALTH MANAGEMENT SYSTEM**	**10**
3.1	Health & Safety Policy	10
3.2	Safety Organization	11
3.3	Safety Committee	11
3.4	Safety Inspection	12
3.5	Safety Audits	13
3.6	Accident Reporting, Recording, Investigation & Analysis	13
3.7	Safety Education & Training	15
3.8	Safety Communication / Motivation / Promotion	16
3.9	Hazard Identification & Risk Assessment	19
3.10	Safety Manual	19
3.11	Performance Appraisal System	19
3.12	Safety Budget	19
3.13	Safety Library	20
3.14	Contractor Safety System	20
3.15	First Aid & Medical	21
3.16	Occupational Health Center (OHC)	22

Sr. No.	TITLE	PAGE NO.
3.17	Pre-Employment and Periodical Medical Examination	23
3.18	Compliance with Statutory requirements	23
3.19	Health and Safety Improvement Plan and Targets	25
PART - 4	**CHEMICAL HAZARDS AND THEIR CONTROL MEASURES**	**26**
4.1	Storage & Handling of Hazardous Chemical	26
4.2	Material Safety Data Sheet (MSDS)	27
4.3	Colour Code in Pipelines	27
4.4	Laboratory Safety	28
4.5	Transport Safety and Training to Driver	28
PART – 5	**PHYSICAL & MECHANICAL HAZARDS AND THEIR CONTROL MEASURES**	**30**
5.1	Testing & Examination of Pressure Vessels/Plants	30
5.2	Testing & Examination of Lifting Machines & Tackles	30
5.3	Manual and Mechanical Material Handling	32
5.4	Guarding of Machines and Dangerous Areas	33
5.5	Storage and Handling of Gas Cylinders	34
5.6	Means of access, Platforms & Railings	35
5.7	Ventilation, Illumination, and Noise	35
5.8	Preventive & Breakdown Maintenance System	37
5.9	Work Permit System	37
5.10	Safe Operating Procedures	38
5.11	Management of Change, New Equipment Review/Inspection	38
5.12	Monitoring of Work Place & Stack Emission (Treatment & Disposal of Wastes & Effluents)	39
5.13	Personal Protective Equipment's	40
PART - 6	**FIRE PREVENTION, PROTECTION AND MITIGATION**	**41**
6.1	Fire Hazard Occupancy	41
6.2	Organizational Set up for Fire Fighting	41
6.3	Fire Order/Notice	41
6.4	Fire Tender	42

Sr. No.	TITLE	PAGE NO.
6.5	Fire Preventive Measures	42
6.6	Fire Inspection	46
6.7	Fire Incident Reporting System	47
6.8	Fire Fighting Training	47
6.9	Fire Detection and Alarm System	47
6.10	Portable Fire Extinguishers	48
6.11	Fire Water and Hydrant System	49
6.12	Fire and Emergency Exit	54
6.13	Emergency Preparedness and Planning	56
6.14	Mock Drill	57
6.15	Communication	57
6.16	Mutual Aid Scheme	57
PART - 7	**ELECTRICAL SAFETY**	**58**
7.1	Testing and Examination of Electrical Machines & Equipment	58
7.2	Preventive Maintenance of Electrical System	68
7.3	Electrical Work Permit System & LOTO Procedures	69
7.4	Electrical Hand Tools – Inspection & Record Keeping	70
7.5	Earthing System	71
7.6	Electrical Zone Classification	73
7.7	Flameproof Electrical Equipment/Fittings	74
7.8	Emergency Lighting System	74
7.9	Compliance with CEA 2010	76
7.10	Electrical Safety and Personal Safeguarding	77
7.11	Lightening Protection System/Static Electricity Prevention & Discharge System	79
7.12	Safety in Temporary Wiring	80
7.13	Fire Prevention, Protection And Mitigation wrt Electrical Safety	81
	ANNEXURE	
1.	List of officials who attended the opening meeting	83
2.	List of officials who attended the closing meeting	85
3.	Health and Safety Policy	87

Sr. No.	TITLE	PAGE NO.
4.	Safety Organization Chart	88
5.	Safety Committee Governance Structure	89
6.	Safety Management Systems: Safety Leadership Approach	90
7.	List of Safety Procedures and EPM Processes	93
8.	Criteria for Risk Assessment	94
9.	Content of Safety Manual	95
10.	Fire Safety Management Plan	96

*****

PART – 1

INTRODUCTION

1.1 The Background

The Management of the Maithon Power Limited requested National Safety Council (NSC), Navi Mumbai to conduct a Comprehensive Safety Audit of their plant located at Dhanbad in Jharkhand state.

Accordingly, the Safety Audit was conducted on 16th – 19th March, 2021 by a team comprising of following experts:

1. *Shri. Kishor D. Patil, Assistant Director, NSC and Lead Auditor*
2. *Shri. S. K. Chatterjee, Member, NSC Experts Panel*
3. *Shri K. N. Govindankutty, Member, NSC Experts Panel*

Shri Abhijit Pandey, Lead Engineer – Safety, Shri Rajkumar Rai, Lead Associate – Fire, Shri Sacchidanand Patel, Lead Engineer – Mechanical, Shri Ashok Kumar, Lead Engineer – Chemistry and Shri Rahul D. Banerjee, Lead Engineer - Electrical were assigned the responsibility as coordinators for liasoning with the audit team. They accompanied the audit team during the inspection of the plant and provided necessary information and documents for perusal. During the course of the field visit, interaction was made with various personnel in different departments in the plant. The overall coordination for the safety audit were done by Shri A. K. Manna, Head – Safety & Fire.

1.2 About the Maithon Power Limited:

Maithon Power Limited (MPL) is a joint venture company of Tata Power and Damodar Valley Corporation. MPL is the coal-based thermal power plant located at MA-5 Gogna, Maithon Dam, District Dhanbad in the State of Jharkhand. In Phase-I, the 2 x 525 MW power station has the installed capacity of 1,050 MW. Unit #1 was commissioned in September, 2011 and Unit #2 in July, 2012. In Phase-II, MPL is in the process of expansion by establishing another 1,320 MW capacity (2 x 660 MW) supercritical units.

The main plants include: coal handling plant, boiler and auxiliaries, turbo-generator and auxiliaries, DM plant, chlorination plant, 400 kV switchyard, electrostatic precipitators, ash handling pump house, cooling water pump house, raw water pump house, diesel generator set, etc. The main Departments are: MMD, EMD, C&I, Operation, CMD, CHP, Safety & Fire, Environment, Health, Chemical, HR, IR & Admn., and Security.

Manufacturing Process:

Coal is brought through tippers is unloaded in the coal storage yard. Dust extraction and tunnel ventilation systems are installed for dust suppression. Raw water from the Maithon Dam Reservoir is drawn to cover the total water requirement.

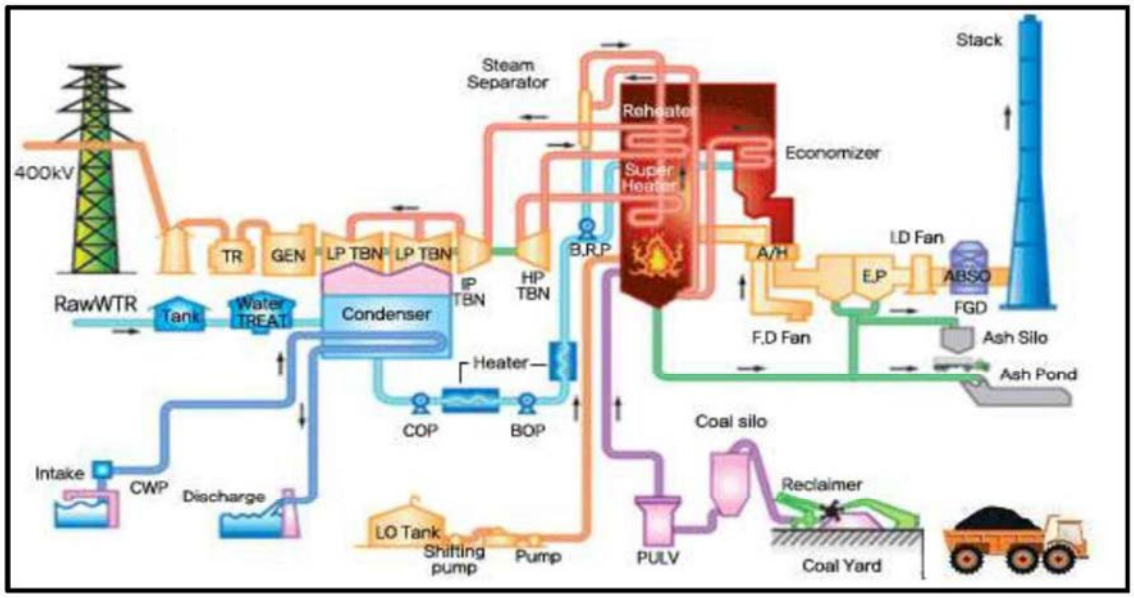
The thermal machines which convert the stored energy in the fuel to the kinetic energy of the rotor have two parts- boilers and turbines. They also include a variety of auxiliary equipment to provide fuel and water to the unit and to eliminate waste gases and products of combustion.

The thermal power generation process involves generation of electricity from burning of coal in two boilers. Coal is pulverized and blown into the boiler furnace where it burns. Water is heated and steam is generated. Steam moves at high speed to a turbine. The turbine spins and drives a rotor attached to a magnet in a generator. The rotating magnetic fields moving across coils in the generator produce electricity.

There is automatic control of coal pulverization of supplied water and fuel of combustion and of superheating. The elimination of ash in the auxiliary process is also automated. Ash is taken to the ash pond in slurry form for disposal. In addition, dry ash system is also installed for collection and use in cement plants, brick plants and low lying area filling.

The factory is a 'hazardous process' unit as defined under Sec. 2 (cb) of The Factories Act, 1948. It is also a Major Accident Hazard Factory as defined under the MSIHC Rules.

Presently MPL has a total strength of 253 management staff, and about 1500 contractor workers working in A, B, C, and General Shifts.



1.3 Scope of Work

The safety audit was carried out on the guidelines as mentioned in Indian Standard IS: 14489 - 1998 on "Code of Practice on Occupational Safety and Health Audit". The broad elements covered in the Safety Audit are as under:

1) *Safety Management Systems*
2) *Safety Training Plans.*

3) *PPE Norms and Practices.*
4) *Compliance with Statutory Requirements pertaining to Safety.*
5) *Fire Hazards and their Control Measures.*
6) *Mechanical/Physical Hazards.*
7) *Electrical System and Personal Safeguarding.*
8) *Safe Operating and Maintenance Procedures.*
9) *Safety Procedures for Contract Work.*
10) *Review of Emergency Planning, Preparedness and Response Systems.*
11) *Safe Handling and Storage of Hazardous Chemicals.*

1.4 The Objectives

i. Examine the existing procedures, system and control measures for health and safety hazards.
ii. Identify potential health and safety hazards not covered by the existing safety systems, procedures & practices.
iii. Recommend improvements for better effectiveness of the existing safety systems, procedures & practices and also other measures of hazards control.
iv. Recommend system, procedures and control measures for identified hazards.
v. Study compliance with critical statutory provisions and relevant codes of practices and recommend actions to be taken, wherever there is non-compliance.

1.5 Methodology

Following methodology was adopted to complete the audit successfully:

i. Study and analyze preliminary information provided by the MPL management in the format sent by the NSC.
ii. Opening Meeting with the Senior Officials of the MPL.
iii. Preliminary walk-through survey of the plant.
iv. Carry out sample inspection of the MPL.
v. Discussion with the Key personnel in group and individually as required to know their views, suggestions, or to verify existence of the systems / procedures.
vi. Study important documents and records.
vii. Concluding Meeting with the senior officials of the MPL to present important / salient observations and recommendations.
viii. Submission of the Audit Report to the MPL Management.

1.6 Opening Meeting

An opening meeting with the main objective of involving senior management at the start of the audit on 16th March, 2021 at 0900 hrs for explaining the scope, objectives and methodology of the Safety Audit by the audit team was held in Conference Hall in Administration Building. Shri Ramesh Jha, Chief Executive Officer and Factory Manager chaired the meeting. The meeting was attended by Senior officials of MPL Plant. The list of Executives / officials who attended the Opening Meeting is enclosed as Annexure – 1.

During the meeting, the Audit Team members made the following points:

i. A brief talk was made by audit team members on various activity of NSC.
ii. The Safety Audit being conducted on an invitation from MPL, Dhanbad. Management shows management keenness to carry out improvements with a view to making the work place safe. Since the plants are represented by the Executives / officials, their involvement and co-operation are essential and important in carrying out the Safety Audit successfully.
iii. The Audit is focused on revealing strength and inadequacies (if any) / weakness in respect of Safety Management system of the plant.
iv. The audit is not an inspection of each and every item, but a sample inspection and study of key records and documents.
v. The Audit Report will be a confidential document between the NSC and the Management of MPL, Dhanbad.

1.7 Study of Documents & Records

In order to check and assess the status of the Environment, Occupational Health and Safety (EHS) Management System prevalent in the departments and facilities, many documents such as Accident Statistics and Records, Safety Policy, Safety Committee Meeting - Agenda Notes and Minutes, Work Permit System, Operating and Maintenance Procedures, Inspection Schedules and Reports, Calibration reports and records of testing of critical equipment, earthing systems, fire extinguishers, etc were perused during the course of audit.

1.8 Departments/Sites Visited

1. Main Unit
2. Generator floor
3. Main Control room
4. DM Plant
5. Caustic and Acid Storage area
6. Fire Pump House
7. LDO/HFO Storage area and unloading station
8. Main Fire Station
9. Hydrogen Generation and Storage room
10. Canteen – 3 nos.
11. ESP 1 & 2
12. JNT area
13. 400 KV Switch yard
14. Effluent Treatment Plant
15. Coal Storage area
16. CHP Control room
17. Main Store
18. Training Centre
19. Occupational Health Centre
20. Cooling Tower
21. DG area

1.9 Concluding Meeting

On the last day of the visit i.e. on 19th March, 2021, the Concluding Meeting was held in Conference room at 1530 hrs. Shri Ramesh Jha, Chief Executive Officer and Factory Manager chaired the meeting, which was attended by senior executives/sectional heads. Closing Meeting is enclosed at Annexure – 2. The audit team presented salient observations and recommendations of the audit.

1.10 Audit Report – (Findings & Recommendations)

Based on the information collected through perusal of records/documents, observations made during the field visit by the audit team, the Observations and Recommendations are presented in Part 2 of this report as followed:

1.11 Disclaimer

The findings and the recommendations mentioned in this audit report are based on the actual condition prevalent in the building during the time of our audit. This report should not be deemed as any warranty or certification of Safety Management System and other technical aspects related to preventing accident in future.

*****

PART – 2

EXECUTIVE SUMMARY

At the request of Maithon Power Limited, National Safety Council (NSC) conducted safety audit of its Plant situated in Dhanbad, Jharkhand. The safety audit was conducted by a 3-member team from 16th – 19th March, 2021. The main objectives of the audit were to particularly examine Occupational Health & Safety (OH&S) systems prevalent in the plant, identify potential H&S hazards and suggest corrective actions wherever necessary.

The information presented in the report is based on perusal of various documents and internal records, sample inspection of the plant and discussions held with employees and management representatives. The recommendations made herein in the report, are based on the conditions and systems prevalent at the plant and hence applicable only to the said plant.

The key findings of the safety audit are summarized in the following paragraphs:

- MPL management gives priority to Safety Awareness among the employees as well as contract workers and ensures availability of adequate tools and financial resources for safety.

- This is highly appreciated that there is no fatal or reportable accident since last 3 years as entire team is taking efforts to maintain safety at workplace.

- Health and Safety Policy is prepared as per as per Rule 62 BH of The Bihar Factories Rules, 1950 under Section 7-A (3), 41-B(2) and 112 of The Factories Act, 1948.

- Well established training by induction video is available in plant for training purpose. Training for top management, employees, and contract workers are well organized

- Safety Committee is available as per Rule 62 – C of The Bihar Rules, 1950 to discuss on safety issues with respective department. All Head of Departments are the participating members. Committee is functioning well.

- Safety Department and management generate and improve safety culture by promotional activities and celebrating National Safety Day, Fire safety day, Road safety week, etc.

- Safety inspection plan and checklists has been prepared and carried out as per schedule. Recommendations in inspection report are complied in time bound manner.

- Occupational health center is available in plant to take care for all the type of medical emergencies.

- All the statutory licenses and approvals are available and copies are available with safety department.

- Fire prevention measures had been taken and all the fire protection equipment's are provided in plant area.

- Comprehensive emergency plan has been prepared and implemented through regular mock drill.

- Statutory requirements with respect to testing of lifting machines/tools and Pressure vessels are complied with.

- SAP is very effectively utilized for Preventive Maintenance System at Maithon Power Limited.

- SMP/SOP has been elaborately documented in SAP and effectively used for Inspection and during Maintenance Jobs.

- Permit to Work procedure envisages various work scenarios like Confined Space entry, Electric Permit, Excavation, General Permit, Hot Permit, Lifting and Slinging, Construction Work, Radiography and Work at Height.

- SOPs for all operation are well documented with JSA included for Job specific Safety requirements.

- Clean stairs with appropriate hand railings, clean and sound platforms with railing and toe boards were observed at all locations inside the plant.

- Hydrogen generation and bottling plant and Chemical labs are clean and properly ventilated.

- MPL is a zero discharge Plant and Rain water harvesting is done.

- Acoustic Guards/Boards have been used to house Turbines and Generators to absorb noise to remarkable limits.

While appreciating the above systems and measures already in practice in the plant, key areas identified for improvement in Safety & Health systems are listed below:

SAFETY, HEALTH AND FIRE MANAGEMENT

- Gate pass of Contractor employees should be issued only after clearance of medical certificate and completed induction training at site. This clause should be included in the Tender document.

- First – Aid boxes are provided at all locations and office area and maintained. Only Name and number of the first aider should be displayed near each first aid box and responsibility should be given to the same authorized person.

- Pre-employment and periodic Medical check-up should be carried out for employees and records should be maintained.

- If LPG cylinders are more than 100 Kg in premises, then License should be required as per Rule 44 of The Gas Cylinder Rules, 2016.

- Colour code of pipeline has been prepared but not implemented at plant level.

- Laboratory: as per Indian Standard 4209 : 1998
  - ⇒ Material Safety data sheets should be maintained in soft as well as hard copy in each laboratory.
  - ⇒ Separate discard policy should be prepared and chemicals should be discarded as per policy only.
  - ⇒ Chemical should be stored as per chemical compatibility chart only.
  - ⇒ Eye washer and safety shower should be maintained.
  - ⇒ Emergency PPE should be available in case of leakage or incident.

- Bonding strips should be provided to all the flange joints of pipeline to avoid accumulation of static charge as per Rule 62 (4b) of The Bihar Factories Rules, 1950 and adequacy/healthiness of earthing connections for all the equipment should be checked at periodic interval of time.

- Foam type extinguisher should be provided near flammable liquid in store.

- Hydrant system (Internal & External), wet risers, Hose reel drums, Hose boxes with separate pump house and separate fire water inventory has been provided as per Table 7 of National Building Code of India, 2016 and as per Rule 62 (11) of The Bihar Factories Rules, 1950. It should be maintained.

- Awareness for firefighting should be increased by advanced training to the employees as well as contract workers.

- Sprinkler system should be provided for coal yard, MOT tanks and it should be maintained as per IS 15105:2002 and IS 9972:1981.

- Illuminated signages at all the exits and arrow indicating the way to the escape route should be provided at a suitable height from the floor level on the wall as per 3.4.7.4 of National Building Code of India, 2016 – Part IV.

- Emergency Control Center should be declared and should be provided with necessary documents and equipment's required to handle emergency.

- All the vehicles including two wheelers should be parked in dedicated parking and in reverse direction only.

PHYSICAL & MECHANICAL HAZARDS AND THEIR CONTROL MEASURES

- Identification No., SWL, Test Date and Next Due Date were not visible in most of the EOT cranes and other lifting machines.

- Pressure Vessels did not have Safe Working Pressure marked on the body of the vessels.

- Pressure Gauge did not have the Maximum Safe Working Pressure limit marked in Red colour.

- In the laboratory expired chemicals were in use.

- Chemical containers are not sorted according to their compatibility.

- Full Body and Eye shower was not charged and could not be opened immediately. Eye shower pressure was very high and could injure the eye.

- No Smoking/ Smoking Strictly Prohibited sign was illegible in Hydrogen plant area.

- At the hydrogen charging area in the Power Plant, H2 gas pipe should be clearly identifiable and gas flow direction indicated.

ELECTRICAL SAFETY

- Fencing is not constructed to 250 KVA out door transformers at RWPH. The transformers should be efficiently protected by constructing fencing not less than 1.8 meter in height so as to prevent access by an undesignated person and the fencing should be connected to earth circuit.

- Power and instrumentation cables are laid in same cable track at FWPH. If any short circuit occurs in power circuit, it will affect the instrumentation system. Hence these two circuits are to be laid separately.

- The diesel tank of diesel engine at FWPH is not connected to earth circuit. For dissipating the static current formed in the diesel tank, earth circuit should be connected to diesel tank.

- Trees are grown up and its branches comes through cable bridge near CHP. In summer, it may dry which attract fire and damages the cable. Hence remove these trees from Cable Bridge.

- Water is accumulated in cable trenches at DM plant MCC room & switch yard. Slope is not maintained while constructing cable trenches. The accumulated water should be removed. The cable trench should be maintained dry and clean.

*****

OBSERVATIONS	RECOMMENDATIONS

PART – 3

SAFETY AND HEALTH MANAGEMENT SYSTEM

3.1 HEALTH AND SAFETY POLICY

MPL, Dhanbad management has prepared Health and Safety Policy covering Safety and Health. Copy of Health and Safety Policy is attached in Annexure – 3. Environment policy has been prepared separately.	This is in order as per Rule 62 BH of The Bihar Factories Rules, 1950 under Section 7-A (3), 41-B(2) and 112 of The Factories Act, 1948.
Both the policies are available in English and Hindi and displayed.	Appreciated.
The existing H&S Policy is signed by Managing Director & Chief Executive Officer of the company. The policy is revised in 11th March, 2019.	This is in order as per the provisions of Sec. 7A (3), 41B (2) of The Factories Act, 1948. Policy should be revised at regular interval.
The Policy is displayed in all the offices, Main gate, Central Control room, units, etc.	Good system.
The policy is publicized among the employees and workers by included in Induction training.	Good system. It should be continued.
The Policy revision document is not available.	The Health & Safety Policy should be revised as often as appropriate but it is necessarily required to be revised under the following circumstances: ▪ Whenever any expansion or modification having implications of H&S of persons at work is made or ▪ When new substance or articles are introduced in the manufacturing process having implications on H&S of persons exposed to such substances.

OBSERVATIONS	RECOMMENDATIONS
3.2 SAFETY ORGANISATION	
MPL, Dhanbad has established Safety department in their unit.	This is in order as per Rules 62-B of The Bihar Factories Rules, 1950 under Section 40B of The Factories Act, 1948.
Presently Shri A. K. Manna, Head – Fire & Safety has been looking after the safety functions who is qualified in Safety. He functionally reports to CEO. He is assisted by Shri Abhijit Pandey, Lead Engineer and Shri Rajkumar, Lead Fire. Both are qualified and well experienced in their area. Shri Pandey is assisted by 2 nos. of Safety officers and one Contractor Safety officer to handle the activities. Organisation chart of Safety Department is attached in Annexure – 4.	
The safety department is found to perform their duties of advising and assisting the management in fulfillment of its obligation.	
All the statutory licenses copies are available with Safety Department.	
3.3 SAFETY COMMITTEE	
The plant has constituted a Safety Committee to promote co-operation between the management and workers in maintaining proper safety and health at work. Safety Committee Governance Structure is attached in Annexure – 4.	This is satisfactory and is in line with the statutory requirement as per 62 - C of The Bihar Factories Rules, 1950 under sections 41 and 41-G of the Factories Act, 1948.
The Committee comprises total 26 members having equal representation of management, workers and contractors.	This is in order as per 62 – C (3) of The Bihar Factories Rules, 1950.
Chief O&M is the Chairman of the Committee. Head Fire & Safety is the Secretary of the Committee.	Thai is in order as per 62 – C (2a & 2b) of The Bihar Factories Rules, 1950.

OBSERVATIONS	RECOMMENDATIONS
The Committee has management members representing from the different departments like Mechanical, Electrical, C&I, HR, Contract Material, CHP, FMO, Civil, Environment, Chemistry, Purchase and Store.	This is in order as per 62 – C (2C) of The Bihar Factories Rules, 1950.
Committee meets once in month. Last Committee meetings were held on 28.01.2021, 26.12.2020, etc. Attendance register for the committee are maintained.	This is in order.
The agenda and minutes of the meeting are prepared and circulated to the committee members. Action part of each item of the agenda has been decided in the meeting and target date is assigned to individual person / department for effective functioning of the Committee. At the beginning of each meeting, status of implementation of decisions taken in the earlier meeting is discussed. Target date and responsible person is mentioned in the MOM for effective implementation.	Appreciated. It should be continued.
Constitution Order of Safety Committee is once in 2 years.	This is in order as per Rule 62 – C (4) of The Bihar Factories Rules, 1950.

3.4 SAFETY INSPECTION

Safety Inspection is carried out regularly to identify unsafe act are as follows: i. Safety officer is taking Inspection round on daily basis. ii. Electrical, Mechanical, Vehicle Department – Monthly basis. iii. Daily Site round by Cross functional team. Schedule has	Appreciated. It should be continued.

OBSERVATIONS	RECOMMENDATIONS
been prepared including top management. iv. Daily theme-based round is taken which is received from Corporate office. v. In addition to this, Pre-monsoon inspection, slip trip inspection, Oil leakage inspection, Coal accumulation inspection and Gas cylinder inspection is carried out. Record of safety inspection is maintained.	
3.5 SAFETY AUDITS	
3.5.1 Internal Safety Audit	
There is no system of conducting internal audit comprehensively. Only Group safety audit has been carried out by Corporate office.	Comprehensive Internal safety audit should be carried out once in year with team from different sections like: 1. Production 2. Maintenance 3. Electrical 4. Safety & Fire Recommendations arising out of internal audit should be implemented in a time bound programme.
3.5.2 External Safety Audit	
External audit carried out once in 2 years from M/s. National Safety Council. Compliance is done on the recommendations.	It is good that management have keen interest to improve the safety management system.
3.6 ACCIDENT REPORTING, RECORDING, INVESTIGATION & ANALYSIS	
3.6.1 Reporting & Recording of Accidents / Dangerous Occurrences	
MPL Dhanbad has a well laid down and detailed procedure for reporting, inquiry (investigation) and recording	Good system. It should be continued.

OBSERVATIONS	RECOMMENDATIONS
of accidents/near-miss incidents. The procedure is divided into Accident / Incident Reporting, Reportable accident and Near-miss and operated on SAP system. Separate investigation forms are prescribed for reporting of accidents. Incident reporting in following fashion: Observer I SAP I Safety + Group HOD I Concerned HOD I If Medium/High – Managing Director Contractors also refer the same reporting system.	
Accident data are maintained by the Safety Department. The accident data for the last 5-years is maintained.	It is appreciated that there no fatal and reportable accidents in last 4 years and First-aid cases are also in decreasing trend. But, it should be continued by aiming “Zero Accident” and follow Safety Management plan.
Accident Register & Register of Accidents & Dangerous Occurrences in Form No. 23 is maintained with NIL report every year.	This is in order as per Rule 104 of The Bihar Factories Rules, 1950.

3.6.2 Analysis and Investigation of Accidents

Accident investigation has been carried out by team appointed by Unit Head. Team is deputed as per the nature of the accident. Separate procedure is prepared with Doc. No. TPSMS/GSP/IRI/011 – Rev. 01. Final report is submitted with compliance with target date. Then this report is discussed within Safety committee meeting even.	Good system. It should be continued.

OBSERVATIONS	RECOMMENDATIONS
If incident is high potential or reportable, then this investigation report submitted to Occupier of the company.	
Analysis of accident is carried out as per IS 3786 – 1983 and prepare accident reduction programme and action plans to improve safety performance and records are maintained.	Appreciated. It should be continued.

3.7 SAFETY EDUCATION & TRAINING

There is a separate well designed training centers available:	Management is commended for this facility for employees.

SN	Name	Cap.
1	Safety Hall	40
2	Conference Hall	25
3	Conference	20
4	MFI Hall	30
5	Field Hostel	15 - 20

All the infrastructures equipped with audio visual aids to keep abreast of the facilities provided by the center with modern systems.	
The activities for these training centers are handling by Shri Rahul Roichowdhary, Lead Associate - Business – HR.	
Training calendar and schedule is prepared with around 45 programmes which includes all safety, health and environmental programs with their duration and catagory for the year 2020 – 21 and followed.	Appreciated. It should be continued.
Training has been provided by Interdepartmental trainer and training has been given under knowledge sharing programme.	Good system. It should be maintained.

OBSERVATIONS	RECOMMENDATIONS
Induction training for new joinee is given in which safety, first-aid and fire modules are included and then Production and utilities are covered.	Good system. It should be maintained.
On-job training is given as per assessment done and before joining at shop floor for three months to fresher.	Appreciated. It should be continued.
Employee training evaluation has been available and feedback form is available online.	Good system. It should be continued.
Attendance register is maintained for all the employees, contract workers and security personnel's.	
The employees are deputed to attend external training programmes and also sent at Inter-plant level.	Appreciated.
There are 25 of employees got First Aid training by St. John Ambulance Association, Kolkata.	Good system. Refreshing training in between also to be considered.

3.8 SAFETY COMMUNICATION / MOTIVATION / PROMOTION

Suggestions scheme is in place and suggestion boxes are available at all the Canteen areas, Operation offices, office areas and Fire station.	Good system. It should be continued.

OBSERVATIONS	RECOMMENDATIONS
	
	
Employees are rewarded on monthly and fortnightly basis for best suggestions.	
Safety awareness is found good among employees and contract workers as TBT is conducted for all the activities and records are maintained.	Good system. It should be continued.
Following Safety Management systems are following in MPL to enhance the safety awareness and maintain the safety system:	Appreciated. Journey to the excellence should be maintained.

OBSERVATIONS	RECOMMENDATIONS
1. Safety Management Systems: Safety Leadership Approach 2. Technological Intervention -Safety Management/ Process Safety 3. EPM Processes – Safety Management 4. Safety Excellence Journey 5. Safety Observation Cycle 6. Safety Trackers Details of safety management and List of Safety Procedures and EPM Processes are attached in Annexure – 6 & 7.	
Plant celebrates National Safety day/week, Fire Safety Week, World environment day and different activities are also conducted. Following activities has been conducted during these celebrations: a) Safety slogan competition b) Best Safety Performance Awards Distribution c) Poster competition for employees and their family members. d) Safety Flag hosting e) PPE Demonstration f) Fire Mock drill g) Fire equipments demonstration h) Fire Training programmes i) Training. Safety posters, accident statistics, etc have been displayed on Safety Alert Notice board.	Good system. It should be continued. It is suggested that, Electrical safety week should be started.
Statutory warning like speed limit, no smoking signs, safety instructions are provided and authorized entry, no use of mobile phone are displayed in hazardous areas. In addition to this, posters are displayed in many areas of the plant for awareness.	Good system. It should be maintained.

OBSERVATIONS	RECOMMENDATIONS
3.9 HAZARD IDENTIFICATION & RISK ASSESSMENT (JSA, QRA, HAZOP)	
Hazard Identification and Risk Assessment (HIRA) study has been conducted to detect and assess hazards in the operations and processes as per OSHAS 45001 with Doc. No. TPSMS/GSP/HIRA/005 in 2016 and risk register is prepared.	This is in order. Risk register should be updated. If new machine / process is incorporated or old machine / process added / deleted, then HIRA should also be reviewed / revised.
Job safety analysis is carried out for non-routine activities.	
Criteria for HIRA are attached in Annexure – 8.	
HAZOP studies and QRA study is not carried out for hazardous storage area and their pipelines.	Technical studies should be carried out and effect for the same should be reviewed.
3.10 SAFETY MANUAL	
Safety Manual is prepared and followed for MPL unit.	Appreciated. Copies for the same should be available in different departments and training center for reference.
Content of Safety manual is attached in Annexure – 9.	
3.11 PERFORMANCE APPRAISAL SYSTEM	
Performance Appraisal is included with 10% criteria allotted for safety depending on the work area and target improvement or each employee.	Appreciated. It should be maintained.
3.12 SAFETY BUDGET	
There is a system for Safety Budget which has been approved by Unit head and will be used for the following Safety Activities. 1. Safety Training 2. Inspection and Audit 3. Rewards 4. New Technology development	It is a good practice.

OBSERVATIONS	RECOMMENDATIONS
5. Procurement of PPE 6. Safety week, Fire week, etc. 7. Procurement of fire fighting equipments and tools 8. Statutory signages. In addition to this, approval has been taken as a special case as and when required.	
3.13 SAFETY LIBRARY	
It was informed that, company is using safety related information online and some statutory books are available with Safety Department.	It is a good practice. However it is suggested to ensure a separate safety section should be provided in which safety related reading materials / books on various Acts, Rules, Circulars, safety magazines, Indian standards, code of practices, safety manual, etc. available for reference purpose.
3.14 CONTRACTOR SAFETY SYSTEM	
Contractors / Agencies for man-power supply are selected depending on the nature of work. However, their safety performance is considered in selection. Separate Guidelines on contractors' safety with Vendor Evaluation form is prepared with Doc. No. TPSMS/GSP/CSM/015 – Rev. 05. In addition to this Contractor field safety audit is conducted.	Good system. it should be followed.
Contractors / Agencies are required to observe OHS Clauses in as per Contract document. Further to that, If the contractor fails in providing safe working environment, Penalty clause is there as Clause in agreement.	Good system.
As per the clause on PPE in agreement for manpower supply service provider, Contractors / Agencies are required to provide all the necessary PPE's as per Clause of the agreement.	System is in place but not followed. It is suggested that, Work permit system should be strengthening and PEP talk should be given by supervisor before start the work. After submission of PEP talk form,

OBSERVATIONS	RECOMMENDATIONS
	work permit may be signed from site incharge.
During the visit it is found that contract workers are not wearing safety appliances and following safety rules near construction and maintenance area.	
Pre employment & periodic medical check-up Health Examinations of the Contractor's labours is conducted but not specified.	Pre employment & periodic medical check-up of contractor workers Clause should be incorporated in the Contract Document. The verification system should be there before entering in the MPL premises.
Dedicated area like canteen and shelter place is provided for contractors by the Management. But, it is found that, contractor workers are not using the same. Tiffin boxes are available at many places in the production and store area.	It is suggested that, Inspection should be carried out by Welfare officer on monthly basis and report should be maintained.
Contractor's vehicles and two wheelers are not parked in designated area.	Vehicles including two wheelers should be parked in dedicated parking area only and that should be in reverse condition.
LPG cylinders of contractors are stored at backside of the store.	Separate area should be provided for the storage of LPG and minimum quantity of the cylinders should be maintained.

3.15 FIRST-AID & MEDICAL

3.15.1 First-Aid Station and boxes

Total 31 nos. of First aid boxes are provided in all the plant areas. List of first-aid boxes is available.	This is in order as per Rule 66 of The Bihar Factories Rules, 1950.
Inspection of the boxes is carried out regularly once in month and register of inspection is maintained.	Display the name and telephone no. of first-aider near the first-aid boxes. Each first aid box should be under the charge of a separate responsible and first aid trained person (holding certificate of first aid) who should be always readily available during the working hours of the station as per Section 45 of the Factories Act, 1948
The notice containing name and telephone number of first-aider is not provided near the box.	

OBSERVATIONS	RECOMMENDATIONS
	and Rule 66 of The Bihar Factories Rules, 1950.
3.15.2 Trained First-Aiders	
There are 25 of employees got First Aid training by St. John Ambulance Association Kolkata.	Good system. Refreshing training should be provided as per Section 45(3) of the Factories Act 1948.
3.16 OCCUPATIONAL HEALTH CENTRE (OHC)	
MPL, Dhanbad is having separate OHC in the Admin. building. Dr. Pankaj Kumar Singh, MBBS is Chief Medical Officer empanelment to take care of medical emergency. Doctor has completed AFIH course. Doctor and staff is available full time in colony itself. In addition to this, 3 nos. of doctors are assisted to CMO. OHC is handling by one fulltime staff nurse, ANM, Pharmacist and 9 assistants. Medical facilities should be provided in dispensary to handle medical case during emergency. Health register in the format of Form No. 16 is maintained.	This is order as per Rule 62-OH of The Bihar Factories Rules, 1950.
A full fledge hospitals are empanelled nearby as follows: 1. Dhanbad hospital – 40 Km 2. Durgapur Govt. Hospital – 45 Km 3. DVC ESI hospital – 16 Km.	
For continuous backup, two ambulances are provided with basic facilities and 24x7 driver availability.	This is a good practice to facilitate medical treatment of the employees of the plant.
All biomedical waste which is collected is send to M/s. Asarfi Hospital Limited. It is authorized by State Pollution Control Board with Lic No. JSPCB/HO/RNC/BMW –	Satisfactory as per The Bio-Medical Waste (Management and Handling) Rules, 1998 are conferred by section 6, 8, 25 of the Environment (Protection) Act, 1986 (29 of 1986).

OBSERVATIONS	RECOMMENDATIONS
7856589/2020/5103/12/2020 dated 03.12.2020 which is valid upto 30.09.2021.	

3.17 PRE-EMPLOYMENT AND PERIODICAL MEDICAL EXAMINATIONS

Pre-employment medical examination is conducted for before joining from outside facility and records are available with HR Department. Periodic medical checkup is carried out annually for all the employees and once in six months for employees working in Hazardous area and records are maintained.	Pre-employment and periodic medical examination should be carried out for all the employees as well as contractor workers as per Rule 62 NH (1a & 1b) of The Bihar Factories Rules, 1950. It is suggested that Health Surveillance Matrix should be prepared with reference to the HIRA document and implemented.
Separate hygiene test for canteen workers is carried out.	Annual medical examination and hygiene test should be carried out once in 15 days for all the canteen staff as per Rule 71B of The Bihar Factories Rules, 1950.

3.18 COMPLIANCE WITH STATUTORY REQUIREMENTS

3.18.1 Applicable Statutes

There is a responsibility on the management of MPL, Dhanbad to comply with the provisions of various relevant statutes on Safety viz :-

i. The Factories Act 1948, (FA) and The Bihar Factories Rules, 1950.
ii. Environment Protection Act, 1986.
iii. The Air (Prevention and Control of Pollution) Act, 1981.
iv. The Water (Prevention and Control of Pollution) Act, 1974.
v. Public Liability Insurance Act, 1991 and Rules 1991 (Amended in 1993).
vi. Storage license under SMPV (Unfired) Rules, 1981(As amended in 2002)
vii. Gas Cylinder (Amendment) Rules, 2016.
viii. Petroleum Act, 1934 and Petroleum (Amendment) Rules, 2011.
ix. Central Electricity Authority Regulations, 2010.

3.18.2 Licenses

Availability and Validity of the following Licenses were verified:

i.	Factory License of Reg. No. FCA1535400248101 in the format of Form No. 4 under Rule 4(4) for 4000	This is in order as per The Factories Act, 1948.

	OBSERVATIONS	RECOMMENDATIONS
	nos. of employee and 5000 HP received from Factory Inspection Department which is valid till 31.12.2030 is available.	
ii.	Environment statement for year 2018 – 19 has been submitted on 29.07.2019.	This is in order.
iii.	Consolidated Consent for Water, Air from Jharkhand State Pollution Control Board having Consent No. JSPCB/HO/RNC/CTO - 5926045/2020/2 dated 01.01.2020 is available which is valid till 31.12.2024. License for Hazardous waste having Lic. No. JSPCB/HO/RNC/HMW – 360249/2017/5 in the format of Form 2 dated 08.05.2017 is valid upto 23.12.2025.	This is in order as per Section 25 & 26 of The Water (Prevention and Control of Pollution) Act, 1974, as per Section 21 of The Air (Prevention and Control of Pollution) Act, 1981, Rule 6 (2) of The Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016under The Environment Pollution Act, 1986.
iv.	License to Storage and use of Petroleum Class C – 12185 KL has been received from PESO having license No. P/HQ/JH/15/1060 (P259489) valid till 31.12.2022 is available in the format of Form No. XV.	This is in order as per Petroleum Act, 1934 and Petroleum Rules, 2011.
v.	License to Storage and use of H2 cylinder has been received from PESO having license No. G/HO/JH/05/77 & GHO/JH/06/76 (G28906) dated 18.08.2018 valid till 30.09.2023 is available in the format of Form No. XV.	This is in order as per Gas Cylinder Rules, 2016. License for LGP gas cylinder storage and use should be taken.
vi.	License for Boiler for Registry number of boiler BR/8922 and BR/8971 under Regulation 389 with validity is available.	This is in order.
vii.	Public Liability Insurance Policy with Policy No. 03020003580500 is available from M/s. Tata AIG General Insurance Company Limited, Mumbai	This is in order as per Public Liability Insurance Act, 1991.

	OBSERVATIONS	RECOMMENDATIONS
	which is valid till midnight of 31.03.2021.	
viii.	Stability Inspection has been conducted by Competent Person, M/s. K. K. Engineering, Jharkhand in January 2021 & February 2021 and Stability Certificates has been issued dated 22.03.2021 valid up to 19.03.2024. Report is available.	This is in order as per Rule 3A of The Bihar Factories Rules, 1950. This should be carried out for all the buildings.
	 Stability of Storage tank support should be added in the list.	

3.19 HEALTH AND SAFETY IMPROVEMENT PLAN AND TARGETS

	Health and Safety improvement plan has been prepared and reviewed on yearly basis.	Appreciated. It should be maintained.

*****

OBSERVATIONS	RECOMMENDATIONS

PART – 4

CHEMICAL HAZARDS AND CONTROL MEASURES

4.1 STORAGE & HANDLING OF HAZARDOUS CHEMICALS

Hazardous chemicals stored in bulk quantities are HCL, H2SO4, Caustic Soda, Ferric Chloride, Sodium Hypochlorite etc which are stored in Tanks. Apart from these, Chlorine Toners and Hydrogen Cylinders in H2 generation Plant are also stored.	Noted.
Each of the Tank Farms have dyke. Acid tank farms are provided with neutralizing pits in case of leakage.	Good.
MSDS and SOPs for Unloading/Handling of the chemicals are displayed at the respective sites.	The Full Body /Eye Shower may be moved to a easily accessible spot outside the dyke wall.
Full Body /Eye Shower is provided in the Acid Tank Farm. In HCL Tank Farm area the Shower is within the dyke. When checked it was observed that turbid water gushed out at very high pressure.	Clean potable water to be supplied to Eye/Body shower. Each shower should have a pressure regulator. IS: 10592 may be referred for Eye/Body shower.
It was observed that HCL Tank and Caustic Soda Tank had the same colour in DM Plant.	Different colour as per Colour Code to be maintained for different chemicals.
License No. G/EC/JH/06/319 has been renewed up to 30th Sept. 2023 for Chlorine Storage.	In Order.
MSDS and Safe handling procedure is displayed in the Store.	MSDS and Caution/Danger boards in Local language to be displayed at the entrance.
There are chlorine leakage sensors set at 1 ppm with Alarm system. Automated Caustic Soda release valve for neutralization is in operation.	

OBSERVATIONS	RECOMMENDATIONS
Required PPEs including 5 sets of SCABA are available. Chlorine Toners are hydrotested and date of next date is marked on the toners.	To be maintained.
In H2 Plant MSDS and DOs and DONTs are displayed prominently.	
Audit Team was happy that Mobiles had to be handed over to the Security at the entrance.	
License for generation and storing 120 H2 cylinders have been renewed up to 30.09.2023.	
H2 Plant was clean and well maintained. H2 sensors were with Alarm system connected to MCR were observed in Generation, Filling and Storage areas.	It is suggested that insulated chains may be used to eliminate any spark.
Cylinders were kept upright with caps and chained.	
Light fittings were Flame proof type.	

4.2 MATERIAL SAFETY DATA SHEET (MSDS)

MSDS for all Hazardous Chemicals and Gases have been displayed in the vicinity of Handling and Storage areas. MSDS boards are available both in local language and English.	MSDS may be displayed at the entrance or boundary walls for all stake holders and visitors to check inadvertent entry into hazardous areas.
At some locations like Chlorine Storage area MSDS boards are inside the storage area.	

4.3 COLOUR CODE FOR PIPELINES

Colour Code Matrix for Pipelines were displayed at few locations only.	Colour Code Matrix need to be displayed at the entrance and other prominent locations to caution all visitors to the Plant.
Adherence to the color code is not strictly adhered to. At H2 Plant Air	Color Code once fixed should be strictly followed.

OBSERVATIONS	RECOMMENDATIONS
and Water pipes were both in Blue color.	
The direction of flow was seen at very few places	Direction of Flow and the name of the Liquid / Gas being conveyed to be clearly written on the pipelines and also storage Tank. IS: 2379 : 1990 may be referred

4.4 LABORATORY SAFETY

There are two Laboratories inside the Plant the Main Lab is at the DM Plant.	
Laboratory is clean and spacious.	
Chemicals/Reagents were not arranged according to their compatibility. Acid and alkali bottles were side by side. Label on few bottles showed the that expiry date was over.	Chemicals to be arranged as per compatibility.
A fume chamber and a Full Body-cum-eye shower was seen inside the Lab.	This to be sorted out.
The body/Eye shower was not charged.	Good. Please Refer IS: 10592 for Full body and Eye Shower

4.5 TRANSPORT SAFETY AND TRAINING TO DRIVER

Coal is the main input material which is transported by Road. A huge fleet of dumpers are operated through seven contractors to transport coal from linked Collieries to Coal Yard of MPL. Safe movement of such large fleet is controlled through RFDI (Radio Frequency Detection and Identification) system and GPS fitted in each dumper.	
Ash Disposal bunkers are outside the working area and do not pose any safety problem. Ash is disposed	

OBSERVATIONS	RECOMMENDATIONS
through Bulkers or Dumpers. Loaded dumpers have to be covered to prevent any spillage or ash getting blown away by wind affecting the environment.	
Inside the Plant a speed limit of 16 KMPH is maintained by all vehicles.	Appreciated.
All drivers of dumpers of contractors as well as operators of other machines like Hydra, mobile cranes, dozers and excavators are given safety training.	HIRA and JSA for Rail Movement and unloading have to be developed.
All vehicles engaged by MPL have rear view cameras and reversing horns.	
Transportation by Rail is also to start within few months as Rail Track laying and Track Hoppers are under construction.	

*****

OBSERVATIONS	RECOMMENDATIONS

PART – 5

PHYSICAL & MECHANICAL HAZARDS AND CONTROL MEASURES

5.1 TESTING & EXAMINATION OF PRESSURE VESSELS/PLANTS

List of Pressure Vessels/Air Receivers are maintained by the Maintenance Planning Group in the SAP system.	Appreciated.
All the Air Receivers are Examined by Competent Authority every six months.	Conforms to Bihar factory Rules 1950 (BFR 50) Rule 57 Section (d) (i).
Test Certificates and Competency certificates are up to date.	Appreciated.
Since internal examinations cannot be done due to operational constraints, UT is carried out during half yearly examination.	To be maintained.
Hydrostatic Tests of Receivers in continuous use are carried out every four years.	
The PVs had ID No., Capacity, Test Date and the Next Due Date marked on the body.	Maximum Permissible Working Pressure may also be marked on the body of PVs.
The Pressure Gauge did not have the Maximum Permissible Working Pressure marked in Red.	Not in conformity with BFR 57 (c) (ii). MPWP may be marked in Bold Red.
Compressors are mainly of centrifugal type.	To be maintained.
The Compressor House of Power Plant was found to be adequately ventilated and illuminated.	

5.2 TESTING & EXAMINATION OF LIFTING MACHINES & TACKLES

A comprehensive list of all cranes, lifting machines, tools and tackles are	Commendable and appreciated. For all new lifting tools and slings the

OBSERVATIONS	RECOMMENDATIONS
maintained in the SAP system.	date of putting it into service may be mentioned.
Types of Lifting machines and tools used at MPL are EOT, HOT and Monorail Hoists, Pulling & Lifting Machine, Chain Pulley Blocks, Wire Slings, Mobile Cranes and Hydras etc.	Noted.
All the EOT Cranes, other lifting machines are tested annually by Competent Person.	Good. Test certificates verified. Competency certificate examined.
Measurement of Rope dia is either not done or not mentioned.	
On the two EOT cranes on Turbine floor the SWL is not clearly visible from the floor. Identification number not marked on the body	To be painted in sufficiently large and bold letters.
Trained operators are engaged for the EOT cranes. Operator cabins have safe access, are well ventilated and have non conducting flooring.	
Records of routine inspections with checklists could not be produced for the lifting machines in Power Plant areas.	Periodic Inspection with checklists to be regularized.
Checklist for periodic maintenance of all other equipment is available	Good.
Records of inspection of conveyors, drives, rail tracks, etc. are done by CHP.	Appreciated.
Mobile cranes Hydra machines, Dozers etc. are tested by competent persons and certificates are available.	Good.
Wire Slings do not have tags indicating ID, SWL, Test date and next due date.	All wire slings need to be tagged. Supplier also should submit Test Certificates of Ropes during delivery

OBSERVATIONS	RECOMMENDATIONS
Lifts in the Plant and Offices are Tested every six month and Test Certificates verified. Copied of certificates were pasted inside some lifts.	Good Practice. To be maintained.

5.3 MANUAL AND MECHANICAL MATERIAL HANDLING

5.3.1 Manual Material Handling

MPL has no Manual Material Handling practices.	Noted.

5.3.2 Mechanical Material Handling

Coal is the major fuel which is procured by Rail and by Road.	To be maintained.
Rail wagons are offloaded on the Track Hopper. Coal is transported to Coal beds through conveyors.	
Track hopper is well maintained and free of accumulation of stones or other foreign material.	
A Stacker cum Reclaimer is used both for stacking and reclaiming coal.	
Seven different contractors operate dumpers for transporting coal from their designated coal mines to MPL. They have also their designated yards for dumping coal.	
Each dumper is fitted with Radio Frequency Detector Identification (RFDI) to digitally identify the contractor and the source. The system also guides the dumper to its designated yard.	This unique system has considerably reduced road accidents involving dumpers.
Each dumper is also fitted with GPS for tracking their movement.	Appreciated.
Dumpers also have rear view cameras and reversing horn.	

OBSERVATIONS	RECOMMENDATIONS
Dozers are deployed at the coal feeding hoppers and a very good system to check any criss-cross movement.	Appreciated.
Mobile Cranes (tyre mounted) and new generation Hydra machines are deployed for material handling.	
Series of Conveyors transport coal from Coal yard to Crushers, Mills and to Boiler bunkers.	Appreciated. To be maintained.
Conveyors have Pull Chords and emergency stop switches. Wire mesh nets have been provided to prevent contact with running belt.	Cables to securely laid on the trays and cable trays to be made free of coal dust.
However, at BCN 3A/3B, coal spillage was observed and an electric cable had fallen from the cable tray on the walkway. Any leakage of the cable could be dangerous.	Laudable.

5.4 GUARDING OF MACHINES & DANGEROUS AREAS

Rotating parts of all machine drives and couplings were found stoutly guarded. Greasing/lubricating points could be safely accessed.	Confirms to Section 21, 22 and 26 of FA 1948.
The rotating drums in the underground and over ground conveyors, couplings and nip points are provided with guards. Walkways are protected.	To be maintained.
Drains are mostly found covered.	Safety measures taken is appreciated.
At the Project site of FGD, stairs of the new stack under construction have been provided with hand rails and mid rails and nets to arrest any fall.	
The stack at CHP has vertical fixed type steel ladder.	The vertical ladder may be replaced with a spiral ladder with handrails and platforms at suitable heights.

OBSERVATIONS	RECOMMENDATIONS
5.5 STORAGE AND HANDLING GAS CYLINDER	
Only DA cylinders are used in MPL for Gas cutting jobs and LPG is not permitted.	Noted.
DA and Oxygen Cylinders were found placed on trolleys during cutting activities. Shifting of gas cylinders inside the plant is also in trolleys.	Appreciated.
Flash Arresters are in use both at Cylinder and Torch end.	Good Practice.
At the storage areas, cylinders were found properly chained and capped.	Confirm to Gas Cylinder Rules, 2016.
However, at the cylinder storage area of contractors, DA and Oxy cylinders were stacked side by side.	At least 20 feet distance should be maintained between Flammable gases and Oxygen or there should be Fire wall of minimum 5 feet high.
Empty and Loaded cylinders were capped and stored in their respective storage areas and chained.	Confirm to Gas Cylinder Rules, 2016.
In the canteens LPG cylinder were fitted to manifolds. The Flow regulator valves and flow meters were fitted to the manifold inside the room.	Control valve and the flow meter should be place outside the room near the entrance so that in case of any fire inside the room, gas flow can be cut off from outside.
At the Hydrogen generation plant, empty and loaded cylinders were separately stored, capped and chained.	It is suggested that non-ferrous chains be used inside H2 Plant and at the H2 cylinder storage spots.
Signage like 'NO SMOKING' has become illegible	Very Prominent "NAKED FLAME AND SMOKING STRICTLY PROHIBITED" signage at all the approach roads to H2 plant should be put up.

OBSERVATIONS	RECOMMENDATIONS
5.6 MEANS OF ACCESS, PLATFORMS & RAILINGS	
Stairs with hand rails and mid rails have been provided in all the staircases of Power House, CHP, Pump Houses and offices. Platforms are guarded with railings. Stairs and platforms are clean and free of any dust, oil or water spillage.	In conformity with Section 32 of FA 1948.
Even at dust prone area of Coal handling Plant all stairs, Landings, Platforms and Machine floors were clean and sufficiently protected.	Appreciated.
The approach to LDO tank is from HFO Tank Farm side.	Separate entry directly to LDO tank is suggested.
5.7 VENTILATION, ILLUMINATION, NOISE AND VIBRATIONS	
a) The layout and design of Shops have taken care of ventilation at all floor levels adequately. There is sufficient flow of natural air. Control Rooms are Airconditioned.	In conformity with Section 13 of FA 1948 and Rule 20 (b) of BFR 1950.
Exhaust fans are provided in Compressor Houses. Pump houses have large openings for sufficient drought.	
The underground conveyor galleries have Ventilation system to supply clean air.	
b) The shop floors get sufficient natural light during the day. Light fittings provide additional illumination wherever required.	In line with Section 17 of FA 1948 and Rule 31 and 32 of BFR 1950.
Basement of Coal receiving hoppers at CHP and Underground conveyor galleries are adequately illuminated. There was no glare from any of the light fittings.	Appreciated.
Illumination mapping has been carried out MPL and Readings were	

OBSERVATIONS	RECOMMENDATIONS
all within norms.	
c) High noise emanating equipment like Turbines and Generators have been enclosed in Acoustic Guard housing which has considerably reduced noise.	In line with Section 17 (3) (a) and Rule 33 of BFR 1950. Appreciated. To continue at regular intervals for both Day and Night.
Signage in high noise areas are few and not very prominent.	More signage in high noise areas needed.
No worker was seen using Ear Plugs. One workman from M/s SMCS said that the contractor has not provided him with Ear Plugs.	Use of Ear Plugs to be encouraged. All PPEs to be supplied to workmen.
d) Vibration frequency of Turbines /Generators are continuously exhibited in Control Panels through the DCS system in MCR and abnormal vibration would cause tripping as Interlocks are integrated.	Good.
Vibration measurement for ID/FD Fans and other machineries in CHP are done by Mechanical team periodically.	Good.
e) Ergonomics is not part of the regular training program. But brooms, mops etc supplied to cleaning staff do not strain the lower back	Good.
In the Control Rooms the position of online screens and sitting are arranged to give comfortable viewing without any strain on the neck or back.	Good.
Sitting arrangements in the offices and computer desks are ergonomically designed.	

OBSERVATIONS	RECOMMENDATIONS
5.8 PREVENTIVE MAINTENANCE SYSTEM AND RECORDS	
MPL has a well-established system of Preventive Maintenance.	SAP system can be used for various analysis to come up with Predictive Maintenance
A comprehensive list of all mechanical equipment is maintained in SAP and Maintenance schedule has been designed on the basis of past experience and guidelines of OEM. Sometimes preventive maintenance is also necessitated if Vibration results or Oil tests so demands.	
SOP for Cross Function Safety Team in critical overhauling is well documented with JSA.	
Checklists for maintenance jobs are part of SMP.	Good.
5.9 WORK PERMIT SYSTEM	
All kinds of jobs like General Permit, Electrical Permit, Hot Work Permit, Confined Space Entry, Lifting and Slinging, Excavation, Radiography, Work at Height and Project Nature Permit.	Appreciated.
PTW Procedure is vide document TPSMS/CSP/PTW/008TPSMS/CSP/ PTW/008.	
Work Permit System is established effectively through the SAP system. Approval process is through SAP system. After approval a print of PTW is taken and signed by the concerned departments.	
During inspection it was found that the signatures on the hard copy is not very clear as no names are put. It is also not clear if the PTW has been closed or not.	PTW must be closed by responsible person on completion and after clearance from concerned agencies. Names of signatories also should be clear as PTW is legal document.

OBSERVATIONS	RECOMMENDATIONS
LOTO has been soundly established for Electrical Work Permits.	Appreciated.
Safety Measures as per JSA has been incorporated.	Good. Has to be revised periodically.

5.10 SAFE OPERATING PROCEDURES (SOP)

Documented SOPs is available at MPL for almost all operations in Boiler, Turbine and Generator, Mechanical Material Handling like Coal tippling, Coal crushing and stacking etc.	Good Practice.
SOPs are NOT displayed in the Control Rooms or at the operational areas.	SOPs need to be printed in Bold letters with larger font and displayed more prominently in the Control Rooms and also at other critical locations. SOP should be in both Hindi and English.
All critical functions are provided with Interlocks and linked to the DCS system.	To be maintained
Pressure/ Temperature Gauges of different types, Sensors and Monitors are calibrated.	Good.
There are Registers to record of temporary bypass of Interlocks for maintenance or for operation. However, the approver's column in some cases were missing.	A policy for such Bypass of Interlocks may be made with fixed responsibilities for approval and normalization.

5.11 PLANT MODIFICATION PROCEDURE / NEW EQUIPMENT REVIEW (MOC)

Plant/Process Modification which can impact Health or Safety is addressed by MOC Procedure vide TPSMS/GSP/MOC/007.	Appreciated.
Procedure for Temporary and Permanent changes have been considered and authorization for approval is documented.	Good.

OBSERVATIONS	RECOMMENDATIONS
HIRA is a must document with all such modifications of Process or Plant.	HIRA with respect to Installation, Operation and Maintenance to be ensured

5.12 MONITORING OF WORK PLACE & STACK EMISSION (TREATMENT & DISPOSAL OF WASTES & EFFLUENTS)

Workplace monitoring is done through various means like Noise and Ambient quality measurements.	At the Main Gate only SPM results are exhibited and SOX and NOX results are not declared. This is not in conformity with the CPB Rules.
There are two stacks one for the Power Plant and the other at CHP for DE system. There are online monitoring of SPM, NOX, SOX and Real Time results are available in the Control Rooms.	
There are Seven sensors for Air Quality measurement all around the Plant.	
It was found that SOX and NOX results are higher than the maximum limits that prescribed by CPCB. It was informed that MPL has been granted permission to maintain this level till their Flue Gas Desulphurization Units come into operation in December 2022.	Progress of the Work for FGD for both the units are in progress as per schedule which is appreciated.
MPL is a Zero discharge Plant. It has ETP and STP and Waste Water Management System. It also has Rain Water Harvesting System.	Appreciated.
Sludge from Water Treatment Plant is dumped in Fly Ash ponds & used for Road Building or Mines pit filling.	

OBSERVATIONS	RECOMMENDATIONS



5.13 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Employees in general were observed to be using PPEs like Safety Helmet and Safety Shoes.	Good Practice. To be maintained.
No worker in high noise areas were observed to use Ear Plugs.	Use of ear plugs to be encouraged.
MPL procures PPEs as per Specifications of BIS standards from reputed companies.	Appreciated.
Special type of PPEs are procured by respective departments.	
PPEs like Electrical Rubber gloves, insulated tools, face shield, Rubber Gloves, Aprons etc. are procured by Electrical department or Chemical Dept as may be the case.	
Quality of Safety Helmet and Shoe given to the Audit team for Plant visit was found to be satisfactory.	A strict check on the quality of PPE given to Contract workers must be done by MPL
For contract workmen, PPE is provided by the contractors and the cost is reimbursed.	

*****

OBSERVATIONS	RECOMMENDATIONS

PART – 6

FIRE PREVENTION, PROTECTION AND MITIGATION

6.1 FIRE HAZARD OCCUPANCY

With respect to fire scenarios, the plant is classified under "Light Hazard Occupancy" But at the same time, LDO/HFO storage area, H2 Cylinder Generation Unit and H2 station and Coal handling area is comes under "High Hazard Occupancy" and fire zone 2 with reference to fire load.

6.2 FIRE ORGANISATION

There is separate fire department in the company. Shri Rajkumar Rai, Lead Associate – Fire is heading the fire department. He is reporting to Shri A. K. Manna, Safety Head. Shri Rai is assisted one Site Incharge, Assistant Site Incharge and Senior Supervisors. Site Incharge is assisted by 4 nos. of Shift Supervisors, 11 nos. of DCPO 33 nos. of Firemen and 5 nos. of maintenance assistant form Siemens. Full fledge Fire station is looking after day-to-day functions of fire aspects and take immediate actions to mitigate any eventualities that may arise.	This is in order as per Rule 62 of The Bihar Factories Rules, 1950 and IS 3034.
Fire Safety Management chart is attached in Annexure – 10.	
Safety Warden team is prepared to handle different kind of emergencies including fire emergency.	Good system. It is suggested that Safety cap or Jacket separately should be provided for identification during emergency to ERT member.

6.3 FIRE ORDER/NOTICE

Separate fire notice indicating the responsibilities in case of fire is not prepared.	As an industrial practice, action plan to deal with fire which is known as 'Fire Order/Notice' should be prepared as per Clause 4.11 of Part – 4 of The National Building Code 2016 and implemented to manage fire emergencies by displaying at
Information for fire protection is displayed in Coal Handling plant area.	

OBSERVATIONS	RECOMMENDATIONS
	vantage points. Employees should be made aware of their role and responsibility during a fire emergency. The Fire Order/Notice should be used as a guidance document to conduct 'Fire drills".
6.4 FIRE TENDER	
MPL plant is having 3 nos. of fire tenders and Incase of major emergency, tenders are available from Asansol Fire Station which is at around 40 Km.	Arrangement is satisfactory only route inside the plant area should be finalized and unobstructed always.
6.5 FIRE PREVENTIVE MEASURES	
6.5.1 Smoking Regulations	
No Smoking Policy has been prepared and implemented. 'No smoking' boards are displayed in plant areas.	No smoking policy should be prepared and implemented. No person should be allowed for smoking, lighting or carrying of any match, lighter or smoking material as per Rule 62 (4d) of The Bihar Factories Rules, 1950.
6.5.2 Housekeeping	
Overall housekeeping in the plant area is good. Following are the observations: 1. Combustible boxes are stored in Control room electrical panel area.	Efforts should be put in to maintain good housekeeping and avoid fire.

OBSERVATIONS	RECOMMENDATIONS
	
Dry vegetation found in coal storage area.	Frequency should be maintained to remove dry vegetation around the area where chances of fire is there.
	
	

6.5.3 Spontaneous combustion

Material like cardboard, wood, thermacol, cotton waste, Oil soaked rags, etc are liable to spontaneous combustion found in many areas in the plant.	Such stores should be thoroughly examined and should be removed.

OBSERVATIONS	RECOMMENDATIONS

6.5.4 Static Electricity

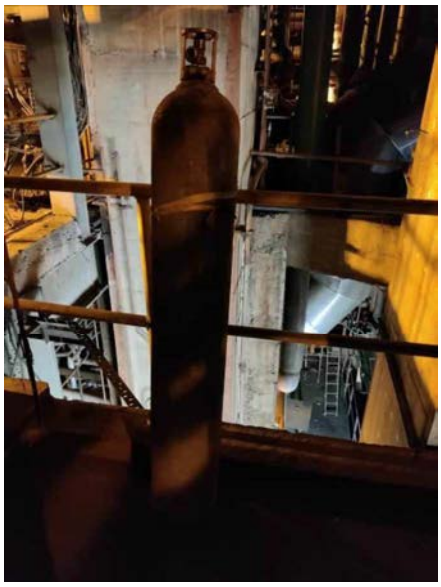
Bonding strips for flange joints are not provided at LDO/HFO pipelines, MOT pipelines and diesel area.	Bonding strips should be provided to all the flange joints of pipeline to avoid accumulation of static charge and adequacy/healthiness of earthing connections for all the equipment should be checked at periodic interval of time. This is also requirement as per Rule 62 (4b) of The Bihar Factories Rules, 1950.

6.5.5 Handling of Flammables and Gas Cylinders

Handling of lubricating oil, diesel, paint and thinner in small quantities has been found in Contractor office areas, MOT area, Hydrogen station.	Lubricating oil should be stored away and only should be transported by trolley as and when required. It is suggested that storage of this kind of bottles should be avoided or stored in safe cabinets.





OBSERVATIONS	RECOMMENDATIONS
	

6.5.6 Passive Fire Protection

1. Duct travelling from one area to another area and cables of panel are not sealed at many places.	As per IS 12459, all cable entries and duct in floor/electrical room should be effectively sealed by use of fire stops. Also as per CEA Regulation No. 36, all ducts (Cable duct) should be provided with fire barrier at each floor crossing.
	
	
2. Smoke exhaust system is not provided for the major building.	Smoke exhaust system for major building area should be provided at

OBSERVATIONS	RECOMMENDATIONS
3. Fire rated door are provided for fire exits.	top or near terrace area. This is in order as per Rule 62 (9 - h) of The Bihar Factories Rules, 1950. Design norm of fire door should be available for reference.
4. No written procedure for management of change/modification is exist. After modification in Control room area, changes are carried out without following procedure.	There should be written format for the management of change for any building modification. Drawings, manual, Evacuation route, etc. documents should be updated after any modification.



6.6 FIRE INSPECTION

Fire Inspection on fire prevention is in practice by using checklist once in 6 months. High visibility tour (HVST) is carried out once in year by Corporate office. Reports are avaliable	Joint regular monthly inspection by a team comprising Fire, Plant representative and Electrical executives should be carried out to ensure pruning of loose cables/ wires to avoid short circuit. Separate checklist should be prepared area wise and report should be submitted to concerned area incharge. Recommendations on deviation should be complied in time bound frame.

OBSERVATIONS	RECOMMENDATIONS

6.7 FIRE INCIDENT REPORTING SYSTEM

Fire Incident reporting and recording system is exist. Fire call register is maintained. Other reporting, recording and investigation procedure is same as accident.

Good system. It should be maintained.

Following are the data:

Year	No. of fire incidents
2020 - 21	--
2019 – 20	04
2018 – 19	03
2017 - 18	--

6.8 FIRE FIGHTING TRAINING

Fire training has been provided once in month as per training schedule to cover all the employees.

Good system. It is suggested that, all the employees and contract workers should be covered once in 6 months for fire training.

6.9 FIRE DETECTION AND ALARM SYSTEM

Smoke detector and alarm system is installed in the buildings and plant areas.

Good system. It should be continued.

All smoke detectors and manual call points should be numbered. Procedure or instructions for operating MCP should be displayed near each MCP.

Following are the details:

LOCATIONS	Detector POINTS
Smoke Detectors	1378
Gas Detectors	06
Manual Call Points	498

It is found that, Panel provided for the detection system is with on off system. Incase of closure, system will not gives any alarm in emergency.

No on-off system should be there, it should be on direct supply.

Review of smoke detectors and manual call points should be carried out after any change in process/building.

OBSERVATIONS	RECOMMENDATIONS
	
Servicing and maintenance of the detectors, panels and MCP's are carried out by internal team.	
6.10 PORTABLE FIRE EXTINGUISHERS	
There are total 423 nos. of fire extinguishers are provided in entire plant area which includes DCP/ABC, Foam and CO_2 type fire extinguishers.	Arrangement is adequate. It is suggested that, survey should be carried out considering the different types of fire risks and type of fire to allot the fire extinguishers as Mechanical foam type fire extinguishers are not provided near flammable storage areas.
Detail list of extinguishers with their type and capacity has been prepared and maintained.	
At many places fire extinguishers are not within the reach of workers due to obstacles of material stores or due to poor housekeeping.	As per Rule 62 (10 – I & j) of The Bihar Factories Rules, 1950, all fire extinguishers should be kept at height 750mm from ground level.
	

OBSERVATIONS	RECOMMENDATIONS
Use of Fire extinguishers charts are displayed in plant areas.	Appreciated. It should be maintained.
	
All the extinguishers are allotted with individual number.	Appreciated.
The refilling of fire extinguisher is carried out by internal team.	Maintenance and servicing of fire extinguishers should be carried out as per IS:2190:2010.
	
Total 34 nos. of fire buckets are provided and maintained in the plant.	Good system. It should be maintained.

6.11 FIRE WATER SYSTEM (INCLUDING FIRE PUMP HOUSE) / HYDRANT SYSTEM

There is a fire water tank having capacity of 2800 KL dedicated for fire only. In addition to this, 28000 KL Clarifier water tank will be used in case of fire emergency. Fire lines are laid underground/over-ground covering every area of plant.	Arrangement is satisfactory as per The National Building Code of India, 2016. It should be maintained. Hydrant maintenance should be carried out as per IS 13039:1991 – External hydrant system provision and maintenance and IS 3844 – Code of practice for installation and maintenance of Internal fire hydrant

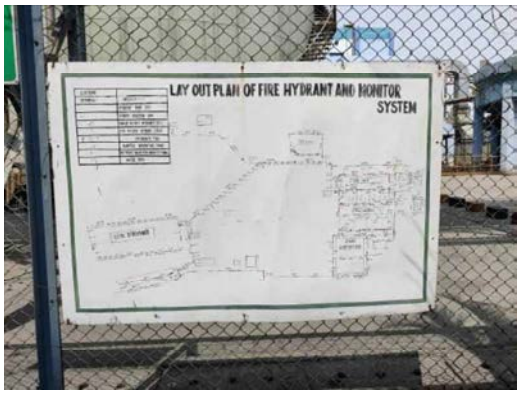
OBSERVATIONS	RECOMMENDATIONS
External and internal hydrants are installed after every thirty meters.	system.
Fire hose box installed at various conspicuous location, with fire hoses, and nozzle branch.	
All Fire Hydrants, Hose Boxes, Water monitors has been allotted with identification number.	
The total no. of Pumps available with:	

TYPE	QTY	CAPACITY
Main Electric Pump – Hydrant	2	172 M3/Hr
Diesel Pump	2	168 M3/Hr
Jokey Pump	2	10.8M3/Hr
Booster Pump	2	108 M3/Hr

Fire hydrant points are not maintained. Maintenance of Hydrant points, Monitors, Fire Tenders and Deluge valves are carried out by M/s. Akshar Fire & Safety Limited, Ahmedabad.	
	
Electrical cables are routed with fire hydrant line.	Electrical cables should be rerouted.

OBSERVATIONS	RECOMMENDATIONS
	
Fire hydrant lines are provided with branch for flushing, but it found that branch line using for other purposes.	Fire water should not be used for any other purpose as per 7.6.2 of Fire Protection Manual of TAC.
	
	

OBSERVATIONS	RECOMMENDATIONS
	
	
During visit, leakages found in underground hydrant line at BTG area which is not possible to rectify also.	It is suggested that, fire line in BTG area should be installed above the ground for ease of maintenance and better fire protection system for same area.
Checklist has been prepared for all the pumps by maintenance department and preventive maintenance has been carried out as per the schedule prepared.	Appreciated.
Layout of Fire hydrant system is available and displayed.	Appreciated. Only it should be updated whenever any changes are carried out.

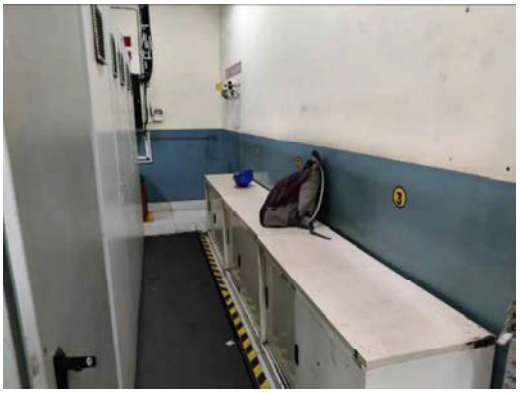
OBSERVATIONS	RECOMMENDATIONS
	
Foam pourer system is provided for LDO/HFO storage tank area.	Good system. It should be maintained.
	
Sprinkler system is provided covering transformers and maintained in auto mode.	Appreciated. Sprinkler system should be provided for coal yard. It should be maintained and tested as per IS 15105:2002 and IS 9972:1981.
	
Medium velocity water sprinkler provided for following system: 1. Cable Gallery 2. LDO/HFO tank area 3. CHP – Conveyor belt area.	

OBSERVATIONS	RECOMMENDATIONS
	
High velocity water sprinkler provided for following system: 1. 400 KV Switchyard 2. GT system 3. TG – MOT, DOT, SOT, MDBFP and TDBFP 4. Boiler	
Sprinkler system not provided for MOT tank.	It should be provided and maintained.
Following are the fire safety equipment's are available in plant area to tackle fire emergency:	Appreciated. It should be maintained.

SN	Area	Qty
1	Fire Buckets	65
2	Fire Hydrant Points	279
3	Hose Boxes	279
4	Fire Water Monitor	66
5	Foam Making Branch Pipes	03
6	Foam trolly	15
7	Fire Proximity Suit	8
8	SCBA Sets	25

6.12 FIRE AND EMERGENCY EXIT

1. Main entry gate of plant is wide enough for passage of fire fighting.	This is in order as per Rule 62 (9) of The Bihar Factories Rules, 1950.
2. Most of the access, floors, walkways, passages, stair-case etc. in plant were found well	"Every exit, exit access or exit discharge should be continuously maintained free from all obstructions

OBSERVATIONS	RECOMMENDATIONS
planned but not maintained. At some pathway, material has been kept.	and impediment" as per 4.2.3 and 4.4.2.4.2 of National Building Code of India, 2016 – Part IV. It should be removed on immediate basis.
	
3. Emergency exits/means of escape are not wide enough in contractor office area.	It should be provided and maintained.
	
4. Signages are provided on exits but not at all the places.	Illuminated signages at all the exits and arrow indicating the way to the escape route should be provided at a suitable height from the floor level on the wall as per 3.4.7.4 of National Building Code of India, 2016 – Part IV.

OBSERVATIONS	RECOMMENDATIONS
6.13 EMERGENCY PREPAREDNESS AND PLANNING	
Emergency Preparedness and Response plan has been prepared. Emergency Control Centre is not declared.	Appreciated. Emergency Control Center should be declared and should have following facilities: i. A copy of On-site Emergency Plan ii. List of important telephone numbers such as Police, Fire Brigade, Hospitals, and other outside emergency services, etc. iii. List of key personnels with addresses and telephone numbers iv. List of mutual aid scheme members v. Plant layout indicating storage of hazardous materials vi. List of Fire extinguishers vii. Fire fighting system (layout of Fire Hydrant), List of personal protective equipments viii. Material Safety Data Sheets ix. Portable Public address system x. Telephone
Electrical emergency siren has been provided to declare emergency.	Good system. It is suggested that electrical siren should be connected with emergency back-up system in case of power failure.
Vehicles are parked in designated parking area but, not in reverse direction.	All the vehicles including two wheelers should be parked in reverse direction only.

OBSERVATIONS	RECOMMENDATIONS
	
Emergency exit plan has been prepared and displayed.	Appreciated. It should be maintained.
6.14 MOCK DRILL	
Mock drill has been carried out on quarterly basis. Observers are appointed for the drills and recommendations are incorporated given by observer with target date. Plan for drill is prepared and followed. Records and reports are maintained.	Good system. It should be continued.
6.15 COMMUNICATION	
For the purpose of communication following facilities are available: 1. Emergency electric siren 2. Public Address system 3. Megaphone 4. Walki-Talki system – 80 nos. 5. Mobile phones, and 6. Intercom 7. CCTV – 300 nos.	Good system. All communication facilities provided should be periodically tested and results should be recorded.
6.16 MUTUAL AID SCHEME	
MPL Dandbad is not having an arrangement for mutual aid.	It should be done and documented as per the guidelines given vide Para 9 of TAC Fire Protection Manual.

*****

OBSERVATIONS **RECOMMENDATIONS**

PART – 7

ELECTRICAL SAFETY

Maithon Power Ltd, Nirsa has an installed capacity of 1050 MW in two units of 525 MW each and uses coal as fuel. The generated voltage is 21 KV, which is stepped up to 400 KV through generator transformer of capacity 216 MVA. The GT is single phase units and are accommodated in transformer yard along with unit auxiliary transformer of capacity 25 MVA. Bus ducts are provided to GT from generator and in bus duct 6 kg/sq. cm air pressure is maintained. MPL is thermal generation and availability of coal from CI L & BCL coal fields and water availability from Damodar river which is flowing about two kms away from plant. At water intake point, 250 KVA capacity two transformers of voltage ratio 6.6/ 0. 44KV is installed for operating in take motors of rating 279 KW. The generated power is evacuated through four no's of 400 KV circuits which is connected to grid, The circuit breaker rating of line side and bus side at 400 KV is 2000 A and the isolator also having the same rating. The line side isolators are equipped with earth blades and which are operating on remote& local. Two no's of DG's are available in the plant with a capacity of 2 MW each and are synchronized with main LT supply at DG control panel.

During the process of audit, verified documents such as SLD, transformer test records, cable distribution system, earth test results, PTW, accident records, maintenance schedule, DC system, operational log book, calibration details of protective relays, lux level at switch gear rooms, breaker test reports and DGA results of power transformers including BDV of oil. Checks and verifications are carried out at TG floor, 400 KV switch yard, transformer yard, control rooms, HT & LT switch gear rooms of units, DG's & DG panel, fire water pump house, stores, cable gallery's, MCC's, DTC's, BOP, Raw water pump houses, DM plant, FOPH, AHP, CHP, compressor house and external & internal electrical installations in plant premises, which are convincing that, the electrical section, up to a certain extend complied the statutory requirements as per CEA Regulation 2010.

7.1 TESTING AND EXAMINATION OF ELECTRICAL MACHINES & EQUIPMENT

LT power cables & HT cables are extended for street lights/area lights/load centers and the cables are taken through underground along the side of internal roads. Most of all places in the plant, cable markers are not visible along the route of cable. But near CHP the HT cable marker is visible. Hence the cable route is not identifying, especially in canteen/contractor shed area.	Cable marker shall be provided along the route of cable. This shall save the cable while digging and reduces the interruption period in case of cable fault. Cable laying should be as per CEA 2010 R (67) (P&L).

OBSERVATIONS	RECOMMENDATIONS
  The cable trench is accumulated with water and no source to drain the water from cable trench at DM plant LT switch gear room & at 400 KV switch yard near marshaling box.	Stop the water entry at source by proper sealing. It is not safe to charge the cable which are under water. Slope should be maintained while constructing the cable trench to drain water. This should confirm to CEA2010 Regulation no. 67(P&L).
  LT power cables and instrumentation/ control cables are laid in same cable track and crossing each other without any separation at FWPH.	Separate cable trays should be used for laying of control cables and power cables. As any fault on power cable may damage the instrumentation system, which leads to malfunction in operation. A comprehensive procedure for segregation /separation of cables of different types/voltages shall be adapted for laying of cables. This confirms to Central Electricity Authority (CEA) Regulations – 2010 no.37-11(b)

OBSERVATIONS	RECOMMENDATIONS
  Disconnected/faulty cables are not removed from circuit at RWPH.	Cable shall be properly terminated at proper places by nut and bolt with identification. If the cables, not in service / disconnected, remove from circuit and kept in store, to avoid confusion in case of cable fault, and early rectification. This should confirm to CEA 2010 Regulation no. 12.
 LT service cables are joined and covered with PVC tape at FWPH, which may lead to short circuit due to lose joint.	Make permanent LT joint by using jointing kits. The naked joints may attract injury to lives as there are chances of coming into contact with exposed live portion of wires. Make service laying in permanent in nature to avoid loose fitting, which should confirm to CEA 2010 Regulation no. 12.
 The LT distribution boxes is properly sealed at its point of entry of cable to prevent any entry of foreign objects, in PDB provided at LT switch gear room of 400 KV CR.	Very systematic cabling system adapted and implemented, which is the requirement of CEA 2010 Regulation no. 22(i).

OBSERVATIONS	RECOMMENDATIONS
	
Creepers are climbed on wire mesh fencing of 400 KV switch yard.	When it dry, it attracts fire due to spark from substation operation. Hence the same has to be removed. The switch yard fencing should be maintained as it protects the equipment's inside. This confirms to CEAR 2010 (12).
	
Rubber mats/insulating mats are not spread at in front of LT panels installed at ER-3 & DM plant switch gear room.	Providing rubber mats in front of panels for the safety of the operator. The rubber mat should confirm to IS-15652 of 2006, which is as per Central Electricity Authority Regulation 2010, sub-clause no.19 (5).
	
Smoke detector sensor is provided at 400 KV control room at the celling, and regularly testing.	Providing smoke detector at control room for early detection of fire is possible. Hence the control cables and equipment's in control panel can

OBSERVATIONS	RECOMMENDATIONS
	be protected. This should confirm to CEA 2010 Regulation no. 5 (plants, lines).
The 90 KW HFO-2B motor & 160 KW main hydrant motor at FWPH are connected to earth circuit by 25x3 mm GI strip from two distinct earth sources.	Very systematic earth circuit connection. CEA 2010 Regulation no.41 (Xii) states that 75 KW motor should be connected to earth circuit from two distinct sources. Proper installation of electrical equipment should reduce the maintenance cost and increase the life of the equipment.
	
Disconnected/faulty LT cables are not removed from service cable bunch/circuit, causing identification is difficult at cable gallery of CHP & ESP.	Remove the disconnected/faulty cable from circuit, which will help in fault finding and reduces the interruption period and also confirms to CEA 2010 Regulation no.12.

OBSERVATIONS	RECOMMENDATIONS
  Many materials like isolator mechanism boxes, substation GI structures and old CT's are placed in 400 KV switchyard. This reduces the operating space in switch yard. Way should be clear in switch yard for emergency operation.	Remove these materials from switch yard and the way should keep always free from obstacles and which should confirm to CEA 2010 Regulation no.12.
  Fire buckets filled with dry and clean sand on separate stand with cover is not provided near CHP switch gear room. 	Protective Equipment like fire buckets filled with dry and clean sand on separate stand should be provided near transformer yard for ready and immediate use of extinguishing fire, which is mandatory as per CEA 2010 Regulation no. 27(1).

OBSERVATIONS	RECOMMENDATIONS
Protective relays such as over current, earth fault & numerical relay are installed on HT/LT switch gear panels at RWPH switch gear room.	Installation of protective relays on control panels displays instant fault description. This should comply with CEA 2010 Regulation no. 100. The relays should be calibrated periodically and assure that the test results are within the limits.
	
Rust has partially developed on LT terminal box of 2500 KVA 6.6/0.4 KV distribution transformer installed at CWPH.	Periodic painting should be carried out on transformer. The cables and the terminals inside the box may get damaged due to development of rust, which affects the system operation. This should confirm to CEA 2010 Regulation no.12.
	
Scrap materials are stacked in CHP switch gear room. Hence approach to DB is denied in emergency.	Remove these materials from switch gear room, for getting sufficient space to the operator for operating the equipment's in emergency. The switch gear panel room always kept free of scrap materials, which is the requirement of CEA 2010 Regulation no.12.
	
At GT-1 B, in transformer yard, Baffle wall has constructed between generator transformers with sufficient space between wall and transformer.	Baffle wall between two transformers to avoid the spreading of fire to other one. This should confirm to CEA 2010 R 44(2)(vii)(a).

OBSERVATIONS	RECOMMENDATIONS
	
Grasses are grown up at 400 KV switch yard. When grasses are dry, it attracts fire due to spark from yard operation, which affects the substation equipment's.	Remove the grasses from 400 KV switch yard to protect the yard installations, which confirms to CEA 2010 Regulation no.12.
	
First aid box with prescribed medicines is available at 400 KV switch yard control room for giving immediate first aid to injured person.	First aid box should be provided at control room, which confirms to CEA 2010 Regulation no.27.

OBSERVATIONS	RECOMMENDATIONS
	
Cables are not supported while connecting to LV termunals of 2.5 MVA transformer installed for ESP. The LV bushing terminals may get damaged due to the dead weight of cable acting on LV bushings.	Provide cable support to avoid damages to terminals, which confirm to CEA 2010 Regulation no.67(P&L).
	
At RWPH cable gallery the illumination level is inadequate. Sufficient lights are not available at whole area of cable gallery.	Illumination survey to be carried out regularly at other cable galleries also. If any deficiency in illumination observed, provide adequate illumination at that location subject to observing the standard as per CEA 2010 Regulation no.10 (p&l).
	

OBSERVATIONS	RECOMMENDATIONS
Except in few cases the LT panels are mostly found in satisfactory condition, however at the LT switch gear at ER-3, is having disconnected wires with open end terminals are not removed from circuit and is mixed up with service wires inside the panel. The switch gear panel surface also not clean. Dust accumulation on panel.	Service wires should be properly connected to terminal on panels and ensure that all wires are connected to concerned terminals. This complies with CEA 2010 Regulation no. 104.The surface of panel should be maintained dust free.
	
By considering load requirement, proper capacity LT switchgear 630 A & 1000 A has been installed and commissioned at FWPH MCC room for fire hydrant LT panel.	Critically study the load requirement of various process of the said plant and take necessary action to replace if found unbalance to that particular equipment commensurate with maximum electrical consumption. This is the requirement of CEA 2010 Regulation no. 12.
	
At 400 KV switch yard, cable trench cover is damaged, causing damages to control cable insulation.	Replace the damaged trench cover to protect the control cables. The cable trench cover should be properly placed in grove of trench

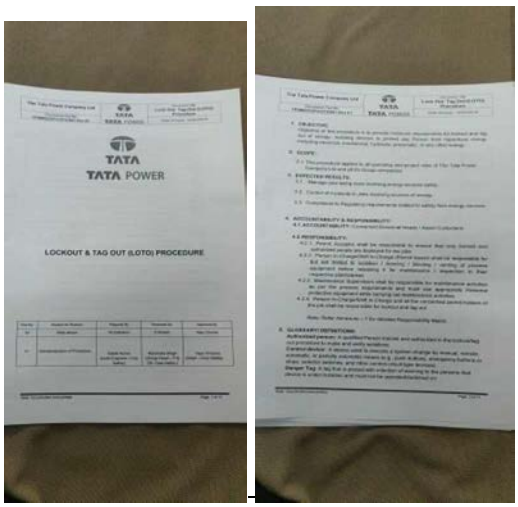
OBSERVATIONS	RECOMMENDATIONS
	wall. Sufficient width should be available in grove for seating of trench cover to avoid slipping. The cables and cable laying work should confirm to CEA 2010 Regulation no. 43.
The 2000 KVA DG-1, is tested periodically and test results are regularly reviewing by authorities.	This is satisfactory and complies with CEA 2010 Regulation no. 31(1) (2). Confirm the DG test results are within the permissible limit.
	

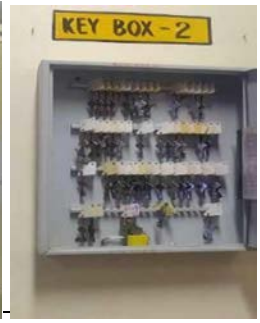
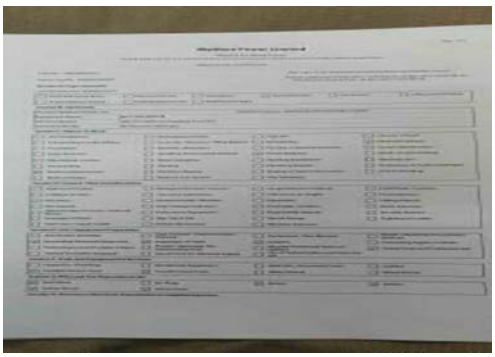
7.2 PREVENTIVE MAINTENANCE PRACTICES

The preventive maintenance schedule of electrical equipment's and panels of Hydrogen plant is exhaustive & comprehensive and it is not covering all periodicities as data available for audit. Check list for PM schedule is not available.	Preventive maintenance schedule for all periods such as daily, weekly, monthly, quarterly, half yearly, and yearly should be carefully prepared for all electrical equipment's and installations. The check list should be strictly followed. This is the requirement of CEA 2010 Regulation no. 12 Form-III.
The preventive maintenance schedule for 216 MVA 21/400 KV GT-1B-phase, is covering all important components of transformer and are not included in its physical verification format.	The findings in the check list should be rectified as early and properly documented. The transformer maintenance register should confirm to CEA 2010 Regulation no. 12.

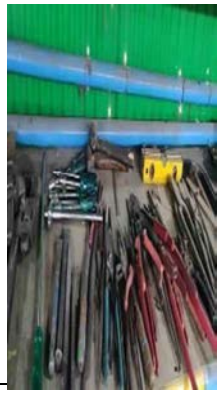
OBSERVATIONS	RECOMMENDATIONS
	
The maintenance schedule with check list of all electrical equipment's like transformers, motors, HT panels, LT panels and circuit breakers are available with electrical section and monitoring the maintenance scheduled.	Regularly monitors the planned maintenance schedule of approved works and proper documentation to be maintained for future reference, which confirms to CEA 2010 Regulation no. 12.

7.3 ELECTRICAL WORK PERMIT SYSTEM & LOTO PROCEDURES

Proper work permit system with foolproof arrangement is existing in electrical department and LOTO system is not followed by Electrical section.	Present work permit system adapted by electrical section for availing any outage works is to be followed till the prescribed outage system is finalized. This is a requirement of C.E.A. 2010 Regulation no. 19(1) (2) (3).
	
At 400 KV switch yard control room, the incomer circuit is locked in 'OFF' position and key has kept at CR key board during outages. There is separate arrangement made for keeping key in control room.	Properly maintain the procedure followed for outages and necessary entry should be made in log book which should confirms to CEAR 2010-(12).

OBSERVATIONS	RECOMMENDATIONS
 	
The work permit for preventive maintenance work on HT switch gear panels is issued according to format and work has executed. Proper entry has made and documented, which are available in electrical section.	The procedure adapted for outages is good and the activities are entered in register, in order with date & time, confirms CEA 2010 Regulation no.12.
	

7.4 ELECTRICAL HAND TOOLS – INSPECTION & RECORD KEEPING

Electrical hand tools such as insulated pliers, screw drivers, tool box, earthing/discharge rods etc. are kept in separate place and its records are available with Electrical section.	After work, keep these tools at the designated place, like tool room/tool box. Then in emergency the same shall be easily available, confirms to CEA R 2010-19(2).
 	

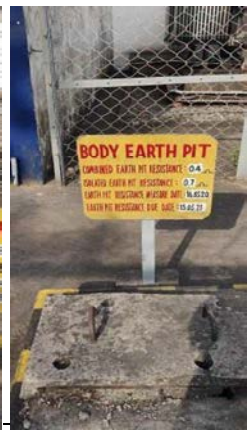
OBSERVATIONS	RECOMMENDATIONS
Insulated pliers and insulated screw drivers are using by electrical staff while extending supply from Main switch installed at contractor shed for fabrication purpose.	Ensure that pliers and screw drivers are having proper insulation level before using. A register should be maintained mentioning the make and description of hand tools for ready reference. Which confirms to CEA Regulation no.19. If the cables are not in service, remove from circuit.




7.5 EARTHING SYSTEM

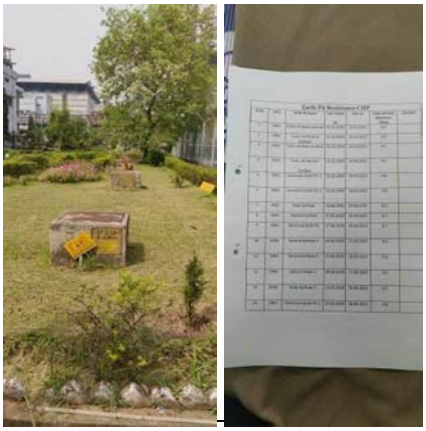
The earth pits are provided CHP near transformer, which are numbered and properly documented. Regular cleaning is to be done on earth pits. Earth pits are provided with chamber and cover with earth details.	The numbering done on earth pits is good and it is very much helpful in documentation. Proper and regular cleaning of earth pit is required, then only good conductivity can be expected and confirms to C.E.A. 2010 Regulation no. 41(xv) (a) (b)(c).





The lighting arrester of GT-B & R phases are earthed by 50X5 mm GI strips and which is extended to main earth strip coming from nearby earth pit. Watering arrangement is not done to earth pit.	Individual earth connection gives good conductivity. Watering arrangement should be done to earth pit, which confirms to CEAR 2010(74).

OBSERVATIONS	RECOMMENDATIONS
	
The earth connection to raiser is heavily rusted in earth pit near CWPH. The GI strip also develops rust at earth circuit connecting point. The earth pit is not cleaned and the pit wall also damaged.	For getting good earth connection, replace the rusted nut bolt. The earth pit should be cleaned and repair damages, which is as per CEA 2010 Regulation (16).
	
Rust developed at the nut bolt & GI strip provided to earth at LT panel installed at Chimney.	Replace the rusted nut bolt for getting good conductivity to discharge leakage current. This complies CEA 2010 Regulation no.48. To avoid entry of dust the glass on door to be provided.

OBSERVATIONS	RECOMMENDATIONS
	
Earth resistance tests are conducted regularly on earth pits and its values are documented and verified at Hydrogen plant LA earth pit. The CHP earth pit values are measured in ohms are available with Electrical section.	The earth values in ohms should be documented regularly after test, then only the obtained values should be compared. The earth test is confirmed to CEAR 2010 (41).
	

7.6 ELECTRICAL ZONE CLASSIFICATION

There is no documentation for Electrical Zone Classification in entire plant.	Drawings and documentation for Electrical Zone Classification should be prepared and periodically reviewed to make the changes if any. The Electrical Zone Classification document should be made available for reference to authorities.
The electrical zone classification demarcation drawings of the plant & bldgs. are not available during audit.	The 400 KV switch yard & GT yard areas are coming under electrical zone expect the service area which is normally part of the TG building.

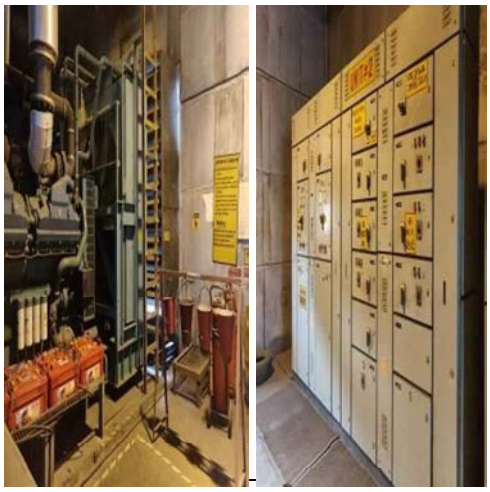
OBSERVATIONS	RECOMMENDATIONS

7.7 FLAMEPROOF ELECTRICAL EQUIPMENT /FITTINGS

Flameproof Electrical Fittings with specifications for concerned application is documented. Flame proof fittings are provided to Hydrogen plant and FOPH. In Hydrogen plant office, the LT DB in service is non flame proof.	Periodic review shall be taken at regular interval at strategic locations where flameproof fittings are required especially in flammable gas emanating area. The non-flame proof DB should be replaced to flame proof. The flameproof electrical fittings shall be done in this area to conform to CEA 2010 Regulation no. 37(iv).
 	
There is no documentation about hazardous area classification for proposing the flame proof fittings are required, especially at Hydrogen plant.	If flame proof electrical fitting is required for a location, then it should be as per CEA Regulation no.110.

7.8 EMERGENCY LIGHTING SYSTEM

DG sets of capacity 2000 KVA each are available in the plant, which meets the emergency loads. The DG output is 415 volts. Change over facility is installed at DG control panel.	The Diesel Generator Sets should be maintained properly and documented as per maintenance schedule, then only it helps in emergency. The availability of DG confirms to CEAR 2010(10)(13)(p&l).

OBSERVATIONS	RECOMMENDATIONS
	
At strategic locations like control rooms, switch gear rooms and in pathway areas, emergency lights are operational. Emergency light is in service at CHP switch gear room.	Emergency supply should be made available from DG to strategic locations in the plant, which confirm to CEAR 2010 (10)(15)(p&I).
	
Drawings of locations of emergency lamps installed are not available in Electrical Section and details of emergency lamps provided at strategic locations in the plant are not documented.	The emergency light locations shall be marked in the drawings and the same has to be displayed in prominent locations at plant with periodic review. This will give a quick access in emergency and confirms to CEAR 2010(8).
Only two diesel generators are available in the plant of capacity 525X2 MW. Common stand by DG is not available in the plant.	One DG set should be provided to each unit of 200 MW and above. In addition, there should be one common stand by DG set of same capacity to serve for two units, which confirms to CEAR 2010 (10)(13).

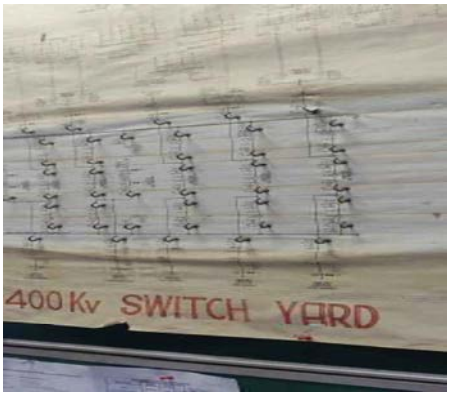
OBSERVATIONS	RECOMMENDATIONS



7.9 COMPLIANCE WITH CEA 2010 AND RULES

The Electrical Inspectorate has approved the Electrical Installation and the documentations which are available in Electrical section. The inspection reports are also available in office.

The approved electrical drawing should be made available any time in electrical office and presented to the authorities as and when demanded. Then only it complies with the C.E.A. 2010 Regulation no. 8(1), 9, 10 & 11(6).



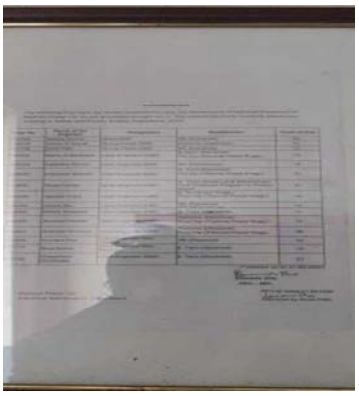
The single line diagram of electrical layout including location are available at electrical section. The drg. is available for verification during audit.

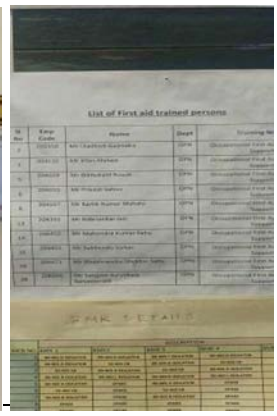
Any changes in circuit should be reflected in drawing and make sure that the drawing is up to date and confirm to CEA 2010 Regulation no.43(P&L).



OBSERVATIONS	RECOMMENDATIONS

7.10 ELECTRICAL SAFETY AND PERSONAL SAFEGUARDING

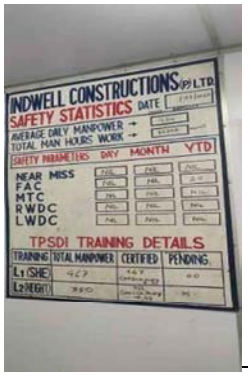
Authorized list of personnel's eligible to receive and take permit is maintained at electrical section. The authorized personal list is displayed at prominent location in 400 KV switchyard CR.	As per C.E.A. 2010 Regulation no. 3(3), it is mandatory to maintain a register of authorized personal list. This authorized personal list should be updated timely.
	
Electrical incidences are reported properly and in time and its document copies are available with Electrical section.	Conducting incident investigation after occurrence reporting is full filling the statutory requirements under C.E.A. 2010 Regulation no.8
Training on Electrical Safety is conducted by Electrical section. Systematic Electrical safety training is conducted for Electrical Staff and contract employees with prescribed syllabus on electrical safety.	It is recommended that periodic systematic Electrical Safety training is imparted to the electrical staff and contract through well experienced trainers. Electrical safety training should confirm to CEA 2011 Regulation no. 11.
Helmets, Safety shoes and hand gloves are regularly used by Electrical Staff while at work. PPEs are issued by entering in register.	The concerned in-charge shall ensure these PPEs are worn by staff while entrusting for the particular assignment, which complies to CEAR 2010-19 (2).
400 KV Control room is provided with First Aid Boxes with prescribed medicine and he location of first aid box is easily approachable. List of first aid trainers is also displayed in CR with employee code no.	First aid box with prescribed medicine should be provided in control room and the same is to be available easily in emergency. This complies with C.E.A. 2010 Regulation no. 27(3).

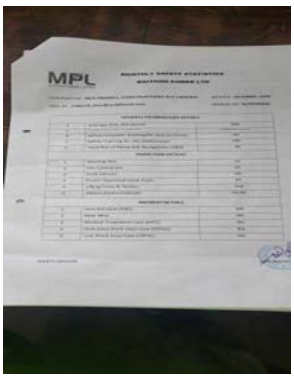
OBSERVATIONS	RECOMMENDATIONS
 	
In CHP control room, artificial respiration chart is displayed at prominent location in CR.	Artificial respiration chart should be displayed at prominent location in switch gear room. This complies with C.E.A. 2010 Regulation no. 28(1).
	
DO's and DON'T's are displayed at the entrance of the 400 KV switch yard.	It is recommended to display DO's and DON'T's board at the entrance of the switch yard with the following points: ⇨ Entry restricted to authorized persons only. ⇨ Do not carry long objects inside the switch yard. Use safety gadgets like helmet, safety shoes, and hand gloves of appropriate type while working inside the yard. Displaying danger board confirms to CEA 2010 Regulation no.18.
	
The 250 KVA out door transformers installed at RWPH is not constructed	The out-door transformers should be efficiently protected by chain link

OBSERVATIONS	RECOMMENDATIONS
with fencing. The voltage rating of both transformers is 6.6/0.44 KV and both transformers are in service.	fencing not less than 1.8 m in height so as to prevent access by an undesignated person and the fencing should be effectively connected to earth circuit, which is as per CEAR 2010 (49).



Monthly safety statistics are prepared and displaying at office.	Staff confidence should increase and it helps the general safety awareness among staff. Which confirms to CEAR 2011 (11).



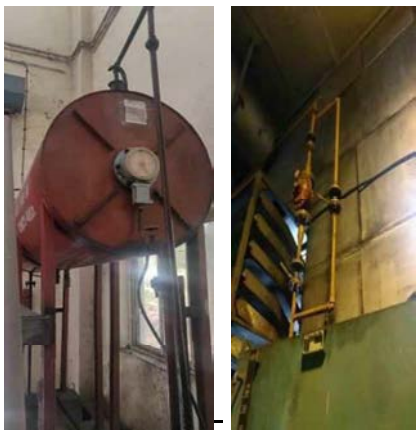


7.11 LIGHTENING PROTECTION SYSTEM/STATIC ELECTRICITY PREVENTION & DISCHARGE SYSTEM

Lightening arrestor has provided at GT- B phase in 400 KV switch yard. The earth resistance value of LA earth pit is documented. Separate registers are maintained for recording the earth value.	Earth connection should be checked regularly for its tightness and its resistance value shall be taken periodically and make sure that the values are within the limit, which has to confirm CEA 2010 Regulation no.41 (xvi) (xvii). The LA earthing shall be confirmed to CEA 2010 Regulation no.74 (2).



OBSERVATIONS	RECOMMENDATIONS
The diesel engine provided at Fire water pump house; its diesel tank is not connected to earth circuit. If earth circuit is not connected to diesel tank, the static current formed in diesel tank is not properly dissipating as the path of discharge is through MS frame which is grouted in concrete to earth. Earth bonds are not connected to diesel pipe flanges at DG 's diesel tank.	The diesel tank should be earthed for discharging of static current, which is also confirms to OISR-110. However, it is recommended to prepare a list of locations where provision of static discharge setup should be made. Earth bonds should be connected across diesel pipe flanges as between flange gasket has placed, which is non-conductor. Periodic inspection and maintenance carried out shall be defined in the maintenance schedule list. This is to comply with C.E.A. 2010 Regulation no. 74 (2).



7.12 SAFETY IN TEMPORARY WIRING

No separate system has been adapted for providing extension of temporary supply which is evident in temporary supply has extended near contractor shed/canteen.	The following method should be adapted for extension of temporary electric supply: a) Armored cable shall be used for extension. b) Cable shall be taken through G.I. pipe at pathway crossing. This is the requirement of C.E.A. 2010 Regulation no. 21 and 107.



At CHP switch gear room, disconnected cables and temporary extended cables are in circuit path	Remove the disconnected cables from circuit which reduces the interruption time while locating the

OBSERVATIONS	RECOMMENDATIONS
and the disconnected cables are not removed from circuits/cable trays which are mix up with service cables including instrumentation cables.	cable fault. If faulty cables are removed, less times should take for rectification. The control cables should be laid in separate GI cable trays from power cables, which confirms to CEA 2010 Regulation no. 67(5).



7.13 FIRE PREVENTION, PROTECTION AND MITIGATION w.r.t. ELECTRICAL SAFETY

A good number of portable fire extinguishers and fire buckets filled with dry clean sand are placed at strategic locations in CHP switch gear room. The portable fire extinguisher locations are easily approachable in emergency and approach ways are clear. The approach way to fire extinguisher location is obstacle free.	This is very good and the portable fire extinguisher maintenance should be carried out in time and documented. The approach way should be obstacle free, which should be assured. This should comply with CEA 2010 Regulation no. 27(1).





OBSERVATIONS	RECOMMENDATIONS
Many electrical equipment's are installed in TG building, and are maintained as per schedule. The healthiness of equipment's is assured through the maintenance planning. This helps in reducing the chances of electrical fire/electrical incidences.	This is very encouraging and hence continue with due importance to maintenance and record keeping. This also has to confirm with CEA 2010 Regulation no. 12
At transformer yard, arranges are made for high velocity water sprinkler system with its control valves. 	Adequate fire protection system should be arranged such as providing high velocity water sprinkler system in transformer yard, confirms to CEA 2010 Regulation no. 44.

*****

Annexure – 1

NATIONAL SAFETY COUNCIL, MUMBAI

Safety Audit of M/s. Maithon Thermal Power Plant, Dhanbad, Jharkhand

(16th – 19th March, 2021)

List of officials present in the **Opening Meeting** held on 16/03/21 at 0930 hrs.

Sr. No.	Name (Capital Letters)	Designation	Department	Sign
1.	ASHOK PANDA	Chief-O&M	O & M	
2.	DINESH K GANGWAL	Head-FGD Project	Corporate Projects	
3.	ALAK KUMAR MANNA	Head Safety & Fire	Safety & Fire	
4.	ABHISIT PANDEY	LE-SAFETY	Safety & Fire	
5.	SAMIR PANDAB	Head- P&E	P & E	
6.	SRINIVASA RAO TIGARI	Head – Chemistry	Chemistry	
7.	KUNTAL KR MITRA	Head- BE&Strategy	BE & Strategy	
8.	Shashi Kant Kumar	LE-Safety	Safety	
9.	Kumar Kundan Raj	Head	C&I	
10.	Keka Pattanayak	Lead-Engineer	C&I	K Pattanayak
11.	HIMADRI BHATTACHARJEE	GH – P&E	Performance & Efficiency	Himadri Bhattacharjee
12.	AMIT KUMAR PAL	Head- FGD & NOX O&M	FGD	
13.	Rajkumar Ravi	LA- Fire	Safety & Fire	
14.	Chandrima Chatterjee	LE - EMD	Electrical Maintenance	C. Chatterjee
15.	Kajal Kumari	OMST – EMD	EMD	Kajal Kumari

Sr. No.	Name (Capital Letters)	Designation	Department	Sign
16.	Sanjay Kumar	Head EMD	EMD	Sanjay.
17.	Kajal Kumar Singh.	CFO	F & A	Kajal Singh.
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				
31.				
32.				
33.				

Annexure – 2

NATIONAL SAFETY COUNCIL, MUMBAI

Safety Audit of M/s. Maithon Thermal Power Plant, Dhanbad, Jharkhand

(16th – 19th March, 2021)

List of officials present in the **Closing Meeting** held on 19/03/21 at 1400 hrs.

Sr. No.	Name (Capital Letters)	Designation	Department	Sign
1.	SRINIVASA RAO TILARI	Head – chemistry	Chemistry	[signature]
2.	ALAK KUMAR MANNA	Head Safety & Fire	Safety & fire	[signature]
3.	KUMAR KUNDAN RAJ	Head - IMD	IMD	[signature]
4.	Biplab Chatterjee	Head – ops	OPS	Biplab Chatterjee
5.	J.K. Kumar	Lead Associate	Safety	J.K. Kumar
6.	AMIT KR. PAL	Head - FGD & NO_x O&M	FGD	[signature]
7.	ABHIJIT PANDEY	LE - Safety & Fire	Safety & Fire	[signature]
8.	S. No patel	LE - MMD	MMD	[signature]
9.	D K Gangwal	Head - FGD Project	Corp. Proj.	[signature]
10.	Keka Pattanayak	Lead Engineer	C&I Maint.	KPattanayak
11.	K. K. MITRA	Head - BER Strategy	Business Excellence	[signature]
12.	Raghava Rajan	LE - FAH.	Fuel & Ash Algmt	[signature]
13.	Supratik Mukherji	Head - BHR	HR.	[signature]
14.	Rahul Deo Banerjee	Lead - EMD	EMD	RDBanerjee
15.	A. K. Nayak	GH - EMD	EMD	[signature]

Sr. No.	Name (Capital Letters)	Designation	Department	Sign
16.	SUBHRA SUNDAR CHATTERJEE	HEAD	MMD	
17.	Ashok Kumar	HE-ch	Chemistry	
18.	U.N.JHA	Head	C&M	
19.	SAMIR PANDAB	Head	PSE	
20.	Kajal Kumar Singh	CFO	F&A	
21.	ASHOK PANDA	chief-O&M	O&M	
22.	Ramesh Thy	LDC	—	
23.	Rajkumar Das	LA-Fire	Safety&Fire	
24.				
25.				
26.				
27.				
28.				
29.				
30.				
31.				
32.				
33.				

Annexure – 3

Health and Safety Policy

HEALTH AND SAFETY POLICY

Tata Power is committed to provide safe and healthy working environment for the prevention of work related injuries and ill-health. Safety is one of our core values. We strive to be a leader in safety excellence in the global power and energy business. In pursuit of this, we are committed to the following:

- Maintain and continually improve our management systems to eliminate hazards and reduce health & safety risks to all our stakeholders.
- Incorporate appropriate health & safety criteria into business decisions for selection of plant and technology, performance appraisal of individuals and appointments in key positions.
- Comply and endeavour to exceed all applicable health & safety legal and other requirements
- Integrate health & safety procedures and best practices into every operational activity with assigned line-functional responsibilities at all levels.
- Involve our employees and business associates in maintaining a safe and healthy work environment through consultation and participation
- Inculcate safety culture by visible leadership and empowerment.
- Ensure required competency to enable our employees and business associates for working safely.
- Promptly report incidents, investigate, share crucial learnings and prevent recurrences.
- Influence our business associates in enhancing their health and safety standards and align with Tata Power's health & safety codes and practices.
- Set safety & health metrics as indicators of excellence, monitor progress and continually improve health and safety performance.

We shall ensure the availability of appropriate resources at all times to fully implement and communicate this policy to all stakeholders by suitable means and periodically review its relevance in continuously changing business environment.

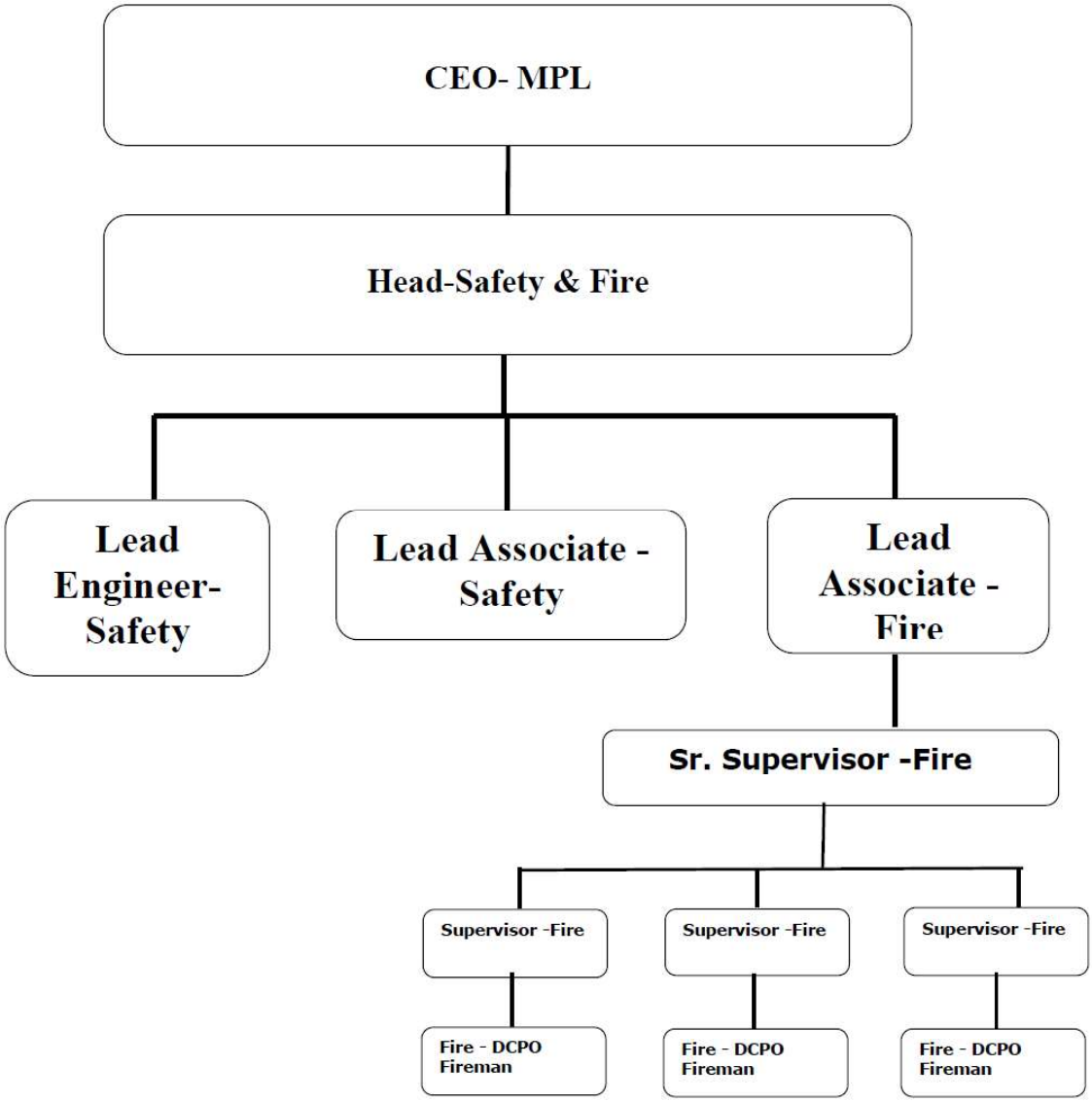
(Praveer Sinha)
CEO & Managing Director

Date: 11th March, 2019

TATA POWER
Lighting up Lives!

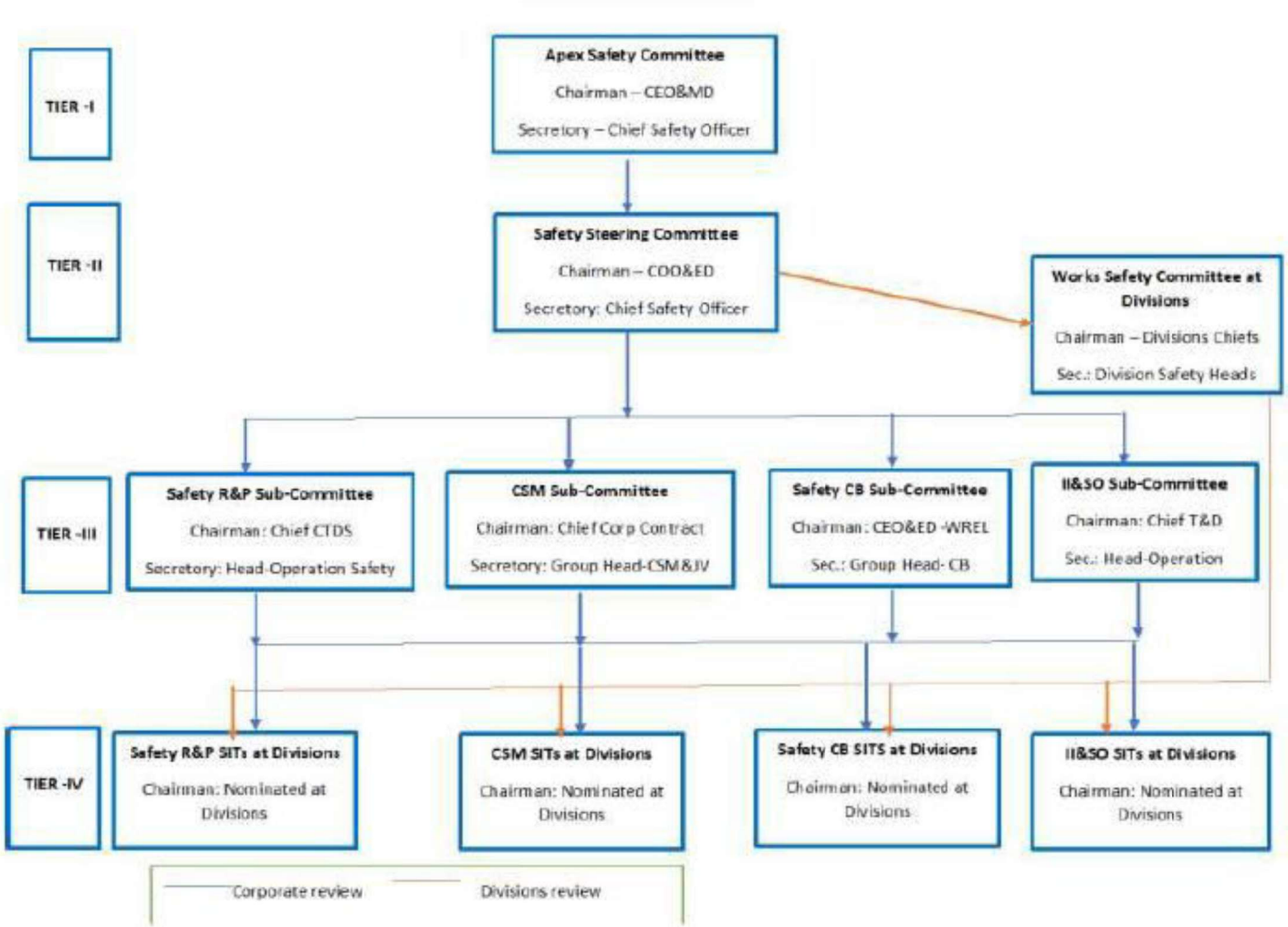
Annexure – 4

Safety Organization Chart



Annexure – 5

Safety Committee Governance Structure



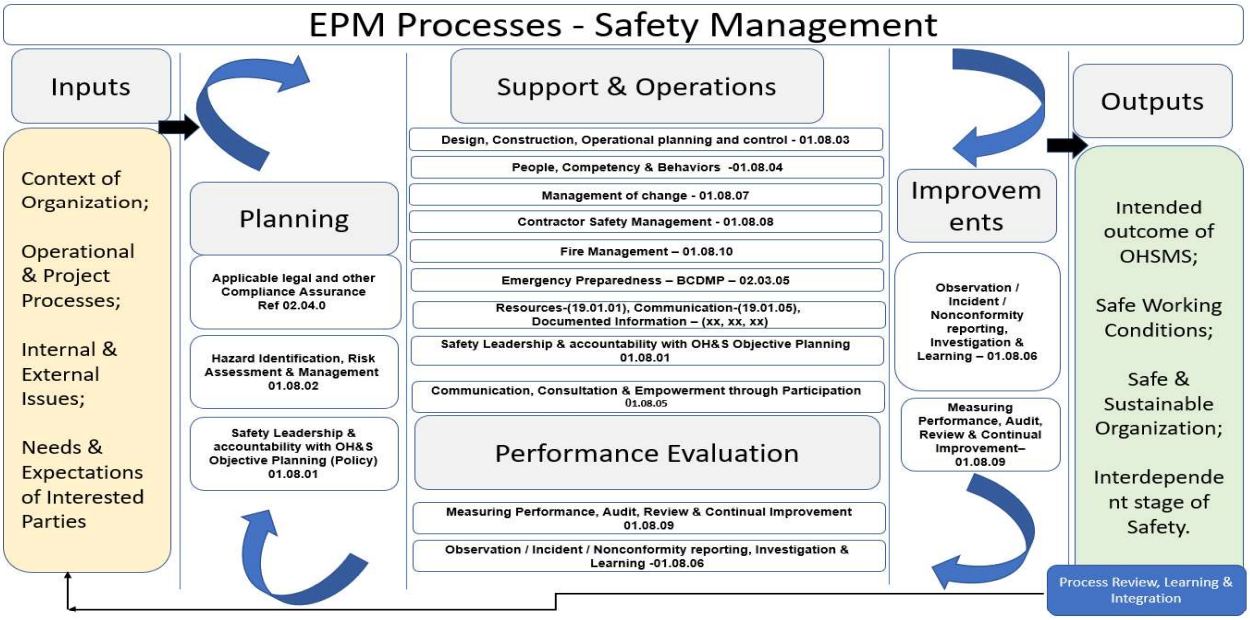
Annexure – 6

Safety Management Systems: Safety Leadership Approach



Technological Intervention -Safety Management/ Process Safety





Safety Excellence Journey

1 Safety Plan, **10** L3 EPM processes, **10** Policies, **11** Standards, **22** Procedures, **25** initiatives and activities.

Initiatives and Activities to Achieve Safety Excellence

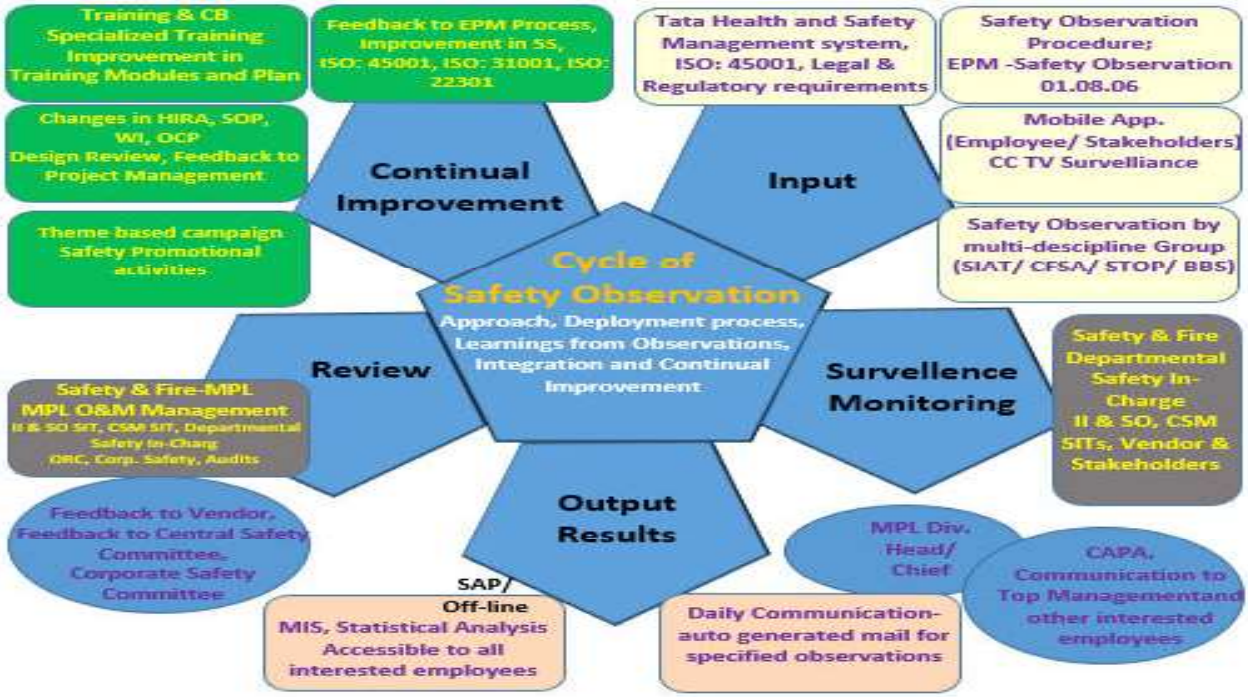
Training Program
1. Induction training
2. Standards and procedures
3. Job specific training
4. Contractors Internal training
5. Refresher training
6. Tools Box talk
7. Mass Meetings

Audit and Inspection program
1. Weekly CFSA Audit
2. SIAT – 4 Days per week
3. Weekly STOP Observation
4. Daily Incident Report
5. Daily Safety Inspection
6. Daily Housekeeping Inspection
7. Daily PTW & HIRA Audit

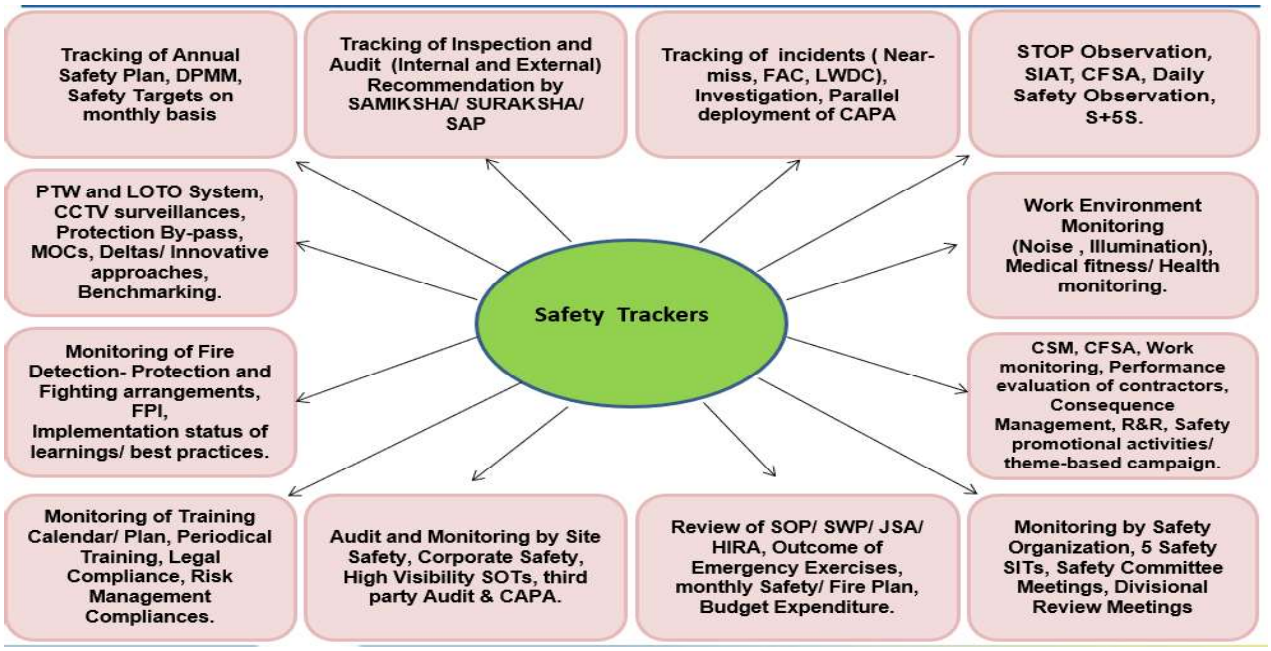
Safety Organization
1. Central Safety Committee
2. Rules & Procedures SIT
3. Capability Building SIT
4. Safety Observation SIT
5. Contractor Safety SIT
6. Incident Investigation SIT

Rewards & Recognition for
1. Safety, House Keeping,
2. Quiz, Slogan & Posters
3. Safe man of the month/ Safety Maestro
4. Reporting Near-misses/ Job stoppage
5. knowledge Sharing/ Training & Capability Building of Employees & Associates

Safety Observation Cycle



Safety Trackers



Annexure – 7

List of Safety Procedures and EPM Processes

SN	Doc NO.	Name of Document
A	TPSMS/CSP	Critical Safety Procedures
1	TPSMS/CSP/LOTO/001	Lock out and Tag out Procedure
2	TPSMS/CSP/EXS/002	Excavation Safety (Shoring and Sloping) Procedure
3	TPSMS/CSP/CSE/003	Confined Space Entry Procedure
4	TPSMS/CSP/WAH/004	Working at Height Procedure
5	TPSMS/CSP/HEMS/005	Heavy Equipment Movement Safety Procedure
6	TPSMS/CSP/MCS/006	Mobile Crane Safety Procedure
7	TPSMS/CSP/SCAF/007	Scaffold Safety Procedure
8	TPSMS/CSP/PTW/008	Permit To Work Procedure
9	TPSMS/CSP/JSA/009	Job Safety Analysis (JSA) Procedure
10	TPSMS/CSP/ELEC/010	Electrical Safety Procedure
11	TPSMS/CSP/FSM/011	Fire Safety Management Procedure
B	TPSMS/GSP	General Safety Procedures
1	TPSMS/GSP/LIFT/001	Lift (Elevator) Safety Procedure
2	TPSMS/GSP/CONV/002	Working on Conveyor Belt Procedure
3	TPSMS/GSP/HAZM/003	Handling of batteries and disposal Procedure
4	TPSMS/GSP/MATL/004	Material handling and storage Procedure
5	TPSMS/GSP/HIRA/005	Hazard Identification & Risk Assessment (HIRA) Procedure
6	TPSMS/GSP/OFS/006	Office Safety Procedure
7	TPSMS/GSP/MOC/007	Management of Change (MOC) procedure
8	TPSMS/GSP/ELCB/008	Earth Leakage Circuit Breaker (ELCB) Testing Procedure
9	TPSMS/GSP/LEGL/009	OH&S Legal Compliance Procedure
10	TPSMS/GSP/PSSR/010	PSSR Procedure
11	TPSMS/GSP/IRI/011	Incident Reporting & Investigation Procedure
12	TPSMS/GSP/AUDT/012	Safety Audit Procedure
13	TPSMS/GSP/COMM/013	Safety Communication Procedure
14	TPSMS/GSP/DOC/014	Document Control Procedure
15	TPSMS/GSP/CSM/015	Contractor Safety Code of Conduct
16	TPSMS/GSP/SCB/016	Safety Capability Building Procedure
17	TPSMS/GSP/TTRM/017	Tree Trimming Procedure
18	TPSMS/GSP/TRVL/018	Road Travel Safety Procedure
19	TPSMS/GSP/LONE/019	Safe Lone Working Procedure

SN	EPM No.	Name
1	EPM 04.01.01	Managing Workplace Safety Risk
2	EPM 04.01.02	Safe working procedures
3	EPM 04.01.03	Management Objectives & Planning
4	EPM 04.01.04	Disaster Management Plan (DMP)
5	EPM 04.01.05	Contractor Safety Management (CSM)
6	EPM 04.01.06	Occupational Health Management
7	EPM 04.01.07	Safety Training, Awareness & Development
8	EPM 04.01.08	Safety Observation
9	EPM 04.01.09	Incident Management and Investigation
10	EPM 04.01.10	Safety Inspection & Audit
11	EPM 04.01.11	Safety Monitoring, Review & Communication
12	EPM 04.02.01	Fire Detection Protection System Maintenance Management

Annexure – 8

Criteria for Risk Assessment

Risk Priority Number (RPN) Matrix

Frequency						
	5 (Very High - Has happened more than once per year in the Divisions)	5 (Low)	10 (High)	15 (High)	20 (Very High)	25 (Very High)
	4 (High - Has happened in the Division and more than once per year in Company)	4 (Low)	8 (Medium)	12 (High)	16 (Very High)	20 (Very High)
	3 (Medium- Has happened in the Company)	3 (Low)	6 (Medium)	9 (Medium)	12 (High)	15 (High)
	2 (Low- Happened in The Power Industries globally last 20 Years)	2 (Very Low)	4 (Low)	6 (Medium)	8 (Medium)	10 (High)
	1 (Very Low- Happened in the Industries globally last 10 years)	1 (Very Low)	2 (Very Low)	3 (Low)	4 (Low)	5 (Low)
		1 (Very Low)	2 (Low)	3 (Medium)	4 (High)	5 (Very High)
		Severity				

Annexure – 9

Content of Safety Manual

CONTENTS

A	Introduction	3
B	Scope of field of application	5
C	Accountability & Responsibility of implementation	5
D	Definition & Terms	6
E	Tata Power Safety Management System - Overview	11
F	System Elements	13
	1. Leadership & Accountability	14
	2. Hazard Identification, Risk Assessment & Management	15
	3. Compliance Assurance	15
	4. Design, Construction & Operational Control	15
	5. People, Competency & Behaviours	17
	6. Communication, Consultation & Empowerment	18
	7. Incident Reporting, Investigation & Learning	19
	8. Asset Management	20
	9. Management of Change	20
	10. Working with Contractors	21
	11. Emergency Preparedness, Response & Crisis Management	22
	12. Document Control & Record Management	22
	13. Measuring Performance, Audit & Review	23
G	Abbreviations	25
H	Exception	26
I	References	26
J	Review	26
K	Annexures	27

Annexure – 10

Fire Safety Management Plan



*****

Pyrotech
PYROTECH ELECTRONICS PVT. LTD. (UNIT-II)
E-329, ROAD NO. 12, M.I.A., UDAIPUR - 313003, INDIA
Ph.: +91-9116643376/77, E-mail: pyrotech@pyrotechindia.com
Web : www.pyrotechindia.com

Date: 06.05.2023

To,
Tata Power
Maithon Power Ltd.,
(A Joint Venture Company of Tata Power & DVC),
MA-5 Gogna,
P.O. Maithon Dam, District-Dhanbad 828 207,
Jharkhand, India

Ref.: Non availability of spare parts for Pyrotech supplied (Via BHEL to MPL) DLP system Model ID1400 67.

Dear Sir,

Greetings!

We would like to inform you that we have supplied Planar (formerly Clarity/Synelec) DLP system Model ID1400 67 in March 2010 to Maithon Power.

Planar ID series DLP cubes is already **End of life /obsolete** few years back.

Now we are also facing some problem to maintain the costly spares for these models (due to the component unavailability in market for the long time). Hence the supply of spares pertaining to this system cannot be possible in future. Also Repairing of the all faulty cards & modules are also not possible globally of existing DLP system.

We would like to bring to your kind notice that **all Planar DLP based Rear View Projection Cubes are END of LIFE** in the market and the **New generation direct view fine pitch LED Videowall** has been introduced few years back.

Hence we request you to please upgrade the existing DLP based Videowall System to direct view Fine pitch LED Videowall for trouble free operation.

Best Regards,

Pyrotech Electronics Pvt. Ltd. Unit-II
E-329
Road No.-12
UDAIPUR
M.I.A.

Akhilesh Mogra
DSBU Division- Pyrotech

List of switches replaced:

Old Switch (Make)	Old Switch (Model)	Serial Number(old)	New Switch Installed (Model)	New Switch (Serial No.)	Qty
Cisco	WS-C2960-24-S	F0C1344Z6Q5	C9200L-24T-4G-E	FVH28032ZMD	1
Cisco	WS-C2960-24-S	F0C1443Z3ZM	C9300X-12Y-A	FVH2752L0UL, FVH2752L1K1	2
Cisco	WS-C2960+24TC-L	FOC1941Z3WN	C9200L-24T-4G-E	FVH28041CTN	1
Cisco	WS-C2960-24-S	F0C1446X1E8	C9200L-24T-4G-E	FVH2750247F	1
Cisco	SG220-26-K9	DNI252907P6	C9200L-24T-4G-E	FVH28041CRT	1
Cisco	WS-C2960-24-S	F0C1423Y0ZR	C9200L-24T-4G-E	FVH2750247S	1
Cisco	WS-C2960+24TC-L	FOC2011S1CV	C9200L-24T-4G-E	FVH275024DE	1
Cisco	WS-C2960C-8TC-L	FOC2002Y04U	C9200L-24T-4G-E	FVH28041D9T	1
Cisco	SG250-10P-K9	FVH28041CXS	C9200L-24T-4G-E	FVH28041CXS	1
D-Link	DGS- 1024 D	FVH28041DBS	C9200L-24T-4G-E	FVH28041DBS	1

End of Life Product List (2024-04-30)

Model	H/W Ver.	Product Type	End of Life
DTR-244DG	ALL	Device	30-04-2024
DSL-2750B	ALL	Device	12-04-2024
DAP-1955	A1	Device	31-03-2024
DIR-853	A3	Device	31-03-2024
DSL-124	I1	Device	31-03-2024
DSL-2730U	ALL	Device	31-03-2024
DIR-853	A1	Device	31-03-2024
DIR-853	A2	Device	31-03-2024
DIR-853	R2	Device	31-03-2024
DIR-853	R1	Device	31-03-2024
DIR-X3260	A1	Device	31-03-2024
DIR-2150	A1	Device	01-03-2024
DIR-842	C1	Device	15-02-2024
DIR-842	C2	Device	15-02-2024
DIR-842	C3	Device	15-02-2024
DV-700	ALL	Software	19-01-2024
DWL-6610AP	A1	Device	31-12-2023
DES-1008P+	ALL	Device	30-04-2023
DNR-322L	ALL	Device	30-03-2023
DSL-125	I1	Device	01-01-2023
DSL-2640B	C2	Device	01-01-2023
DCS-1820LM	ALL	Device	01-06-2022
DXS-3610-FAN-FB	ALL	Device	23-02-2022
DGS-6600	ALL	Device	09-11-2019
DGS-6600-48P-C	ALL	Device	09-11-2019
DGS-6600-AF-II	ALL	Device	09-11-2019
DEM-320S	A1	Device	End of Life
DEM-CB100	A1	Device	End of Life
DEM-CB50	A1	Device	End of Life
DES-1005D	A1	Device	End of Life
DES-1005D	F1	Device	End of Life
DES-1005D	G1	Device	End of Life
DES-1005D	G2	Device	End of Life
DES-1005D	G3	Device	End of Life
DES-1024R+	B1	Device	End of Life
DES-1024R+	C1	Device	End of Life
DES-1026G	A1	Device	End of Life
DES-1026G	B1	Device	End of Life
DES-1026G	B2	Device	End of Life

DES-1032	A2	Device	End of Life
DES-1048	A1	Device	End of Life
DES-1048G	A3	Device	End of Life
DES-1048G	B2	Device	End of Life
DES-1048G	B3	Device	End of Life
DES-1200M	B1	Device	End of Life
DES-1218R	A1	Device	End of Life
DES-1218R	B1	Device	End of Life
DES-1226F	A1	Device	End of Life
DES-1226G	A1	Device	End of Life
DES-1226G	A2	Device	End of Life
DES-1226R	A1	Device	End of Life
DES-1226R	B1	Device	End of Life
DES-124F	A1	Device	End of Life
DES-1250G	A1	Device	End of Life
DES-128	A1	Device	End of Life
DES-1316	A1	Device	End of Life
DES-131F	A2	Device	End of Life
DES-131FL	A2	Device	End of Life
DES-132	A1	Device	End of Life
DES-132F	A2	Device	End of Life
DES-132FL	A2	Device	End of Life
DES-132G	A1	Device	End of Life
DES-132GB	B3	Device	End of Life
DES-132GL	A2	Device	End of Life
DES-132T	A2	Device	End of Life
DES-1526	A1	Device	End of Life
DES-3218	C1	Device	End of Life
DES-3224	A1	Device	End of Life
DES-3225G	A1	Device	End of Life
DES-3226S	A1	Device	End of Life
DES-3226S	B1	Device	End of Life
DES-3226SM	B1	Device	End of Life
DES-3226SM	B2	Device	End of Life
DES-3250TG	A1	Device	End of Life
DES-3326	B1	Device	End of Life
DES-3326S	B1	Device	End of Life
DES-3326SR	B1	Device	End of Life
DES-332GS	A4	Device	End of Life
DES-361GL	A1	Device	End of Life
DES-361T	A1	Device	End of Life
DES-3624	A1	Device	End of Life
DES-3624F	A1	Device	End of Life
DES-3624i	A1	Device	End of Life



DES-3624iF	A1	Device	End of Life
DES-362FM	A1	Device	End of Life
DES-362G	A1	Device	End of Life
DES-362GL	A1	Device	End of Life
DES-362T	A1	Device	End of Life
DES-363S	A1	Device	End of Life
DES-6000	A3	Device	End of Life
DES-6007	A2	Device	End of Life
DES-6300	A1	Device	End of Life
DES-6303	A1	Device	End of Life
DES-6304	A1	Device	End of Life
DES-6305	A1	Device	End of Life
DES-6306	A1	Device	End of Life
DES-6307	A1	Device	End of Life
DES-6308	A1	Device	End of Life
DES-6309	A1	Device	End of Life
DES-6504	B1	Device	End of Life
DES-6505	A1	Device	End of Life
DES-6507	A1	Device	End of Life
DES-6508	B1	Device	End of Life
DES-6509	A1	Device	End of Life
DES-6510	B1	Device	End of Life
DES-7000	A1	Device	End of Life
DES-7003	A1	Device	End of Life
DES-7005	A1	Device	End of Life
DES-7006	A1	Device	End of Life
DES-7010	A1	Device	End of Life
DES-7011	A1	Device	End of Life
DES-7012	A1	Device	End of Life
DGE-528T	A1	Device	End of Life
DGE-530T	A1	Device	End of Life
DGE-550T	A1	Device	End of Life
DGE-550T	A2	Device	End of Life
DGS-1005D	A1	Device	End of Life
DGS-1005D	B1	Device	End of Life
DGS-1005D	B2	Device	End of Life
DGS-1005D	C1	Device	End of Life
DGS-1008D	C1	Device	End of Life
DGS-1008T	A1	Device	End of Life
DGS-1008TL	A1	Device	End of Life
DGS-1016D	A1	Device	End of Life
DGS-1016T	A1	Device	End of Life
DGS-1016T	A2	Device	End of Life
DGS-1016TL	B1	Device	End of Life

DGS-1024D	A1	Device	End of Life
DGS-1024T	B1	Device	End of Life
DGS-1024TG	A1	Device	End of Life
DGS-1024TL	A1	Device	End of Life
DGS-1216T	B1	Device	End of Life
DGS-1224T	B1	Device	End of Life
DGS-3024	A2	Device	End of Life
DGS-3208F	A1	Device	End of Life
DGS-3208TG	A1	Device	End of Life
DGS-3212SR	A1	Device	End of Life
DGS-3224SR	A1	Device	End of Life
DGS-3224TG	A1	Device	End of Life
DGS-3224TGR	A1	Device	End of Life
DGS-3308FG	A1	Device	End of Life
DGS-3308FG	A2	Device	End of Life
DGS-3308TG	A1	Device	End of Life
DGS-3312SR	A1	Device	End of Life
DGS-3312SR	A3	Device	End of Life
DGS-3426	A1	Device	End of Life
DMC-1002	A1	Device	End of Life
DMC-1530SC	A1	Device	End of Life
DMC-300M	A1	Device	End of Life
DMC-300SC	A1	Device	End of Life
DMC-515SC	A1	Device	End of Life
DMC-530SC	A1	Device	End of Life
DMC-560SC	A1	Device	End of Life
DMC-560SC	B1	Device	End of Life
DMC-615SC	A1	Device	End of Life
DMC-700SC	A1	Device	End of Life
DMC-810SC	A1	Device	End of Life
DPS-1000	A1	Device	End of Life
DSS-16+	F2	Device	End of Life
DES-1008D	G2	Device	End of Life
DES-1010G	A1	Device	End of Life
DES-1048G	A2	Device	End of Life
DES-1226F	A2	Device	End of Life
DES-1316	A2	Device	End of Life
DES-131F	A1	Device	End of Life
DES-131FL	A1	Device	End of Life
DES-332GS	A1	Device	End of Life
DES-332GS	A2	Device	End of Life
DES-332GS	A3	Device	End of Life
DES-361G	A1	Device	End of Life
DES-6504	A1	Device	End of Life



DES-6506	A1	Device	End of Life
DES-6506	A2	Device	End of Life
DGE-550SX	A1	Device	End of Life
DGE-550T	A5	Device	End of Life
DGS-1004T	A1	Device	End of Life
DGS-1004T	A2	Device	End of Life
DGS-1004T	A3	Device	End of Life
DGS-1008TL	A2	Device	End of Life
DGS-1224T	A1	Device	End of Life
DGS-3208F	A2	Device	End of Life
DGS-3208F	A3	Device	End of Life
DGS-3208TG	A2	Device	End of Life
DGS-701	A1	Device	End of Life
DGS-701	C1	Device	End of Life
DGS-702	A1	Device	End of Life
DGS-702	C1	Device	End of Life
DGS-703	A1	Device	End of Life
DGS-704	A1	Device	End of Life
DGS-707	A1	Device	End of Life
DGS-708	A1	Device	End of Life
DGS-711	C1	Device	End of Life
DPS-1001	A1	Device	End of Life
DES-1008F	B1	Device	End of Life
DES-1008F	C1	Device	End of Life
DES-3526DC	A2	Device	End of Life
DGS-1005D	C2	Device	End of Life
DGS-1008D	C2	Device	End of Life
DGS-1008D	C3	Device	End of Life
DMC-920	A1	Device	End of Life
DMC-920	B2	Device	End of Life
DES-3010FL	A1	Device	End of Life
DES-1250G	A2	Device	End of Life
DMC-300M	D1	Device	End of Life
DMC-560SC	D1	Device	End of Life
DGS-108	A2	Device	End of Life
DGE-528T	A2G	Device	End of Life
DGE-550T	A3	Device	End of Life
DGS-2205	A1	Device	End of Life
DMC-920	B1	Device	End of Life
DMC-1001	A2	Device	End of Life
DMC-300M	B1	Device	End of Life
DMC-300M	C1	Device	End of Life
DMC-300SC	B1	Device	End of Life
DMC-300SC	C1	Device	End of Life



DMC-515SC	B1	Device	End of Life
DMC-515SC	C1	Device	End of Life
DMC-530SC	B1	Device	End of Life
DMC-530SC	C1	Device	End of Life
DMC-560SC	C1	Device	End of Life
DES-7200-48P	A1	Device	End of Life
DES-7200-48	A1	Device	End of Life
DES-7200-1200AC	A1	Device	End of Life
DES-7200-2000AC	A1	Device	End of Life
DES-7210-FAN	A1	Device	End of Life
DES-7200-CM4	A1	Device	End of Life
DES-7200-4XG	A1	Device	End of Life
DES-7200-2XG	A1	Device	End of Life
DES-7200-24G	A1	Device	End of Life
DES-7200-24	A1	Device	End of Life
DES-7200-CM2	A1	Device	End of Life
DES-7200-CM1	A1	Device	End of Life
DSS-24+	A1	Device	End of Life
DES-1008D	E4	Device	End of Life
DES-3012PA	A1	Device	End of Life
DES-3226PA	A1	Device	End of Life
DES-3400	A1	Device	End of Life
DES-3400-28	A1	Device	End of Life
DES-3400-28P	A1	Device	End of Life
DES-3400-52	A1	Device	End of Life
DES-3400-52P	A1	Device	End of Life
DES-3728P	A1	Device	End of Life
DES-3752P	A1	Device	End of Life
DES-6800	A1	Device	End of Life
DGS-1016D	D3	Device	End of Life
DGS-1024D	D3	Device	End of Life
DGS-6600-24SC2XG	A1	Device	End of Life
DES-7100	A1	Device	End of Life
DGE-560T	E1	Device	End of Life
DGE-560T	F1	Device	End of Life
DES-1005A	A1	Device	End of Life
DES-3010F	A1	Device	End of Life
DES-3226	B1	Device	End of Life
DGS-3204	A1	Device	End of Life
DGS-3426	A2G	Device	End of Life
DEM-515SC	D1	Device	End of Life
DGS-3324SR	A3G	Device	End of Life
DEM-515SC	D2	Device	End of Life
DSS-24	D2	Device	End of Life



DEM-220T	A1	Device	End of Life
DEM-220R	A1	Device	End of Life
DES-1108	B1	Device	End of Life
DES-3810-28-SE-LIC	A1	Device	End of Life
DES-3810-52-SE-LIC	A1	Device	End of Life
DGS-3120-24PC-SE-LIC	A1	Device	End of Life
DGS-3120-24SC-SE-LIC	A1	Device	End of Life
DGS-3120-24SCDSE-LIC	A1	Device	End of Life
DGS-3120-24TC-SE-LIC	A1	Device	End of Life
DGS-3120-48PC-SE-LIC	A1	Device	End of Life
DGS-3120-48TC-SE-LIC	A1	Device	End of Life
DGS-6600-24SC2XS-II	A1	Device	End of Life
DGS-6600-48S-II	A1	Device	End of Life
DES-3200-10-DC	C2	Device	End of Life
DGS-1210-10	A1	Device	End of Life
DGS-1210-52MP	A1	Device	End of Life
DGS-1210-52P	A1	Device	End of Life
DXS-3400-FAN-FBFAN	A1	Device	End of Life
DSS-100E-18P	A1	Device	End of Life
DQS-5000-54SQ28	A1	Device	End of Life
DXS-PWR500DC	A1	Device	End of Life
DPS-900	A1	Device	End of Life
DPS-300	A1	Device	End of Life
7100-24SC	A1	Device	End of Life
7100-24SC2XS	A1	Device	End of Life
7100-24TC	A1	Device	End of Life
7100-300AC-I	A1	Device	End of Life
7100-300AC-P	A1	Device	End of Life
7100-400AC-I	A1	Device	End of Life
7100-48P	A1	Device	End of Life
7100-48T	A1	Device	End of Life
7100-CM	A1	Device	End of Life
7100-CM2-2XS	A1	Device	End of Life
7100-CM-24SC	A1	Device	End of Life
7100-CM-2XS	A1	Device	End of Life
7100-PA800-PSE	A1	Device	End of Life
7100-PSE	A1	Device	End of Life
7100-PSE-M	A1	Device	End of Life
7104-FAN	A1	Device	End of Life
7106-FAN	A1	Device	End of Life
ACS-DAP3220-MNTKIT	A1	Device	End of Life
ACS-USB-CRADLE	A1	Device	End of Life
ACS-WPCASE	A1	Device	End of Life
ANT24-0230	A1	Device	End of Life

ANT24-0400	A2	Device	End of Life
ANT24-0400	A4	Device	End of Life
ANT24-0400	B1	Device	End of Life
ANT24-0401	A2	Device	End of Life
ANT24-0500	A1	Device	End of Life
ANT24-0500	A2	Device	End of Life
ANT24-0500CB	A1	Device	End of Life
ANT24-0501	A1	Device	End of Life
ANT24-0501	A2	Device	End of Life
ANT24-0501C	A1	Device	End of Life
ANT24-0502	A1	Device	End of Life
ANT24-0600	A1	Device	End of Life
ANT24-0600	A2	Device	End of Life
ANT24-0700	A1	Device	End of Life
ANT24-0700	A2	Device	End of Life
ANT24-0700	B1	Device	End of Life
ANT24-0700C	A1	Device	End of Life
ANT24-0700C	A2	Device	End of Life
ANT24-0800	A1	Device	End of Life
ANT24-0800	A3	Device	End of Life
ANT24-0800	B1	Device	End of Life
ANT24-0800	B2	Device	End of Life
ANT24-0800CB	A1	Device	End of Life
ANT24-0801	A1	Device	End of Life
ANT24-0801	A2	Device	End of Life
ANT24-0801	A3	Device	End of Life
ANT24-0802	A1	Device	End of Life
ANT24-0802C	A1	Device	End of Life
ANT24-1000N	A1	Device	End of Life
ANT24-1200	A1	Device	End of Life
ANT24-1200	A2	Device	End of Life
ANT24-1200CB	A1	Device	End of Life
ANT24-1201	A1	Device	End of Life
ANT24-1201	A2	Device	End of Life
ANT24-1201	A3	Device	End of Life
ANT24-1202	A1	Device	End of Life
ANT24-1400	A1	Device	End of Life
ANT24-1400	A2	Device	End of Life
ANT24-1400	A3	Device	End of Life
ANT24-1400N	A1	Device	End of Life
ANT24-1500	A2	Device	End of Life
ANT24-1600N	A1	Device	End of Life
ANT24-1800	A1	Device	End of Life
ANT24-1800	A2	Device	End of Life



ANT24-1801	A2	Device	End of Life
ANT24-2100	A1	Device	End of Life
ANT24-2100	A2	Device	End of Life
ANT24-2100	B1	Device	End of Life
ANT24-CB03N	A1	Device	End of Life
ANT24-CB03N	A2	Device	End of Life
ANT24-CB03N	B1	Device	End of Life
ANT24-CB06N	A1	Device	End of Life
ANT24-CB06N	A2	Device	End of Life
ANT24-CB06N	B1	Device	End of Life
ANT24-CB09N	A1	Device	End of Life
ANT24-CB09N	A2	Device	End of Life
ANT24-CB09N	B1	Device	End of Life
ANT24-DLK3M	A2	Device	End of Life
ANT24-JC	A1	Device	End of Life
ANT24-ODU03M	A2	Device	End of Life
ANT24-ODU1M	A2	Device	End of Life
ANT24-ODU3M	A2	Device	End of Life
ANT24-SP	A2	Device	End of Life
ANT50-1400N	A1	Device	End of Life
ANT50-2000N	A1	Device	End of Life
ANT70-0500	A1	Device	End of Life
ANT70-0800	A1	Device	End of Life
ANT70-0800	B1	Device	End of Life
ANT70-0801	A1	Device	End of Life
ANT70-1000	A1	Device	End of Life
ANT70-1000	A2	Device	End of Life
ANT70-1400N	A1	Device	End of Life
ANT70-1800	A1	Device	End of Life
ANT70-CB1N	A1	Device	End of Life
ANT70-CB1R	A1	Device	End of Life
ANT70-CB1RN	A1	Device	End of Life
ANT70-SP	A1	Device	End of Life
APMII	A1	Device	End of Life
DAP-2320	A1	Device	End of Life
DAP-2320L	A1	Device	End of Life
DAP-3640	A1	Device	End of Life
DAP-3662	A1	Device	End of Life
DAP-3662	A2	Device	End of Life
DAS-4192-10	A1	Device	End of Life
DAS-4192-20	A1	Device	End of Life
DAS-4192-21	A1	Device	End of Life
DAS-4192-30	A1	Device	End of Life
DAS-4192-40	A1	Device	End of Life

DAS-4192-41	A1	Device	End of Life
DAS-4192-50	A1	Device	End of Life
DAS-4192-60	A1	Device	End of Life
DAS-4672-10	A1	Device	End of Life
DAS-4672-20	A1	Device	End of Life
DAS-4672-30	A1	Device	End of Life
DAS-4672-40	A1	Device	End of Life
DAS-4672-50	A1	Device	End of Life
DAS-AMS	A1	Device	End of Life
DCH-302KT	A1	Device	End of Life
DCH-G110-LIC	NA	Device	End of Life
DCS-201A	A1	Device	End of Life
DCS-201I	A1	Device	End of Life
DCS-25	A1	Device	End of Life
DCS-250-VMS-032-LIC	NA	Device	End of Life
DCS-31	A1	Device	End of Life
DCS-32-1	A1	Device	End of Life
DCS-32-2	A1	Device	End of Life
DCS-32-3	A1	Device	End of Life
DCS-32-4	A1	Device	End of Life
DCS-33-1	A1	Device	End of Life
DCS-33-2	A1	Device	End of Life
DCS-33-3	A1	Device	End of Life
DCS-33-4	A1	Device	End of Life
DCS-34-1	A1	Device	End of Life
DCS-34-2	A1	Device	End of Life
DCS-34-3	A1	Device	End of Life
DCS-34-4	A1	Device	End of Life
DCS-35-1	A1	Device	End of Life
DCS-37-1	A1	Device	End of Life
DCS-37-1	A2	Device	End of Life
DCS-37-2	A1	Device	End of Life
DCS-37-2	A2	Device	End of Life
DCS-45	A2	Device	End of Life
DCS-45	A3	Device	End of Life
DCS-45	B1	Device	End of Life
DCS-4612EK	A1	Device	End of Life
DCS-5030LH	A1	Device	End of Life
DCS-5221	A1	Device	End of Life
DCS-55	A1	Device	End of Life
DCS-56	A1	Device	End of Life
DCS-56P	A1	Device	End of Life
DCS-56W	A1	Device	End of Life
DCS-60	A1	Device	End of Life



DCS-60	A2	Device	End of Life
DCS-6045L	A1	Device	End of Life
DCS-70	A1	Device	End of Life
DCS-70	A2	Device	End of Life
DCS-70	A3	Device	End of Life
DCS-70	A4	Device	End of Life
DCS-71	A1	Device	End of Life
DCS-71P	A1	Device	End of Life
DCS-71W	A1	Device	End of Life
DCS-7411	A1	Device	End of Life
DCS-80-5	A1	Device	End of Life
DCS-80-6	A1	Device	End of Life
DCS-900W	A2	Device	End of Life
DCS-932L-TWIN	A1	Device	End of Life
DCS-935LX	A1	Device	End of Life
DCS-945L	A1	Device	End of Life
DCS-N2100	A1	Device	End of Life
DCS-N2104	A1	Device	End of Life
DCS-N2200	A1	Device	End of Life
DCS-N2204	A1	Device	End of Life
DCS-N3534	A1	Device	End of Life
DCS-N5424	A1	Device	End of Life
DCS-N5441	A1	Device	End of Life
DCS-N5444	A1	Device	End of Life
DCS-N6241	A1	Device	End of Life
DCS-N6244	A1	Device	End of Life
DEM-220T/220R	A1	Device	End of Life
DEM-220T/220R	B1	Device	End of Life
DEM-410CX	A1	Device	End of Life
DEM-410CX	A2	Device	End of Life
DEM-412X/CX	A1	Device	End of Life
DES-1009MP	A1	Device	End of Life
DES-1210-26/ME	B1	Device	End of Life
DES-1210-26/ME	B2	Device	End of Life
DES-3000	A1	Device	End of Life
DES-3000	A3	Device	End of Life
DES-3028/52	A1	Device	End of Life
DES-3226L	A1	Device	End of Life
DES-3226L	A2	Device	End of Life
DES-3226L	B1	Device	End of Life
DES-3226L	B2	Device	End of Life
DES-3226S	C1	Device	End of Life
DES-3226S	C2	Device	End of Life
DES-3226SM	C2	Device	End of Life



DES-3326SRM	B2	Device	End of Life
DES-3700	A1	Device	End of Life
DES-3800	A1	Device	End of Life
DES-3800	A2	Device	End of Life
DES-3810	A1	Device	End of Life
DES-3810-28-EI	A1	Device	End of Life
DES-3810-28-SI	A1	Device	End of Life
DES-6002	A2	Device	End of Life
DES-6003	A1	Device	End of Life
DES-6005	A1	Device	End of Life
DES-6005	A2	Device	End of Life
DES-6007	A1	Device	End of Life
DES-7206DC	A1	Device	End of Life
DES-7210DC	A1	Device	End of Life
DEV-3618DC	A1	Device	End of Life
DFE-528TX/EP	F1	Device	End of Life
DFE-528TX/EP	F2	Device	End of Life
DFE-551FX	A1	Device	End of Life
DFE-551FX	A2	Device	End of Life
DFE-551FX	B1	Device	End of Life
DFE-551FX	C1	Device	End of Life
DFE-551P	A1	Device	End of Life
DFE-551R	A1	Device	End of Life
DFE-850	A1	Device	End of Life
DFE-851	A1	Device	End of Life
DFE-852	A1	Device	End of Life
DFL-1660-AC-12-LIC	NA	Device	End of Life
DFL-1660-AC-24-LIC	NA	Device	End of Life
DFL-1660-AC-36-LIC	NA	Device	End of Life
DFL-1660-AV-12	B1	Device	End of Life
DFL-1660-AV-12	NA	Device	End of Life
DFL-1660-AV-12-LIC	NA	Device	End of Life
DFL-1660-AV-24-LIC	NA	Device	End of Life
DFL-1660-AV-36-LIC	NA	Device	End of Life
DFL-1660-IPS-12	B1	Device	End of Life
DFL-1660-IPS-12	NA	Device	End of Life
DFL-1660-IPS-12-LIC	NA	Device	End of Life
DFL-1660-IPS-24-LIC	NA	Device	End of Life
DFL-1660-IPS-36-LIC	NA	Device	End of Life
DFL-1660-WCF-12	B1	Device	End of Life
DFL-1660-WCF-12	NA	Device	End of Life
DFL-1660-WCF-12-LIC	NA	Device	End of Life
DFL-1660-WCF-24-LIC	NA	Device	End of Life
DFL-1660-WCF-36-LIC	NA	Device	End of Life



DFL-260E/860E	A1	Device	End of Life
DGE-870	A1	Device	End of Life
DGE-871	A1	Device	End of Life
DGS-1026X	A1	Device	End of Life
DGS-1026X	A1	Device	End of Life
DGS-3100	A1	Device	End of Life
DGS-3100	A2	Device	End of Life
DGS-3100	B1	Device	End of Life
DGS-3200	A1	Device	End of Life
DGS-3200	A2	Device	End of Life
DGS-3200	A3	Device	End of Life
DGS-3200	B1	Device	End of Life
DGS-3400	A1	Device	End of Life
DGS-3400	A2	Device	End of Life
DGS-3400	A3	Device	End of Life
DGS-3460-26P	A1	Device	End of Life
DGS-3600	A1	Device	End of Life
DGS-3600	A2	Device	End of Life
DGS-3600	A3	Device	End of Life
DGS-3610	A1	Device	End of Life
DGS-3610	A2	Device	End of Life
DGS-3610-50P	A1	Device	End of Life
DGS-3620-28PC-SE-LIC	NA	Device	End of Life
DGS-3620-28SC-SE-LIC	NA	Device	End of Life
DGS-3620-28TC-SE-LIC	NA	Device	End of Life
DGS-3620-52P-SE-LIC	NA	Device	End of Life
DGS-3620-52T-SE-LIC	NA	Device	End of Life
DGS-3700	A1	Device	End of Life
DHD-3310	A1	Device	End of Life
DHP-200	A1	Device	End of Life
DHP-201	A1	Device	End of Life
DHP-304	A1	Device	End of Life
DHP-312	A1	Device	End of Life
DHP-313	A1	Device	End of Life
DHP-343	A1	Device	End of Life
DHP-500	A1	Device	End of Life
DHP-502	A1	Device	End of Life
DHP-700AV	A1	Device	End of Life
DHP-700AV	B1	Device	End of Life
DHP-700AV	C1	Device	End of Life
DHP-700AV	D1	Device	End of Life
DHP-E200AV	A1	Device	End of Life
DHP-P202AV	A1	Device	End of Life
DHP-P306AV/B	A1	Device	End of Life



DHP-P307AV/B	A1	Device	End of Life
DHP-P326AV	A1	Device	End of Life
DHP-W540	A1	Device	End of Life
DHS-3000	D3	Device	End of Life
DHS-3010F	D2	Device	End of Life
DHS-3010F	D3	Device	End of Life
DHS-3010G	D2	Device	End of Life
DHS-3010G	D3	Device	End of Life
DHS-3018	D1	Device	End of Life
DHS-3018	D3	Device	End of Life
DHS-3026	D1	Device	End of Life
DHS-3026	D3	Device	End of Life
DHS-3028	A1	Device	End of Life
DHS-3226	C1	Device	End of Life
DHS-3618DC	A1	Device	End of Life
DHS-3618DC	A2	Device	End of Life
DHS-3626	A1	Device	End of Life
DHS-3626	A2	Device	End of Life
DHS-3626DC	A1	Device	End of Life
DHS-3626DC	A2	Device	End of Life
DHS-3626F	A1	Device	End of Life
DHS-3626M-AC	A1	Device	End of Life
DHS-3626M-DC	A1	Device	End of Life
DHS-3628DC	A1	Device	End of Life
DHS-3628F	A1	Device	End of Life
DI-604+	A1	Device	End of Life
DI-604+	A2	Device	End of Life
DI-704GU	A1	Device	End of Life
DI-704GU	A2	Device	End of Life
DI-704GU	A3	Device	End of Life
DI-704GU	A4	Device	End of Life
DI-704UP+	A1	Device	End of Life
DI-724GU	A1	Device	End of Life
DI-724GU	A2	Device	End of Life
DI-724GU	A3	Device	End of Life
DI-724GU	A4	Device	End of Life
DI-724U	A1	Device	End of Life
DI-724UP+A	A1	Device	End of Life
DI-724UP+A	A2	Device	End of Life
DI-784	A1	Device	End of Life
DI-784	A2	Device	End of Life
DIR-2150	A1	Device	End of Life
DIR-2150	A1	Device	End of Life
DIR-301	A1	Device	End of Life



DIR-452	A1	Device	End of Life
DIR-461	A1	Device	End of Life
DIR-600-WNIC	A1	Device	End of Life
DIR-601L	A1	Device	End of Life
DIR-601L	B1	Device	End of Life
DIR-602L	A1	Device	End of Life
DIR-640	A1	Device	End of Life
DIR-730	A1	Device	End of Life
DIR-806L	A1	Device	End of Life
DIR-850L/BNA	A1	Device	End of Life
DIR-850L/CCN	A1	Device	End of Life
DIR-850L/ENA	A1	Device	End of Life
DIR-850L/LNA	A1	Device	End of Life
DIR-851	A1	Device	End of Life
DIR-865	A1	Device	End of Life
DIR-868LW	A1	Device	End of Life
DIR-870/N	A1	Device	End of Life
DIS-5024T	A1	Device	End of Life
DIS-5024T	A2	Device	End of Life
DIS-5024TG	A1	Device	End of Life
DKT-401	A1	Device	End of Life
DKT-402	A1	Device	End of Life
DKVM-222	A1	Device	End of Life
DKVM-225	A1	Device	End of Life
DKVM-2DK	A1	Device	End of Life
DKVM-401	A1	Device	End of Life
DKVM-401	A2	Device	End of Life
DKVM-402	A1	Device	End of Life
DKVM-402	A2	Device	End of Life
DKVM-403	A1	Device	End of Life
DKVM-403	A2	Device	End of Life
DKVM-440	A1	Device	End of Life
DKVM-450	A1	Device	End of Life
DKVM-72U	A1	Device	End of Life
DKVM-CB	A3	Device	End of Life
DKVM-CB15	A1	Device	End of Life
DKVM-CB3	A2	Device	End of Life
DKVM-CB3C	A1	Device	End of Life
DKVM-CB5	A2	Device	End of Life
DKVM-CBC	A1	Device	End of Life
D-LIFE	A1	Device	End of Life
DMC-1001/DC	A1	Device	End of Life
DNS-120	A2	Device	End of Life
DNS-213-05	A1	Device	End of Life

DNS-325-120	A1	Device	End of Life
DNS-325-210	A1	Device	End of Life
DNS-325-220	A1	Device	End of Life
DNS-325-XXX	A1	Device	End of Life
DP-311U	B1	Device	End of Life
DPF-1200E-HW	A1	Device	End of Life
DPF-1200E-SW	A1	Device	End of Life
DPF-1500E-HW	A1	Device	End of Life
DPF-1500E-SW	A1	Device	End of Life
DPF-1800E-HW	A1	Device	End of Life
DPF-1800E-SW	A1	Device	End of Life
DPF-2010E-HW	A1	Device	End of Life
DPF-2010E-SW	A1	Device	End of Life
DPF-500-HW	A1	Device	End of Life
DPF-500-SW	A1	Device	End of Life
DPF-6012E-HW	A1	Device	End of Life
DPF-6012E-SW	A1	Device	End of Life
DPG-1200	A1	Device	End of Life
DPG-1200	B1	Device	End of Life
DPH-120SE	F1	Device	End of Life
DPH-140S	A1	Device	End of Life
DPH-150S	B1	Device	End of Life
DPH-150S	F1	Device	End of Life
DPH-150SE	A1	Device	End of Life
DPH-150SE	B1	Device	End of Life
DPH-300	A1	Device	End of Life
DPH-C160S	A1	Device	End of Life
DPR-302	A1	Device	End of Life
DRE-KIT001	A1	Device	End of Life
DRE-KIT002	A1	Device	End of Life
DRE-KIT003	A1	Device	End of Life
DRE-KIT004	A1	Device	End of Life
DRE-KIT005	A1	Device	End of Life
DRE-KIT006	A1	Device	End of Life
DRE-KIT007	A1	Device	End of Life
DRE-KIT008	A1	Device	End of Life
DRE-KIT010	A1	Device	End of Life
DRE-KIT011	A1	Device	End of Life
DRE-KIT012	A1	Device	End of Life
DRE-KIT013	A1	Device	End of Life
DRE-KIT014	A1	Device	End of Life
DRE-KIT015	A1	Device	End of Life
DRE-KIT016	A1	Device	End of Life
DRE-KIT017	A1	Device	End of Life



DS-510S	A1	Device	End of Life
DS-601	A1	Device	End of Life
DS-601/605	A1	Device	End of Life
DS-605	A1	Device	End of Life
DSA-1030	A1	Device	End of Life
DSL-2640U	C4	Device	End of Life
DSL-2730B	A1	Device	End of Life
DSL-2730B	B1	Device	End of Life
DSL-2730B	C1	Device	End of Life
DSL-2730U	C1	Device	End of Life
DSL-2730U	C4	Device	End of Life
DSL-2730U	D1	Device	End of Life
DSL-2730U	I1	Device	End of Life
DSL-2730U	T1	Device	End of Life
DSL-2730U	U1	Device	End of Life
DSL-2730U	V1	Device	End of Life
DSL-2730U	V2	Device	End of Life
DSL-2740U	C5	Device	End of Life
DSL-2750B	B1	Device	End of Life
DSL-2750B	C1	Device	End of Life
DSL-2750B	T1	Device	End of Life
DSL-2750B	T2	Device	End of Life
DSL-2750U	C1	Device	End of Life
DSM-22A	A1	Device	End of Life
DSM-22A	A2	Device	End of Life
DSM-260	A1	Device	End of Life
DSM-260	B1	Device	End of Life
DSN-011	A1	Device	End of Life
DSN-060	A1	Device	End of Life
DSN-2100-20	A1	Device	End of Life
DSN-2100-30	A1	Device	End of Life
DSN-3100	A1	Device	End of Life
DSN-3100-10	A1	Device	End of Life
DSN-3200	A1	Device	End of Life
DSN-3400	A1	Device	End of Life
DSN-4000	A1	Device	End of Life
DSN-500	A1	Device	End of Life
DSN-510	A1	Device	End of Life
DSN-540	A1	Device	End of Life
DSN-600	A1	Device	End of Life
DSN-6020	A1	Device	End of Life
DSN-6020	A2	Device	End of Life
DSN-6020	B1	Device	End of Life
DSN-6220	A1	Device	End of Life

DSN-626	A1	Device	End of Life
DSN-652	A1	Device	End of Life
DSN-6520	A1	Device	End of Life
DSN-654	A1	Device	End of Life
DSN-656	A1	Device	End of Life
DSN-656	B1	Device	End of Life
DSN-660	A1	Device	End of Life
DSN-666	A1	Device	End of Life
DSP-P113	A1	Device	End of Life
DSP-W115	A1	Device	End of Life
DSP-W245	A1	Device	End of Life
DSR-1000AC	A2	Device	End of Life
DSR-500AC	A2	Device	End of Life
DU-520	A2	Device	End of Life
DU-520	A3	Device	End of Life
DU-520	A4	Device	End of Life
DUB-2540	A1	Device	End of Life
DUB-C5AB	A2	Device	End of Life
DUB-C5AE	A1	Device	End of Life
DU-H4	A1	Device	End of Life
DVA-G3340SB	A1	Device	End of Life
DVG-3104/S/MS	B1	Device	End of Life
DVM-222	A1	Device	End of Life
DVM-225	A1	Device	End of Life
DVM-440	A1	Device	End of Life
DVM-450	A1	Device	End of Life
DVS-310-4	A1	Device	End of Life
DVS-N3014	A1	Device	End of Life
DVS-N3044	A1	Device	End of Life
DWA-124	A1	Device	End of Life
DWL-3200AP-1I	A1	Device	End of Life
DWL-8220AP	A1	Device	End of Life
DWL-8220AP	A2	Device	End of Life
DWL-922	B4	Device	End of Life
DWL-922C	B1	Device	End of Life
DWL-923	A1	Device	End of Life
DWL-951	A1	Device	End of Life
DWL-952	A1	Device	End of Life
DWL-953	A1	Device	End of Life
DWR-112L	A1	Device	End of Life
DWR-355	A1	Device	End of Life
DXS-1100	A1	Device	End of Life
DXS-3250E-AC	A1	Device	End of Life
GO-PL-200	A1	Device	End of Life

GO-PL-200	B1	Device	End of Life
HCB-4AAWHIF-1-8	B1	Device	End of Life
HCB-4ADWHIF-1-8	B1	Device	End of Life
KR108-P01	A1	Device	End of Life
KVM-225	A1	Device	End of Life
KVM-401	A1	Device	End of Life
KVM-401	A2	Device	End of Life
KVM-402	A1	Device	End of Life
KVM-402	A2	Device	End of Life
KVM-403	A1	Device	End of Life
KVM-403	A2	Device	End of Life
DSL-2740E	ALL	Device	30-04-2024
DES-1210-28/ME	ALL	Device	29-04-2024
DSL-5300	ALL	Device	31-03-2024
COVR-R2203	ALL	Device	31-03-2024
COVR-2203	ALL	Device	31-03-2024
COVR-2202	ALL	Device	31-03-2024
COVR-2200	ALL	Device	31-03-2024
DSL-124	I1	Device	31-03-2024
DKT-3063	A1	Device	31-03-2024
DKT-2662	A1	Device	31-03-2024
DIR-878	ALL	Device	31-03-2024
DIR-3060	ALL	Device	31-03-2024
DIR-2660	ALL	Device	31-03-2024
DIR-1960	ALL	Device	31-03-2024
DIR-1760	ALL	Device	31-03-2024
DIR-1360	ALL	Device	31-03-2024
DWR-981	ALL	Device	31-03-2024
DWR-980	ALL	Device	31-03-2024
DIR-822	C1	Device	31-03-2024
DIR-620A	ALL	Device	31-03-2024
DIR-300S	ALL	Device	31-03-2024
DIR-867	ALL	Device	31-03-2024
DWR-956	C1	Device	31-03-2024
DWR-953	B1	Device	31-03-2024
DIR-882	ALL	Device	31-03-2024
DIR-853	A3	Device	31-03-2024
DAP-1955	A1	Device	31-03-2024
DAP-1950	A1	Device	31-03-2024
DAP-1755	A1	Device	31-03-2024
DES-1005E	ALL	Device	31-03-2024
DCS-4718E	A1	Device	30-03-2024
DWP-902	A1	Device	30-03-2024
DSL-G2452DG	ALL	Device	26-03-2024

DPN-144DG	ALL	Device	24-03-2024
DPN-124G	ALL	Device	24-03-2024
DPN-1021G	ALL	Device	24-03-2024
DCS-4712E	A1	Device	22-03-2024
DSH-G300	ALL	Device	19-03-2024
DUB-H7	D2	Device	18-03-2024
DUB-H4	D2	Device	18-03-2024
DSL-2888A	ALL	Device	12-03-2024
DIR-615	T3	Device	12-03-2024
DIR-612	B1	Device	12-03-2024
DWA-127	ALL	Device	08-03-2024
DIR-842V2	A1	Device	01-03-2024
DIR-825	I1	Device	01-03-2024
DIR-822	E1	Device	01-03-2024
DIR-615+	A1	Device	01-03-2024
DIR-615	X1	Device	01-03-2024
DIR-612	X1	Device	01-03-2024
DAP-2695	ALL	Device	07-02-2024
DCH-G601W	A1	Device	03-02-2024
DCH-G601	A1	Device	03-02-2024
DCS-8630LH	ALL	Device	01-02-2024
DCS-8526LH	A1	Device	01-02-2024
DCS-8300LHV2	ALL	Device	01-02-2024
DCS-8627LH	A1	Device	01-02-2024
DCS-8302LH	A1	Device	01-02-2024
DUB-H7	F1	Device	01-02-2024
DCS-6517	ALL	Device	01-02-2024
DCS-8330LH	ALL	Device	31-01-2024
DCS-P6000LH	ALL	Device	31-01-2024
DCS-8325LH	ALL	Device	31-01-2024
DCS-8300LH	ALL	Device	31-01-2024
DCS-8000LHV2	ALL	Device	31-01-2024
DNR-2020-04P	A1	Device	31-01-2024
DEM-210	ALL	Device	31-01-2024
DVA-2800	ALL	Device	29-01-2024
DSL-3900	ALL	Device	29-01-2024
DAP-1720	A1	Device	25-01-2024
DGS-3630-28TC	A1	Device	23-01-2024
DGS-3630-28PC	A1	Device	23-01-2024
DWR-932	D1	Device	15-01-2024
DWR-921	C3	Device	15-01-2024
DSL-G256DG	A1	Device	15-01-2024
DSL-7740C	ALL	Device	15-01-2024
DSL-6740C	ALL	Device	15-01-2024

DSL-4320L	ALL	Device	15-01-2024
DSL-3782	ALL	Device	15-01-2024
DSL-225	B1	Device	15-01-2024
DPN-1262	J1	Device	15-01-2024
DPN-101G	A1	Device	15-01-2024
DPN-101G	B1	Device	15-01-2024
DIR-X6060	ALL	Device	15-01-2024
DIR-842	ALL	Device	15-01-2024
DIR-320A	A1	Device	15-01-2024
DHP-W311AV	E1	Device	15-01-2024
DHP-W311AV	D1	Device	15-01-2024
DHP-600AV	C1	Device	15-01-2024
DAS-3626	ALL	Device	15-01-2024
DAP-1650	A2	Device	15-01-2024
DAP-1330	ALL	Device	15-01-2024
DIR-605L	ALL	Device	15-01-2024
DCS-7517	ALL	Device	12-01-2024
DCS-8515LH	ALL	Device	07-01-2024
DES-1018MP	ALL	Device	05-01-2024
DCS-8010LH	ALL	Device	01-01-2024
DCS-6501LH	ALL	Device	01-01-2024
DCS-6500LH	ALL	Device	01-01-2024
DCS-6101LH	ALL	Device	01-01-2024
DCS-6100LH	ALL	Device	01-01-2024
DWR-810	ALL	Device	01-01-2024
DWR-730	ALL	Device	01-01-2024
DWR-720	ALL	Device	01-01-2024
DWR-710	ALL	Device	01-01-2024
DWP-157	ALL	Device	01-01-2024
DWP-156	ALL	Device	01-01-2024
DWM-158	ALL	Device	01-01-2024
DWM-157	ALL	Device	01-01-2024
DWM-156	A8	Device	01-01-2024
DSL-G225	J1	Device	01-01-2024
DSL-2640B	C1	Device	01-01-2024
DSL-2600U	ALL	Device	01-01-2024
DSL-2540U	ALL	Device	01-01-2024
DSL-2540B	C2	Device	01-01-2024
DSL-2520U	C1	Device	01-01-2024
DSL-2500U	C1	Device	01-01-2024
DSL-225	J1	Device	01-01-2024
DIR-1251	ALL	Device	01-01-2024
DCS-4625	ALL	Device	01-01-2024
DWL-6610AP	A1	Device	31-12-2023



DCS-8525LH	ALL	Device	31-12-2023
DIR-2680	ALL	Device	31-12-2023
DSL-2877AL	A3	Device	31-12-2023
DIR-825+	A1	Device	31-12-2023
DCS-4618EK	A1	Device	31-12-2023
DHP-P621AV	ALL	Device	30-12-2023
DWA-192	ALL	Device	20-12-2023
DWA-123	ALL	Device	20-12-2023
DES-1210-08P	ALL	Device	18-12-2023
DWL-2600AP	ALL	Device	31-10-2023
DW-2600AP	A1	Device	31-10-2023
DHP-309AV	B1	Device	31-10-2023
DHP-308AV	ALL	Device	31-10-2023
DSL-320B	ALL	Device	30-06-2022
DSL-2745	ALL	Device	30-06-2022
DIR-870	A1	Device	30-06-2022
DIR-869	A1	Device	30-06-2022
DIR-843	A1	Device	30-06-2022
DIR-620S	A1	Device	30-06-2022
DIR-620	H1	Device	30-06-2022
DIR-619L	B1	Device	30-06-2022
DIR-615	U1	Device	30-06-2022
DIR-615	T2	Device	30-06-2022
DIR-608	A1	Device	30-06-2022
DIR-600M	C1	Device	30-06-2022
DAP-1365	A1	Device	30-06-2022
DSL-G2452DG	Z1	Device	30-06-2022
DGS-1510-52X	A1	Device	29-06-2022
DKVM-IP1	B1	Device	14-06-2022
DWS-4026	A1	Device	05-06-2022
DUB-H7	D1	Device	16-05-2022
DUB-H4	D1	Device	16-05-2022
DUB-1341	A1	Device	16-05-2022
DUB-1340	C1	Device	16-05-2022
KVM-222	A1	Device	14-05-2022
KVM-221	B1	Device	14-05-2022
DKVM-4U	A6	Device	14-05-2022
DSL-G2452DG	T1	Device	30-04-2022
L7-N-R2000	A1	Device	01-04-2022
DWA-160	C1	Device	01-04-2022
DIR-818	A1	Device	01-04-2022
DIR-603	A1	Device	01-04-2022
DWR-922	C2	Device	31-03-2022
DWA-171	A1	Device	31-03-2022



DWA-140	D1	Device	31-03-2022
DWA-137	A1	Device	31-03-2022
DWA-132	B1	Device	31-03-2022
DWA-130	F1	Device	31-03-2022
DSL-2877AL	A1	Device	31-03-2022
DIR-825	G2	Device	31-03-2022
DIR-615	T1	Device	31-03-2022
DIR-611	A1	Device	31-03-2022
DIR-300A	A1	Device	31-03-2022
DAP-1620	A1	Device	31-03-2022
DAP-1530	A1	Device	31-03-2022
COVR-P2502	ALL	Device	31-03-2022
COVR-P2500	ALL	Device	31-03-2022
DIR-615	J1	Device	30-03-2022
DHP-W313AV	A1	Device	20-03-2022
DHP-W312AV	A1	Device	20-03-2022
DHP-P308AV	C1	Device	20-03-2022
DIR-879	A1	Device	01-03-2022
DAP-1635	A1	Device	28-02-2022
DEM-435XT-DD	A1	Device	27-02-2022
DEM-433XT-DD	A1	Device	27-02-2022
DEM-432XT-DD	A1	Device	27-02-2022
DEM-431XT-DD	A1	Device	27-02-2022
DWR-958/N	A1	Device	13-02-2022
DGS-1100-18/ME	B2	Device	13-02-2022
DGS-1100-18	B2	Device	13-02-2022
DGS-6600-PWRDC	ALL	Device	17-01-2022
MYD-012 (China mydlink+ Andr	ALL	Mobile APP	03-01-2022
MYD-001(China mydlink Lite IO	ALL	Mobile APP	03-01-2022
MYD-002(China mydlink Lite An	ALL	Mobile APP	03-01-2022
DCS-401A(China mydlink Baby	ALL	Mobile APP	03-01-2022
DCS-201I (China mydlink View-	ALL	Mobile APP	03-01-2022
DCS-201A(China mydlink View-	ALL	Mobile APP	03-01-2022
MYDLINK-SHAREPORT-ANDR	ALL	Mobile APP	03-01-2022
MYDLINK-SHAREPORT-IOS	ALL	Mobile APP	03-01-2022
DCS-501I (China :OMNA IOS)	ALL	Mobile APP	03-01-2022
DCS-501A(China :OMNA ANDR	ALL	Mobile APP	03-01-2022
MYD-011 (China mydlink+ IOS)	ALL	Mobile APP	03-01-2022
DCS-401I(China mydlink Baby (	ALL	Mobile APP	03-01-2022
DWR-925	A3	Device	09-01-2022
DWR-960	A1	Device	01-01-2022
DCS-2804KT	ALL	Device	01-01-2022
DCS-2803KT	ALL	Device	01-01-2022
DCS-2802KT-EU	ALL	Device	01-01-2022



DCS-2802KT	ALL	Device	01-01-2022
DCS-2800LH-EU	ALL	Device	01-01-2022
DCS-2800LH	ALL	Device	01-01-2022
DCS-4625	ALL	Device	31-12-2021
DCS-37-3	ALL	Device	31-12-2021
DCS-11	ALL	Device	31-12-2021
DCS-6511	ALL	Device	31-12-2021
DCS-4802E	B1/B2	Device	31-12-2021
DCS-4705E	Ax	Device	31-12-2021
DCS-4703E	Ax	Device	31-12-2021
DCS-4701E	Bx	Device	31-12-2021
DCS-4622	ALL	Device	31-12-2021
DCS-4603	ALL	Device	31-12-2021
DGS-1005C	A1	Device	29-12-2021
DGS-6608	ALL	Device	28-12-2021
DGS-6604	ALL	Device	28-12-2021
DAP-1360P	A1	Device	26-12-2021
DWA-548	A1	Device	10-12-2021
DSR-1000N	A1	Device	06-12-2021
DCS-8100LH	ALL	Device	01-12-2021
DCS-5000L	ALL	Device	01-12-2021
DIR-615	N1	Device	30-11-2021
DWR-922	C3	Device	17-11-2021
DGS-1100-26/ME	B2	Device	15-11-2021
DGS-1100-26	B2	Device	15-11-2021
DCS-250-PRE-001-LIC	ALL	Licenese	31-12-2021
DCS-250-COU-001-LIC	ALL	Licenese	31-12-2021
DCS-250-VMS-032	ALL	Licenese	31-12-2021
DCS-501I	ALL	Mobile APP	02-03-2021
MYD-012	ALL	Mobile APP	02-03-2021
MYD-002	ALL	Mobile APP	02-03-2021
DCS-401A	ALL	Mobile APP	02-03-2021
MYDLINK-HOME-IOS	ALL	Mobile APP	02-03-2021
DCS-401I	ALL	Mobile APP	02-03-2021
DCS-501A	ALL	Mobile APP	02-03-2021
MYD-011	ALL	Mobile APP	02-03-2021
MYDLINK-HOME-ANDROID	ALL	Mobile APP	02-03-2021
MYD-001	ALL	Mobile APP	02-03-2021
DES-3552	ALL	Device	05/09/2020
DCS-2670L	ALL	Device	29-06-2021
DSL-2885A	ALL	Device	25-10-2020
DIR-809	ALL	Device	10-04-2021
DSL-2730E	ALL	Device	25-05-2019
DSL-2880AL	ALL	Device	06-05-2019



DSN-4100	ALL	Device	31-07-2019
DUB-E100	B1	Device	31-03-2018
DUB-E100	C1	Device	31-03-2018
DAP-2553	A1	Device	09-01-2018
ICP663450A	ALL	Device	31-12-2018
DSL-2875AL	ALL	Device	11-09-2017
DSL-2730E	T1	Device	25-07-2017
DSL-2730E	U1	Device	06-06-2017
DSL-2770L	ALL	Device	26-12-2016
DWM-350	ALL	Device	01-01-2013
DWM-750	ALL	Device	31-12-2012
DWM-652	ALL	Device	31-12-2012
DWM-351	ALL	Device	31-12-2010
DWM-610	ALL	Device	31-12-2008
DAP-2690	B1	Device	07-04-2021
DAP-3310	A1	Device	31-05-2021
DCH-107KT	A1	KIT	30-06-2021
DCH-G022	A1	Device	30-06-2021
DCH-Z112	A1	Device	30-06-2021
DCH-Z122	A1	Device	30-06-2021
DCS-2530L	ALL	Device	30-04-2021
DCS-5030L	ALL	Device	30-06-2021
DCS-936L	ALL	Device	30-06-2021
DKVM-4K	A7	Device	11-05-2021
DNR-312L	ALL	Device	30-06-2021
DP-302	A2	Device	21-04-2021
DP-310	A1	Device	21-04-2021
DPN-100	A2	Device	24-04-2021
DSL-2877AL	A2	Device	30-09-2021
DV-600P	A1	Software	28-04-2021
DV-600S	A1	Software	28-04-2021
DWA-121	A1	Device	10-04-2021
DWA-133	B1	Device	30-06-2021
DWA-525	B1	Device	31-08-2021
DWL-3600AP	A1	Device	31-08-2021
DWL-6600AP	A1	Device	31-08-2021
DWL-8600AP	A1	Device	31-08-2021
DWM-156	C1	Device	01-05-2021
DWM-157	D1	Device	01-05-2021
DWM-158	D1	Device	01-05-2021
DWP-156	B1	Device	01-05-2021
DWP-157	C1	Device	01-05-2021
DWR-116	A1	Device	09-05-2021
DWR-118	A1	Device	09-05-2021



DWR-510	A1	Device	28-04-2021
DWR-711	A1	Device	02-05-2021
DWR-732	A1	Device	03-05-2021
DWR-758	A1	Device	28-04-2021
DWR-921	D5	Device	02-05-2021
DWR-921	A1	Device	28-04-2021
DWR-921	B1	Device	28-04-2021
DWR-921	D1	Device	28-04-2021
DWR-921E	A1	Device	28-04-2021
DWR-921E	A2	Device	28-04-2021
DWR-922	E2	Device	16-05-2021
DWR-922	B1	Device	28-04-2021
DWR-922	B2	Device	28-04-2021
DWR-922	C1	Device	28-04-2021
DWR-922	D1	Device	28-04-2021
DWR-922	F1	Device	28-04-2021
DWR-922/B	A1	Device	28-04-2021
DWR-923	C1	Device	28-04-2021
DWR-925	B1	Device	02-05-2021
DWR-952	A1	Device	28-04-2021
DWR-952	B1	Device	28-04-2021
DWR-953	A1	Device	25-09-2021
DWR-953	A2	Device	25-09-2021
DWR-955	A1	Device	28-04-2021
DWR-956	A1	Device	28-04-2021
DWR-966	A1	Device	28-04-2021
KVM-121	A2	Device	11-05-2021
DAP-1665	A2	Device	01-01-2021
DCS-37-1-A1	ALL	Device	15-12-2019
DI-524SU	A1	Device	31-12-2013
DIR-825	E1	Device	31-07-2021
DIR-825	F2	Device	31-07-2021
DIR-825	E2	Device	31-05-2020
ONE-TOUCHAPP	ALL	Mobile APP	01-07-2020
DNS-213	ALL	Device	End of Life
DIR-809	A2/A3	Device	10-04-2021
DGS-1210-16	A1	Device	End of Life
DGS-1210-20	A1	Device	End of Life
DGS-1210-24	A1	Device	End of Life
DGS-1210-48	A1	Device	End of Life
7200-1200AC	A1	Device	30-04-2018
7200-1200DC	A1	Device	30-04-2018
7200-2000AC	A1	Device	30-04-2018
7200-2000DC	A1	Device	End of Life



7200-24	A1/A2A3	Device	End of Life
7200-24G	A1/A2/A3	Device	End of Life
7200-24G2XG	A3	Device	End of Life
7200-24G2XGE	A1	Device	End of Life
7200-24GE	A1	Device	30-04-2018
7200-24P	A1	Device	End of Life
7200-2XG	A1	Device	30-04-2018
7200-48	A1	Device	30-04-2018
7200-48E	A1	Device	End of Life
7200-48P	A1	Device	30-04-2018
7200-4XG	A1	Device	30-04-2018
7200-512RAM	A1	Device	30-04-2018
7200-ASE2	A1	Device	30-04-2018
7200-ASE3	A1	Device	30-04-2018
7200-CM1	A1	Device	30-04-2018
7200-CM2	A1	Device	30-04-2018
7200-CM3	A1	Device	30-04-2018
7200-CM4	A1	Device	30-04-2018
7206-FAN	A1	Device	30-04-2018
7210-FAN	A1	Device	30-04-2018
8000-1400AC	A1	Device	End of Life
8000-2000AC	A1	Device	End of Life
8000-24SC2XG-E	A1	Device	End of Life
8000-24SC-E	A1	Device	End of Life
8000-24TC-E	A1	Device	End of Life
8000-48PC-E	A1	Device	End of Life
8000-48TC-E	A1	Device	End of Life
8000-4XG-E	A1	Device	End of Life
8000-CM1	A1	Device	End of Life
8000-CM2	A1	Device	End of Life
CY-SWR1100	A1	Device	06-22-2020
DAP-1120	A1	Device	09-01-2020
DAP-1132	A1	Device	End of Life
DAP-1150	A1	Device	End of Life
DAP-1150	B1	Device	End of Life
DAP-1155	D1	Device	12-15-2019
DAP-1155	A1	Device	End of Life
DAP-1155	B1	Device	End of Life
DAP-1160	B1	Device	02-29-2020
DAP-1160	A1	Device	End of Life
DAP-1160L	A1	Device	07-17-2018
DAP-1316-ES	A1	Device	End of Life
DAP-1320	C1	Device	End of Life
DAP-1320	B1	Device	End of Life

DAP-1320	A2	Device	End of Life
DAP-1320	A1	Device	End of Life
DAP-1332	A1	Device	End of Life
DAP-1350	A1	Device	End of Life
DAP-1353	B1	Device	End of Life
DAP-1353	A1	Device	End of Life
DAP-1360	C2	Device	08-12-2020
DAP-1360	E1	Device	05-13-2020
DAP-1360	C1	Device	End of Life
DAP-1360	D1	Device	End of Life
DAP-1360	B1	Device	End of Life
DAP-1360	A1	Device	End of Life
DAP-1420	B1	Device	04-01-2019
DAP-1422	B1	Device	12-15-2019
DAP-1513	A1	Device	01-22-2018
DAP-1520	A1	Device	02-01-2020
DAP-1522	A1	Device	End of Life
DAP-1522	B1	Device	End of Life
DAP-1522	A2	Device	End of Life
DAP-1525	B1	Device	01-14-2019
DAP-1525	A1	Device	End of Life
DAP-1533	A1	Device	End of Life
DAP-1555	A1	Device	End of Life
DAP-1560	A1	Device	End of Life
DAP-1562	A1	Device	End of Life
DAP-1610	A1	Device	02-01-2020
DAP-1665	A1	Device	01-01-2021
DAP-2555	A1	Device	07-14-2018
DAP-2565	A1	Device	07-10-2018
DAP-2590	A2	Device	End of Life
DAP-2590	A1	Device	End of Life
DAP-3220	A2	Device	End of Life
DAP-3340	A1	Device	09-21-2019
DAP-3410	A1	Device	05-26-2020
DAP-3520	A1	Device	End of Life
DAP-3525	A1	Device	02-13-2019
DAP-3660	A1	Device	08-04-2020
DAP-3690	A1	Device	05-27-2019
DAP-3760	A1	Device	01-05-2020
DAP-3860	B1	Device	06-22-2020
DAS-3208	A1	Device	End of Life
DAS-3208M	A1	Device	End of Life
DAS-3216	B1	Device	End of Life
DAS-3224F	A1	Device	End of Life

DAS-3248F	A1	Device	End of Life
DAS-4192	A1	Device	End of Life
DAS-4672	A1	Device	End of Life
DBT-120	A1/B1/C1	Device	End of Life
DBT-122	A1/B1/C1	Device	End of Life
DBT-320	A1	Device	01-01-2018
DCH-100KT	A2	Device	01-31-2021
DCH-101KT	A1	Device	End of Life
DCH-301KT	A1	Device	End of Life
DCH-G020	A1/A2	Device	12-15-2019
DCH-G021	A1	Device	12-15-2019
DCH-M225	A1	Device	03-01-2020
DCH-S150	A1/A2/B1	Device	12-15-2019
DCH-S155	A1	Device	End of Life
DCH-S160	A1/A2	Device	12-15-2019
DCH-S165	A1	Device	12-15-2019
DCH-S220	A1/A2	Device	01-31-2021
DCH-T100KT	A1	Device	12-15-2019
DCH-T160A A1	A1	Device	12-15-2019
DCH-T2000KT	A1	Device	12-15-2019
DCH-Z110	A1	Device	01-31-2021
DCH-Z120	A1	Device	01-31-2021
DCH-Z310	A1	Device	01-31-2021
DCM-201	A1	Device	End of Life
DCM-202	C1	Device	03-06-2019
DCM-212	B1	Device	End of Life
DCM-232	A1	Device	End of Life
DCM-301	E1	Device	12-13-2020
DCM-712	A1	Device	12-13-2020
DCS-1100	A2	Device	End of Life
DCS-1100L	ALL	Device	End of Life
DCS-1110	A1	Device	End of Life
DCS-1130	A2	Device	End of Life
DCS-1130L	ALL	Device	End of Life
DCS-1201	A1	Device	06-30-2020
DCS-2100	A1	Device	End of Life
DCS-2100G	A1	Device	End of Life
DCS-2102	A3	Device	End of Life
DCS-2103	B1	Device	06-30-2020
DCS-2103	Ax	Device	End of Life
DCS-2120	ALL	Device	End of Life
DCS-2120	A2	Device	End of Life
DCS-2121	A3	Device	End of Life
DCS-2130	A1	Device	12-15-2019

DCS-2132L	B1	Device	06-30-2020
DCS-2132L	A1	Device	03-30-2020
DCS-2132L	Ax	Device	End of Life
DCS-2132L-ES	ALL	Device	06-30-2020
DCS-2136L	A1	Device	06-30-2020
DCS-2210	A1	Device	12-15-2019
DCS-2210L	A1	Device	06-30-2020
DCS-2230	A1	Device	12-15-2019
DCS-2230L	ALL	Device	06-30-2020
DCS-2230L	A1	Device	06-30-2020
DCS-2310L	B1	Device	06-30-2020
DCS-2311L-ES	A1	Device	06-30-2020
DCS-2330L	Ax	Device	12-31-2020
DCS-2332L	A1	Device	06-30-2020
DCS-260	ALL	Device	02-21-2021
DCS-2630L	ALL	Device	06-30-2020
DCS-3010	A2	Device	06-30-2020
DCS-3110	A2	Device	End of Life
DCS-3112	A1	Device	06-30-2020
DCS-3220	A2	Device	End of Life
DCS-3220G	ALL	Device	End of Life
DCS-3410	ALL	Device	End of Life
DCS-3411	A3	Device	12-15-2019
DCS-3415	A2	Device	End of Life
DCS-3420	A2	Device	End of Life
DCS-3430	ALL	Device	End of Life
DCS-3511	A1	Device	06-30-2020
DCS-3530	A1	Device	03-30-2020
DCS-3710	ALL	Device	06-30-2020
DCS-3713	A1	Device	End of Life
DCS-3714	A1	Device	06-30-2020
DCS-3715	A1	Device	12-15-2019
DCS-3716	ALL	Device	06-30-2020
DCS-4201	A1	Device	06-30-2020
DCS-4603	A1	Device	End of Life
DCS-4622	A1	Device	End of Life
DCS-4701E	A3	Device	12-31-2020
DCS-4701E	A1/A2	Device	End of Life
DCS-4703E	A1	Device	End of Life
DCS-4802E	Ax	Device	End of Life
DCS-5009L	A2	Device	06-30-2020
DCS-5010L	A1/A2	Device	01-31-2021
DCS-5020L	A1/A2	Device	01-31-2021
DCS-5025L	A1	Device	06-30-2020

DCS-5029L	A2	Device	06-30-2020
DCS-5211L	A1	Device	01-12-2018
DCS-5220	B2	Device	End of Life
DCS-5222L	Bx	Device	06-30-2020
DCS-5222L	A3	Device	12-31-2019
DCS-5222L	Ax	Device	End of Life
DCS-5230	A1	Device	End of Life
DCS-5230	A2	Device	End of Life
DCS-5230L	A1	Device	End of Life
DCS-5300	A4	Device	End of Life
DCS-5300G	B2	Device	End of Life
DCS-5350L	ALL	Device	01-01-2020
DCS-5605	A2	Device	End of Life
DCS-5610	A1	Device	End of Life
DCS-5615	A1	Device	12-15-2019
DCS-5635	A2	Device	End of Life
DCS-6004L	ALL	Device	06-30-2020
DCS-6005L	ALL	Device	06-30-2020
DCS-6010L	A1	Device	06-30-2020
DCS-6010L	ALL	Device	03-30-2020
DCS-6045LKT	A1	Device	06-16-2020
DCS-6110	A1	Device	12-15-2019
DCS-6111	A2	Device	End of Life
DCS-6112	ALL	Device	12-15-2019
DCS-6112V	ALL	Device	09-16-2018
DCS-6113	B1/B2	Device	06-30-2020
DCS-6113	Ax	Device	End of Life
DCS-6113V	Bx	Device	05-17-2020
DCS-6114	A1	Device	06-30-2020
DCS-6115	A1	Device	06-30-2020
DCS-6116	A1	Device	12-15-2019
DCS-6210	A2	Device	06-30-2020
DCS-6212L	ALL	Device	03-30-2020
DCS-6215	A1	Device	06-30-2020
DCS-6314	A1	Device	06-30-2020
DCS-6315	A1	Device	06-30-2020
DCS-6315	ALL	Device	12-31-2019
DCS-6410	A2	Device	End of Life
DCS-6510	A1	Device	12-15-2019
DCS-6511	A2	Device	06-30-2020
DCS-6513	A2	Device	06-30-2020
DCS-6517	A2	Device	06-30-2020
DCS-6518	Ax	Device	06-30-2020
DCS-6518	A1	Device	End of Life



DCS-6615	A1	Device	06-30-2020
DCS-6616	A1/B1/B2	Device	12-15-2019
DCS-6620	A3	Device	End of Life
DCS-6620G	A4	Device	End of Life
DCS-6815	A1/B1	Device	12-15-2019
DCS-6817	B1	Device	12-15-2019
DCS-6818	A1/B1/B2	Device	12-15-2019
DCS-6915	B4	Device	06-30-2020
DCS-6915	A1/A2/B1/B2/B3	Device	12-15-2019
DCS-7000L	ALL	Device	06-30-2020
DCS-7000L	A1	Device	06-30-2020
DCS-700L	A2	Device	06-30-2020
DCS-7010L	A4	Device	06-30-2020
DCS-7110	Bx	Device	06-30-2020
DCS-7110	Ax	Device	End of Life
DCS-7410	A2	Device	End of Life
DCS-7413	B1	Device	06-30-2020
DCS-7510	A1	Device	End of Life
DCS-7513	A1	Device	06-30-2020
DCS-7517	A2	Device	06-30-2020
DCS-7518	ALL	Device	12-15-2019
DCS-7518	A1	Device	End of Life
DCS-800L	A2	Device	06-30-2020
DCS-8200LH	A1	Device	12-15-2019
DCS-820L	A2	Device	06-30-2020
DCS-825L	A1/A2	Device	06-30-2020
DCS-850L	A2	Device	06-30-2020
DCS-855L	A2	Device	06-30-2020
DCS-900	B2	Device	End of Life
DCS-910	A2	Device	End of Life
DCS-910	A1	Device	End of Life
DCS-920	A2	Device	End of Life
DCS-920	A1	Device	End of Life
DCS-930	A2	Device	12-15-2019
DCS-930L	ALL	Device	06-30-2020
DCS-931L	A2	Device	06-30-2020
DCS-932	Ax	Device	06-30-2020
DCS-932L	Ax	Device	06-30-2020
DCS-933L	A2	Device	06-30-2020
DCS-934L	A3	Device	06-30-2020
DCS-935L	A1/A2	Device	12-15-2019
DCS-935LH	A1	Device	12-15-2019
DCS-940L	A1	Device	06-30-2020
DCS-942L	B2	Device	06-30-2020

DCS-942L	Ax	Device	End of Life
DCS-950	A3	Device	End of Life
DCS-950G	A4	Device	End of Life
DCS-960L	A1	Device	12-15-2019
DCS-G900	A2	Device	End of Life
DCS-P603	ALL	Device	03-31-2021
DCS-P703	Ax	Device	12-31-2020
DCS-T2129	A1	Device	06-30-2020
DCS-T2132	A1	Device	06-30-2020
DCS-T936	A1	Device	End of Life
DEM-201F	A1	Device	End of Life
DEM-201FL	A1	Device	End of Life
DEM-210	A1/B1/C1/D1	Device	End of Life
DEM-211	A1/B1/C1/D1	Device	End of Life
DEM-220R	A1/B1/C1/D1	Device	End of Life
DEM-220T	A1/B1/C1/D1	Device	End of Life
DEM-301G	A1	Device	End of Life
DEM-301T	A1	Device	End of Life
DEM-302S-BXD	B1	Device	12-31-2019
DEM-302S-BXU	B1	Device	12-31-2019
DEM-310GM2	B1	Device	End of Life
DEM-310GT	1/D1/E1/F1/G1/G2/H	Device	End of Life
DEM-311GT	C1/D1/E1/F1/G1/H1	Device	End of Life
DEM-312GT2	A1/B1/C1/D1/E1	Device	End of Life
DEM-314GT	C1/D1/E1/F1/G1	Device	End of Life
DEM-315GT	C1/D1/E1/F1/F2/G1	Device	End of Life
DEM-330R	A1/B1/B2/B3/C1	Device	End of Life
DEM-330T	A1/B1/B2/B3/C1	Device	End of Life
DEM-331R	A1/B1/B2/C1	Device	End of Life
DEM-331T	A1/B1/B2/C1	Device	End of Life
DEM-340MG	A2	Device	End of Life
DEM-340T	A2	Device	End of Life
DEM-410X	A3	Device	06-30-2019
DEM-411S	A1	Device	End of Life
DEM-411T	A1	Device	End of Life
DEM-412CX	A1	Device	End of Life
DEM-412X	A1	Device	End of Life
DEM-420CX	A2	Device	End of Life
DEM-420X	A4	Device	End of Life
DEM-421XT	B2	Device	01-12-2020
DEM-422XT	A4	Device	01-12-2020
DEM-423XT	A3	Device	01-12-2020
DEM-431XT	A1/B1/C1/D1	Device	End of Life
DEM-432XT	A1/B1/C1/D1	Device	End of Life

DEM-433XT	A1/B1/C1	Device	End of Life
DEM-434XT	A1/B1	Device	End of Life
DEM-435XT	A1/B1/C1	Device	End of Life
DEM-436XT-BXD	A1/B1	Device	End of Life
DEM-436XT-BXU	A1/B1	Device	End of Life
DEM-540	A2	Device	End of Life
DEM-CB100	A2	Device	End of Life
DEM-CB100	C1	Device	End of Life
DEM-CB100QXS	A1	Device	End of Life
DEM-CB100QXS-4XS	A1/C1	Device	End of Life
DEM-CB100S	A1/C1	Device	End of Life
DEM-CB300	C1	Device	End of Life
DEM-CB300CX	A1/C1	Device	End of Life
DEM-CB300QXS	A1/C1	Device	End of Life
DEM-CB300S	A1/C1	Device	End of Life
DEM-CB50	A2	Device	End of Life
DEM-CB500S	A1	Device	End of Life
DEM-CB50CXP	A1/B1	Device	End of Life
DEM-CB50ICX	C1	Device	End of Life
DEM-CB700S	A1/C1	Device	End of Life
DEM-CBCX300	A1	Device	End of Life
DEM-PB1S-OLT	A1	Device	11-24-2020
DEM-QX01Q-SR4	A1/B1	Device	End of Life
DEM-QX10Q-LR4	A1/B1	Device	End of Life
DES-1005A	B1	Device	End of Life
DES-1005A	B2	Device	End of Life
DES-1005A	C1	Device	End of Life
DES-1005A	D1	Device	End of Life
DES-1005A	F1	Device	End of Life
DES-1005D	J1	Device	End of Life
DES-1005D	J2	Device	End of Life
DES-1005D	J3	Device	End of Life
DES-1005D	K1	Device	End of Life
DES-1005D	K2	Device	End of Life
DES-1005D	K3	Device	End of Life
DES-1005D	K4	Device	End of Life
DES-1005D	K5	Device	End of Life
DES-1005D	K6	Device	End of Life
DES-1005D	L1	Device	End of Life
DES-1005D	L2	Device	End of Life
DES-1005D	M1	Device	End of Life
DES-1005D	M2	Device	End of Life
DES-1005D	N1	Device	End of Life
DES-1005D	N2	Device	End of Life

DES-1005D	N3	Device	End of Life
DES-1005E	A1	Device	End of Life
DES-1005E	A2	Device	End of Life
DES-1005E	B1	Device	End of Life
DES-1005P	A1	Device	End of Life
DES-1005P	A2	Device	End of Life
DES-1008A	A1	Device	End of Life
DES-1008A	B1	Device	End of Life
DES-1008A	C1	Device	End of Life
DES-1008A	C2	Device	End of Life
DES-1008A	C3	Device	End of Life
DES-1008A	D1	Device	End of Life
DES-1008A	D2	Device	End of Life
DES-1008D	H7	Device	End of Life
DES-1008D	H3	Device	End of Life
DES-1008D	H4	Device	End of Life
DES-1008D	H5	Device	End of Life
DES-1008D	H8	Device	End of Life
DES-1008D	H9	Device	End of Life
DES-1008D	I1	Device	End of Life
DES-1008D	I10	Device	End of Life
DES-1008D	I11	Device	End of Life
DES-1008D	I2	Device	End of Life
DES-1008D	I3	Device	End of Life
DES-1008D	I4	Device	End of Life
DES-1008D	I5	Device	End of Life
DES-1008D	I6	Device	End of Life
DES-1008D	I7	Device	End of Life
DES-1008D	I8	Device	End of Life
DES-1008D	I9	Device	End of Life
DES-1008D	J1	Device	End of Life
DES-1008D	J2	Device	End of Life
DES-1008D	K1	Device	End of Life
DES-1008D	K2	Device	End of Life
DES-1008D	K3	Device	End of Life
DES-1008D/PRO	A1	Device	End of Life
DES-1008D/PRO	A2	Device	End of Life
DES-1008D/PRO	A3	Device	End of Life
DES-1008D/RV	H4	Device	End of Life
DES-1008E	A1	Device	End of Life
DES-1008E	A2	Device	End of Life
DES-1008E	B1	Device	End of Life
DES-1008F	D2	Device	01-14-2019
DES-1008FL/PRO	A1	Device	End of Life

DES-1008FR/PRO	A1	Device	End of Life
DES-1008I	A1	Device	End of Life
DES-1008P	A1	Device	End of Life
DES-1008P	A2	Device	End of Life
DES-1008P	B1	Device	End of Life
DES-1008PA	A2	Device	End of Life
DES-1008PA	B2	Device	End of Life
DES-1008PA	B3	Device	End of Life
DES-1010G	A2	Device	End of Life
DES-1016	A1	Device	End of Life
DES-1016A	B1/C1/D1/D2/D3/E2	Device	End of Life
DES-1016D	1/D2/D3/D4/E1/F1/G	Device	End of Life
DES-1016D/RV	D5	Device	End of Life
DES-1016E	A1	Device	End of Life
DES-1016R	C1/D1/D2/E1	Device	End of Life
DES-1016R+	E3	Device	01-14-2019
DES-1016T	A1	Device	End of Life
DES-1018DG	A2	Device	End of Life
DES-1024A	B1/C1/D1/D2/D3/E2	Device	End of Life
DES-1024D	1/C2/C3/C4/D1/E1/F	Device	End of Life
DES-1024DG	A2	Device	End of Life
DES-1024R	C1/D1/E1	Device	End of Life
DES-1024R+	E3	Device	01-14-2019
DES-1024T	C2	Device	End of Life
DES-1026G	B3/B4/C1/C2/C3/D1	Device	End of Life
DES-1026T	A1/A2	Device	End of Life
DES-102F	C1	Device	01-14-2019
DES-1048	B1/B2/C1	Device	End of Life
DES-105	A1	Device	End of Life
DES-105	B1	Device	End of Life
DES-105	B2	Device	End of Life
DES-1050G	A2	Device	End of Life
DES-1050G	B1	Device	End of Life
DES-108	A1	Device	End of Life
DES-108	B1	Device	End of Life
DES-108	B2	Device	End of Life
DES-1100-26	A1	Device	End of Life
DES-1105	A1	Device	End of Life
DES-1108	A1/A2	Device	End of Life
DES-1126T	A2	Device	End of Life
DES-1150T	C1	Device	06-30-2020
DES-1150T	A2	Device	End of Life
DES-1200M	B1	Device	End of Life
DES-1210/ME	B2	Device	08-15-2019



DES-1210-08P	A1/B1/C1	Device	End of Life
DES-1210-10	A1	Device	10-01-2018
DES-1210-28	A1/B1	Device	End of Life
DES-1210-28P	A1/B1/C1	Device	End of Life
DES-1210-52	A1/B1	Device	End of Life
DES-121G	B1	Device	End of Life
DES-121T	A1	Device	End of Life
DES-1226G	B1/B2/B3	Device	End of Life
DES-1228	A1	Device	06-28-2020
DES-1228	ALL	Device	11-01-2016
DES-1228/ME	B1	Device	04-24-2019
DES-1228P	A2/A2	Device	End of Life
DES-124F	A1	Device	End of Life
DES-1250G	A3/A4	Device	End of Life
DES-1252	A1	Device	End of Life
DES-128	A1	Device	End of Life
DES-1316	A4	Device	End of Life
DES-1316K	A4	Device	End of Life
DES-132	A1	Device	End of Life
DES-1526	A2	Device	End of Life
DES-2110	A2	Device	End of Life
DES-3010F	A3	Device	End of Life
DES-3010FA	A1	Device	End of Life
DES-3010FL	A3	Device	End of Life
DES-3010G	A3	Device	End of Life
DES-3010GA	A1	Device	End of Life
DES-3010PA	A1	Device	End of Life
DES-3016	A2	Device	End of Life
DES-3018	A3	Device	End of Life
DES-3026	A1	Device	End of Life
DES-3028	A2	Device	End of Life
DES-3028G	A1	Device	End of Life
DES-3028P	A2	Device	05-20-2018
DES-3052	A1	Device	05-20-2018
DES-3052P	A1	Device	05-20-2018
DES-3228PA	A1	Device	End of Life
DES-3252P	A1	Device	End of Life
DES-3326S/SR/SRM	B1	Device	End of Life
DES-3326S/SR/SRM	B2	Device	End of Life
DES-3328R	A1	Device	End of Life
DES-3350SR	A1	Device	End of Life
DES-3526	A4	Device	End of Life
DES-3526DC	A3	Device	End of Life
DES-3528DC	A3	Device	12-15-2019



DES-3528P	A1/A2	Device	09-11-2018
DES-3550	A5	Device	End of Life
DES-3552P	A1/A2	Device	08-05-2018
DES-3700-28	A1	Device	09-05-2020
DES-3810-28	A1	Device	03-14-2020
DES-3810-28-SE-LIC	A1	Device	03-14-2020
DES-3810-52	A1	Device	03-14-2020
DES-3810-52-SE-LIC	A1	Device	03-14-2020
DES-3828	A2	Device	End of Life
DES-3828DC	A1	Device	End of Life
DES-3828P	A2	Device	End of Life
DES-3852	A1	Device	End of Life
DES-6000	A1/A2A3	Device	End of Life
DES-6004	A1	Device	End of Life
DES-6006	A2	Device	End of Life
DES-6008	A1	Device	End of Life
DES-6011	A1	Device	End of Life
DES-6310	A1	Device	End of Life
DES-6500	A3	Device	End of Life
DES-6502	A2	Device	End of Life
DES-6504	A3	Device	End of Life
DES-6505	A3	Device	End of Life
DES-6506	A3	Device	End of Life
DES-6507	A3	Device	End of Life
DES-6508	B3	Device	End of Life
DES-6509	A3	Device	End of Life
DES-6510	B2	Device	End of Life
DES-6511	A3	Device	End of Life
DES-6512	A2	Device	End of Life
DES-7200	A1	Device	End of Life
DES-7206	A1	Device	04-30-2018
DES-7206-BASE	A1	Device	04-30-2018
DES-7210	A1	Device	04-30-2018
DES-7210-BASE	A1	Device	04-30-2018
DEV-301S/M	C1	Device	End of Life
DEV-3214	A1	Device	End of Life
DEV-334	A1	Device	End of Life
DEV-3510	A1	Device	End of Life
DEV-3518	A1	Device	End of Life
DEV-3518DC	A1	Device	End of Life
DEV-3618	B1	Device	End of Life
DEV-3710MK	A1	Device	End of Life
DEV-3718I	A1	Device	End of Life
DEV-3718K	A1	Device	End of Life

DEV-3718KDA	A1	Device	End of Life
DEV-3718MK	A1	Device	End of Life
DEV-3726I	A1	Device	End of Life
DEV-3726K	A1	Device	End of Life
DEV-5104K	A1	Device	End of Life
DEV-5110K	A1	Device	End of Life
DEV-5111K	A1	Device	End of Life
DEV-5120K	A1	Device	End of Life
DEV-5121K	A1	Device	End of Life
DEV-5122K	A1	Device	End of Life
DFB-A5	A3	Device	End of Life
DFE-520TX	A1/A2/B1/C1	Device	End of Life
DFE-528TX	1/D2/D3/E1/E2/F1/F	Device	End of Life
DFE-530TX	D1/D2	Device	End of Life
DFE-530TX+	G1/G2	Device	End of Life
DFE-538P	F2	Device	03-10-2018
DFE-538R	F2	Device	03-10-2018
DFE-538TX	F2	Device	End of Life
DFE-550FX	B3	Device	End of Life
DFE-550TX	C4	Device	End of Life
DFE-554C	1061G	Device	End of Life
DFE-554CP	0661G	Device	End of Life
DFE-554FP	CX	Device	End of Life
DFE-554P	CX	Device	End of Life
DFE-580TX	A4	Device	End of Life
DFE-670TXD	A2	Device	End of Life
DFE-690TXD	A4	Device	End of Life
DFE-855	D3	Device	End of Life
DFL-1100	A2	Device	End of Life
DFL-160	A1	Device	End of Life
DFL-1600	A3	Device	End of Life
DFL-1600-IPS-12	NA	Device	08-31-2020
DFL-1660	A1	Device	02-20-2021
DFL-200	A5	Device	End of Life
DFL-210	A4	Device	End of Life
DFL-210-AV-12	NA	Device	08-31-2020
DFL-210-IPS-12	NA	Device	08-31-2020
DFL-210-WCF-12	NA	Device	08-31-2020
DFL-2500	A2	Device	End of Life
DFL-2500-IPS-12	NA	Device	08-31-2020
DFL-2560	A1	Device	03-27-2021
DFL-2560-AV-12	NA	Device	08-31-2020
DFL-2560G	A1	Device	02-20-2021
DFL-2560-WCF-12	NA	Device	08-31-2020



DFL-260	B1	Device	End of Life
DFL-260E	A2	Device	04-14-2019
DFL-260E/860E/1660/2560/256	A1	Device	02-20-2021
DFL-300	A2	Device	End of Life
DFL-700	A2	Device	End of Life
DFL-800	A3	Device	End of Life
DFL-800-AV-12	NA	Device	08-31-2020
DFL-800-IPS-12	NA	Device	08-31-2020
DFL-800-WCF-12	NA	Device	08-31-2020
DFL-860	B1	Device	End of Life
DFL-860E	A1	Device	04-14-2019
DFL-CP310	A1	Device	End of Life
DFL-CPG310	A1	Device	End of Life
DFL-M510	A2	Device	End of Life
DFM-560EL	D1	Device	End of Life
DFM-562E	C1	Device	End of Life
DFM-562I	B1	Device	End of Life
DFM-562IS	D1	Device	End of Life
DFW-500	B2	Device	End of Life
DGE-500T	B1	Device	End of Life
DGE-528T	A1/A2/B1/B2	Device	End of Life
DGE-530T	B1/B2/C1/D1	Device	End of Life
DGE-550SX	A4	Device	End of Life
DGE-550SX	A3	Device	End of Life
DGE-550T	A4	Device	End of Life
DGE-560SX	A1/B1/B2	Device	End of Life
DGE-560T	E1	Device	End of Life
DGE-560T	C1	Device	End of Life
DGE-660TD	A2	Device	End of Life
DGL-3420	A1	Device	End of Life
DGL-4100	A3	Device	End of Life
DGL-4300	A4	Device	End of Life
DGL-4500	A2	Device	12-04-2018
DGL-4500	A1	Device	End of Life
DGL-5500	A1	Device	06-01-2019
DGS-1005A	A1	Device	End of Life
DGS-1005A	B1	Device	End of Life
DGS-1005A	C1	Device	End of Life
DGS-1005A	C2	Device	End of Life
DGS-1005A	D1	Device	End of Life
DGS-1005D	C3	Device	End of Life
DGS-1005D	C4	Device	End of Life
DGS-1005D	C5	Device	End of Life
DGS-1005D	C6	Device	End of Life

DGS-1005D	C7	Device	End of Life
DGS-1005D	C8	Device	End of Life
DGS-1005D	C9	Device	End of Life
DGS-1005D	D1	Device	End of Life
DGS-1005D	D2	Device	End of Life
DGS-1005D	D3	Device	End of Life
DGS-1005D	D4	Device	End of Life
DGS-1005D	D5	Device	End of Life
DGS-1005D	E1	Device	End of Life
DGS-1005D	E2	Device	End of Life
DGS-1005D	F1	Device	End of Life
DGS-1005D	G1	Device	End of Life
DGS-1005D	G2	Device	End of Life
DGS-1005D	G3	Device	End of Life
DGS-1005D	G4	Device	End of Life
DGS-1005D	H1	Device	End of Life
DGS-1005D	H2	Device	End of Life
DGS-1005D	I1	Device	End of Life
DGS-1005D	I2	Device	End of Life
DGS-1005G	A1	Device	End of Life
DGS-1005G	B1	Device	End of Life
DGS-1005G	B2	Device	End of Life
DGS-1005G	C1	Device	End of Life
DGS-1005G	C2	Device	End of Life
DGS-1005G	D1	Device	End of Life
DGS-1008A	A1	Device	End of Life
DGS-1008A	B1	Device	End of Life
DGS-1008A	B2	Device	End of Life
DGS-1008A	C1	Device	End of Life
DGS-1008A	C2	Device	End of Life
DGS-1008A	D1	Device	End of Life
DGS-1008C	A1	Device	03-01-2021
DGS-1008D	B1	Device	End of Life
DGS-1008D	C4	Device	End of Life
DGS-1008D	C5	Device	End of Life
DGS-1008D	C6	Device	End of Life
DGS-1008D	D1	Device	End of Life
DGS-1008D	D2	Device	End of Life
DGS-1008D	D3	Device	End of Life
DGS-1008D	E1	Device	End of Life
DGS-1008D	E2	Device	End of Life
DGS-1008D	E3	Device	End of Life
DGS-1008D	E4	Device	End of Life
DGS-1008D	E5	Device	End of Life

DGS-1008D	E6	Device	End of Life
DGS-1008D	F1	Device	End of Life
DGS-1008D	F2	Device	End of Life
DGS-1008D	G1	Device	End of Life
DGS-1008D	H1	Device	End of Life
DGS-1008D	H2	Device	End of Life
DGS-1008D	H3	Device	End of Life
DGS-1008D	I1	Device	End of Life
DGS-1008D	I2	Device	End of Life
DGS-1008D	I3	Device	End of Life
DGS-1008D	I4	Device	End of Life
DGS-1008D	I5	Device	End of Life
DGS-1008D	J1	Device	End of Life
DGS-1008D	J2	Device	End of Life
DGS-1008D/CH	A1	Device	End of Life
DGS-1008D/ECH	A1	Device	End of Life
DGS-1008G	A1	Device	End of Life
DGS-1008G	B1	Device	End of Life
DGS-1008G	C1	Device	End of Life
DGS-1008G	C2	Device	End of Life
DGS-1008G	D1	Device	End of Life
DGS-1008I	A1	Device	End of Life
DGS-1008MP	A1	Device	End of Life
DGS-1008MP	A2	Device	End of Life
DGS-1008P	A1	Device	End of Life
DGS-1008P	B1	Device	End of Life
DGS-1008P	C1	Device	End of Life
DGS-1008P	C2	Device	End of Life
DGS-1008P+	A1	Device	12-15-2019
DGS-1008TL	B2	Device	End of Life
DGS-1016A	A1	Device	End of Life
DGS-1016C	A1	Device	End of Life
DGS-1016D	C2/C3/C4/C5/D1/D2	Device	End of Life
DGS-1016T	E1/E2/E3/E4/E5/F1/F	Device	End of Life
DGS-1024A	A1	Device	End of Life
DGS-1024C	A1	Device	End of Life
DGS-1024D	1/C2/C3/C4/C5/D1/D	Device	End of Life
DGS-1024T	2/D3/D4/D5/E1/E2/F	Device	End of Life
DGS-105	A2	Device	End of Life
DGS-105	B1	Device	End of Life
DGS-105	B2	Device	End of Life
DGS-105	C1	Device	End of Life
DGS-105	C2	Device	End of Life
DGS-105	C3	Device	End of Life

DGS-105	C4	Device	End of Life
DGS-105	C5	Device	End of Life
DGS-105	D1	Device	End of Life
DGS-108	A1	Device	End of Life
DGS-108	B1	Device	End of Life
DGS-108	B2	Device	End of Life
DGS-108	C1	Device	End of Life
DGS-108	C2	Device	End of Life
DGS-108	C3	Device	End of Life
DGS-108	C4	Device	End of Life
DGS-108	C5	Device	End of Life
DGS-108	D1	Device	End of Life
DGS-1100-05	A1	Device	End of Life
DGS-1100-08	A1	Device	End of Life
DGS-1100-08P	A1	Device	End of Life
DGS-1100-10MP	B1	Device	End of Life
DGS-1100-10MPP	B1	Device	End of Life
DGS-1100-16	A1/B1	Device	End of Life
DGS-1100-24	A1/B1	Device	End of Life
DGS-1100-26MP	B1	Device	End of Life
DGS-1100-26MPP	B1	Device	End of Life
DGS-1210-08P	D1/D2	Device	End of Life
DGS-1210-10	C1	Device	End of Life
DGS-1210-10P	A1/A2/B1/C1	Device	End of Life
DGS-1210-16	D1	Device	End of Life
DGS-1210-20	B1/C1/E1	Device	End of Life
DGS-1210-24	D1	Device	End of Life
DGS-1210-24P	D1/D2	Device	End of Life
DGS-1210-28	A1/B1/C1	Device	End of Life
DGS-1210-28MP	E1	Device	End of Life
DGS-1210-28P	B1/C1	Device	End of Life
DGS-1210-48	D1	Device	End of Life
DGS-1210-52	B1/C1	Device	End of Life
DGS-1210-52MP	C1	Device	End of Life
DGS-1216T	C1/D1/D2	Device	End of Life
DGS-1224T	C1/D1/D2	Device	End of Life
DGS-1224TP	A1	Device	End of Life
DGS-1248T	A1/A2/B1/B2	Device	End of Life
DGS-1500-20	A1	Device	07-05-2020
DGS-1500-52	A1	Device	07-05-2020
DGS-2205	A2/A3/B1/B2/C1/D1	Device	End of Life
DGS-2208	1/A2/B1/C1/C2/D1/E	Device	End of Life
DGS-3000	A1/A2	Device	End of Life
DGS-3024	A4	Device	End of Life

DGS-3048	A1	Device	End of Life
DGS-3100-24	B1	Device	End of Life
DGS-3100-24P	A1	Device	End of Life
DGS-3100-24TG	B1	Device	End of Life
DGS-3100-48	B1	Device	End of Life
DGS-3100-48P	A1	Device	End of Life
DGS-3200-10	B1	Device	04-01-2018
DGS-3200-16	A2	Device	End of Life
DGS-3200-24	A1	Device	End of Life
DGS-3224TGR	A2	Device	End of Life
DGS-3312SR	A4	Device	End of Life
DGS-3324SR	A3	Device	End of Life
DGS-3324SRI	A5	Device	End of Life
DGS-3420-26SC	A1/A2	Device	End of Life
DGS-3420-28PC	A1/A2	Device	End of Life
DGS-3420-28SC	A1/A2	Device	End of Life
DGS-3420-28TC	A1/A2	Device	End of Life
DGS-3420-52P	A1/A2	Device	End of Life
DGS-3420-52T	A1/A2	Device	End of Life
DGS-3426	A3	Device	End of Life
DGS-3426G	A1	Device	End of Life
DGS-3426P	A3	Device	End of Life
DGS-3427	A3	Device	End of Life
DGS-3450	A3	Device	End of Life
DGS-3610-26	A2	Device	End of Life
DGS-3610-26G	A2	Device	End of Life
DGS-3610-26P	A1	Device	End of Life
DGS-3610-50	A1	Device	End of Life
DGS-3612	A2	Device	End of Life
DGS-3612G	A2	Device	End of Life
DGS-3627	A2	Device	End of Life
DGS-3627G	A3	Device	End of Life
DGS-3630-28PC	A1	Device	End of Life
DGS-3630-28SC	A1	Device	End of Life
DGS-3630-28TC	A1	Device	End of Life
DGS-3630-52PC	A1	Device	End of Life
DGS-3630-52TC	A1	Device	End of Life
DGS-3650	A3	Device	End of Life
DGS-3700-12	A1	Device	02-12-2018
DGS-3700-12G	A1	Device	02-12-2018
DGS-6600-16XS-D	A1	Device	02-20-2021
DGS-6600-24SC2XS	ALL	Device	06-30-2019
DGS-6600-24SC2XS-C	A1	Device	End of Life
DGS-6600-48P	A1	Device	End of Life



DGS-6600-48S	ALL	Device	06-30-2019
DGS-6600-48S-C	A1	Device	End of Life
DGS-6600-48T	A1	Device	End of Life
DGS-6600-48TS	A1	Device	End of Life
DGS-6600-8XG	ALL	Device	06-30-2019
DGS-6600-CM	ALL	Device	06-30-2019
DGS-6600-CM-II	A1	Device	End of Life
DGS-6600-FAN	A1	Device	End of Life
DGS-6600-FAN-II	A1	Device	End of Life
DGS-6600-PWR	A1	Device	End of Life
DGS-6604	A1	Device	End of Life
DGS-6604-SK	A1	Device	End of Life
DGS-6604-SK-48P	A1	Device	End of Life
DGS-6604-SK-48S	A1	Device	End of Life
DGS-6604-SK-48T	A1	Device	End of Life
DGS-6608	A1	Device	End of Life
DGS-6608-SK	A1	Device	End of Life
DGS-6608-SK-48P	A1	Device	End of Life
DGS-6608-SK-48S	A1	Device	End of Life
DGS-6608-SK-48T	A1	Device	End of Life
DGS-701	B1	Device	End of Life
DGS-702	B1	Device	End of Life
DGS-703	C1	Device	End of Life
DGS-704	C1	Device	End of Life
DGS-707	C1	Device	End of Life
DGS-708	C1	Device	End of Life
DGS-711	A1	Device	End of Life
DGS-712	B1/B2/C1/D1	Device	End of Life
DHA-110	ALL	Device	End of Life
DHA-30	A1	Device	End of Life
DHA-31	A1	Device	End of Life
DHA-310	A1	Device	End of Life
DHA-311	A1	Device	End of Life
DHA-330	A1	Device	End of Life
DHA-390	A1	Device	End of Life
DHD-131	A1	Device	12-15-2019
DHP-1220AV	A1	Device	02-01-2020
DHP-1221AV	A1	Device	02-01-2020
DHP-1320	A1	Device	02-28-2019
DHP-1565	A1	Device	09-01-2019
DHP-208AV	A1	Device	02-01-2020
DHP-208AV	B1	Device	End of Life
DHP-209AV	A1	Device	02-01-2020
DHP-209AV	B1	Device	End of Life



DHP-300	A1	Device	End of Life
DHP-301	A1	Device	End of Life
DHP-301AV	B1	Device	07-06-2020
DHP-301AV	A1	Device	01-14-2020
DHP-302	A1	Device	End of Life
DHP-303	A1	Device	End of Life
DHP-304AV	A1	Device	02-28-2019
DHP-304AV	B1	Device	End of Life
DHP-306AV	A1/C1/D1	Device	02-28-2019
DHP-307AV	A1/C1/D1	Device	02-28-2019
DHP-310AV	A1	Device	02-28-2019
DHP-311AV	A1	Device	02-28-2019
DHP-328AV	A1	Device	02-01-2020
DHP-329AV	A1	Device	02-01-2020
DHP-341	A1	Device	End of Life
DHP-342	A1	Device	End of Life
DHP-346AV	A1	Device	02-28-2019
DHP-347AV	A1	Device	02-28-2019
DHP-348AV	A1	Device	02-28-2019
DHP-500AV	A1/B1	Device	02-28-2019
DHP-501AV	A1/B1	Device	02-28-2019
DHP-502AV	A1	Device	01-15-2019
DHP-508AV	A1	Device	02-01-2020
DHP-509AV	A1	Device	02-01-2020
DHP-540	A1/A2	Device	01-15-2019
DHP-541	A1	Device	01-15-2019
DHP-600AV	A1	Device	02-01-2020
DHP-600AV	B1	Device	02-01-2020
DHP-601AV	A1	Device	02-01-2020
DHP-601AV	B1	Device	02-01-2020
DHP-601AV+	B1	Device	End of Life
DHP-P306AV	A1/C1/D1	Device	02-28-2019
DHP-P307AV	A1/C1/D1	Device	02-28-2019
DHP-P308AV	C1/B1	Device	06-30-2020
DHP-P309AV	A1/C1	Device	06-30-2020
DHP-P327AV	A1	Device	End of Life
DHP-P338AV	A1	Device	02-01-2020
DHP-P339AV	A1	Device	02-01-2020
DHP-P500AV	A1	Device	02-28-2019
DHP-P501AV	A1	Device	02-28-2019
DHP-P508AV	A1	Device	02-01-2020
DHP-P509AV	A1	Device	02-01-2020
DHP-P600AV	A1	Device	02-01-2020
DHP-P601AV	A1	Device	02-01-2020

DHP-W220AV	A1	Device	02-01-2020
DHP-W221AV	A1	Device	02-01-2020
DHP-W304AV	A1	Device	12-15-2019
DHP-W306AV	A1/A2	Device	End of Life
DHP-W307AV	A1/B1/C1	Device	End of Life
DHP-W310AV	A1/B1	Device	02-01-2020
DHP-W311AV	A1/A2/B1/C1	Device	02-01-2020
DHS-2218	A2	Device	End of Life
DHS-3010F/3010G/3018/3026	D3	Device	End of Life
DHS-3226P	A1	Device	End of Life
DHS-3618	A2	Device	End of Life
DHS-3628	A1	Device	End of Life
DHS-3628GF	A1	Device	End of Life
DI-1000	A2	Device	12-31-2019
DI-304	A1	Device	End of Life
DI-504	B2/C3/D1	Device	End of Life
DI-504M	A2/B1	Device	End of Life
DI-524	B4/G1/G2/H1/I1	Device	02-01-2020
DI-524+A	A1	Device	End of Life
DI-524M	A1/B1	Device	End of Life
DI-524SU	C1	Device	End of Life
DI-524UP	A1/A2/A3	Device	01-15-2020
DI-604	F5	Device	End of Life
DI-604UP	A1	Device	End of Life
DI-624	D2	Device	End of Life
DI-624+A	D1	Device	End of Life
DI-624+A	C2	Device	End of Life
DI-624+A	C1	Device	End of Life
DI-624M	A1	Device	End of Life
DI-624S	B1	Device	End of Life
DI-624S	B2	Device	End of Life
DI-634M	A1	Device	End of Life
DI-704P	D2	Device	End of Life
DI-704UP	A2	Device	End of Life
DI-707P	D1	Device	End of Life
DI-804HV	C3/C4	Device	End of Life
DI-808HV	B1	Device	End of Life
DI-824VUP	B1	Device	End of Life
DI-824VUP+	A2	Device	End of Life
DIB-110	ALL	Device	End of Life
DIB-120	ALL	Device	End of Life
DIB-200	A1/B1	Device	12-27-2020
DIB-360	A1	Device	End of Life
DI-LB604	A1/A2	Device	End of Life

DIR-100	A1/B1/C1/D1/E1	Device	03-01-2020
DIR-101	A1	Device	03-01-2020
DIR-110	A1/B1	Device	06-30-2020
DIR-120	A1	Device	11-01-2020
DIR-130	A1	Device	End of Life
DIR-140L	A1	Device	08-31-2019
DIR-280	A1	Device	End of Life
DIR-300	D1	Device	08-31-2020
DIR-300	Bx	Device	End of Life
DIR-300	C1	Device	End of Life
DIR-300	A1	Device	End of Life
DIR-300S	A1	Device	End of Life
DIR-320	A1/A2/B1/B2/D1	Device	01-31-2020
DIR-320A	A1	Device	End of Life
DIR-330	A1	Device	End of Life
DIR-370	A1	Device	04-25-2020
DIR-400	A1	Device	End of Life
DIR-412	B1	Device	12-15-2019
DIR-455	A2	Device	End of Life
DIR-455U	A2	Device	End of Life
DIR-455V	A2	Device	12-31-2018
DIR-456	A1	Device	12-31-2018
DIR-456U	B1	Device	12-31-2018
DIR-457	B1	Device	End of Life
DIR-457U	B1	Device	End of Life
DIR-457V	A1	Device	End of Life
DIR-462	A1	Device	End of Life
DIR-462	B1	Device	End of Life
DIR-463	A1	Device	End of Life
DIR-465	A1	Device	End of Life
DIR-501	A2	Device	01-14-2019
DIR-501	A1	Device	End of Life
DIR-503	A2	Device	08-31-2019
DIR-503	A1	Device	End of Life
DIR-503A	A1	Device	12-15-2019
DIR-503A	B1	Device	End of Life
DIR-505	A1	Device	09-01-2020
DIR-505	A2	Device	End of Life
DIR-505L	A1	Device	03-01-2020
DIR-506L	A2	Device	08-31-2019
DIR-506L	A2E	Device	End of Life
DIR-506L	A2G	Device	End of Life
DIR-506L	A1	Device	End of Life
DIR-506L	A1E	Device	End of Life

DIR-506L	A1G	Device	End of Life
DIR-508L	A1	Device	12-15-2019
DIR-510L	A1	Device	02-01-2020
DIR-510L	A2	Device	End of Life
DIR-512	A1	Device	End of Life
DIR-513	A1	Device	08-31-2019
DIR-513	A2	Device	End of Life
DIR-513A	A1	Device	12-31-2020
DIR-514	A1	Device	05-01-2018
DIR-514	B1	Device	End of Life
DIR-515	A1	Device	01-14-2019
DIR-515R	A1	Device	11-01-2020
DIR-516	A1	Device	05-31-2020
DIR-516A	A1	Device	05-31-2020
DIR-518L	A1	Device	06-30-2020
DIR-524	B1	Device	08-31-2019
DIR-524	A1	Device	End of Life
DIR-600	B6	Device	10-01-2020
DIR-600	D1	Device	05-31-2020
DIR-600	B5	Device	End of Life
DIR-600	B2	Device	End of Life
DIR-600	C1	Device	End of Life
DIR-600	B1	Device	End of Life
DIR-600	B1G	Device	End of Life
DIR-600	B2G	Device	End of Life
DIR-600	A1	Device	End of Life
DIR-600A	A1	Device	08-31-2019
DIR-600A	B1	Device	End of Life
DIR-600A	A2	Device	End of Life
DIR-600L	A1	Device	12-15-2019
DIR-600L	B1	Device	05-02-2019
DIR-600LW	A1	Device	12-15-2019
DIR-600M	C2	Device	08-26-2020
DIR-600M	B1	Device	05-06-2020
DIR-600M	A3	Device	End of Life
DIR-600M	A2	Device	End of Life
DIR-600M	A1	Device	End of Life
DIR-600M+	A1	Device	08-11-2019
DIR-600N	B1	Device	06-30-2020
DIR-600N	A1	Device	End of Life
DIR-601	C1	Device	07-15-2020
DIR-601	B1	Device	End of Life
DIR-601	A1	Device	End of Life
DIR-602	A1	Device	08-31-2019

DIR-604	A1	Device	End of Life
DIR-604M	A2, A1	Device	06-30-2020
DIR-605	A1	Device	03-01-2020
DIR-605	D1	Device	End of Life
DIR-605	C1	Device	End of Life
DIR-605	B1	Device	End of Life
DIR-605	A2	Device	End of Life
DIR-605L	A1/B1/B2/B3/B4	Device	05-02-2019
DIR-605LW	A1	Device	End of Life
DIR-607	A1	Device	07-31-2019
DIR-610	B1	Device	06-30-2020
DIR-610	A1	Device	End of Life
DIR-610N	A1	Device	06-30-2020
DIR-610N+	A1	Device	06-30-2020
DIR-610-SKD	B1	Device	08-26-2020
DIR-612	B2	Device	08-26-2020
DIR-612	A1	Device	End of Life
DIR-613	B1	Device	12-31-2019
DIR-613	A1	Device	End of Life
DIR-614	B1	Device	End of Life
DIR-615	O1/P1/R1/S1	Device	09-30-2020
DIR-615	Q2	Device	08-15-2020
DIR-615	G1	Device	08-12-2020
DIR-615	R1	Device	End of Life
DIR-615	M2	Device	End of Life
DIR-615	P1	Device	End of Life
DIR-615	Q1	Device	End of Life
DIR-615	V1	Device	End of Life
DIR-615	D3	Device	End of Life
DIR-615	E3	Device	End of Life
DIR-615	H2	Device	End of Life
DIR-615	I1	Device	End of Life
DIR-615	I2	Device	End of Life
DIR-615	K2	Device	End of Life
DIR-615	M1	Device	End of Life
DIR-615	O1	Device	End of Life
DIR-615	D5	Device	End of Life
DIR-615	E4	Device	End of Life
DIR-615	E5	Device	End of Life
DIR-615	G2	Device	End of Life
DIR-615	H1	Device	End of Life
DIR-615	I3	Device	End of Life
DIR-615	K1	Device	End of Life
DIR-615	D4	Device	End of Life

DIR-615	F3	Device	End of Life
DIR-615	B2	Device	End of Life
DIR-615	C1	Device	End of Life
DIR-615	C2	Device	End of Life
DIR-615	D1	Device	End of Life
DIR-615	D2	Device	End of Life
DIR-615	E1	Device	End of Life
DIR-615	F1	Device	End of Life
DIR-615	F2	Device	End of Life
DIR-615A	A1, A2	Device	06-30-2020
DIR-615G	A1	Device	08-26-2020
DIR-615KSB	A1	Device	End of Life
DIR-615KSC	A1	Device	End of Life
DIR-615-SKD	T1	Device	08-26-2020
DIR-616	A1	Device	03-01-2020
DIR-616	C1	Device	End of Life
DIR-616	D1	Device	End of Life
DIR-616	B1	Device	End of Life
DIR-616+	A1	Device	12-15-2019
DIR-617	A1	Device	07-31-2019
DIR-618	B1	Device	06-01-2018
DIR-618	A1	Device	End of Life
DIR-618	A1G	Device	End of Life
DIR-619	A1	Device	End of Life
DIR-619L	A1	Device	End of Life
DIR-619L	A2	Device	End of Life
DIR-620	1/B2/C1/D1/D2/E1/F	Device	05-31-2020
DIR-620A	A1	Device	End of Life
DIR-625	C2	Device	End of Life
DIR-626L	A1	Device	05-02-2019
DIR-627	A1	Device	End of Life
DIR-628	A2	Device	End of Life
DIR-628	A1	Device	End of Life
DIR-629	B1	Device	12-15-2019
DIR-629	A1	Device	End of Life
DIR-632	A1	Device	End of Life
DIR-635	ALL	Device	End of Life
DIR-636L	A1	Device	03-01-2020
DIR-640L	A1/A2	Device	08-31-2019
DIR-645	A1	Device	05-01-2018
DIR-651	A1/A2/B1	Device	03-01-2018
DIR-652	A1/B1	Device	01-01-2018
DIR-653	A1	Device	05-01-2018
DIR-655	A2/A3/A4/A5/B1/C1	Device	05-01-2018

DIR-657	A1	Device	08-01-2018
DIR-660	A1	Device	End of Life
DIR-665	A1	Device	End of Life
DIR-685	A1/A2	Device	End of Life
DIR-802	A1	Device	11-01-2020
DIR-803	A1	Device	03-01-2020
DIR-804	A1	Device	02-01-2020
DIR-805	A1	Device	08-31-2019
DIR-806	A1	Device	02-01-2020
DIR-806A	A1	Device	03-01-2020
DIR-808L	A1	Device	08-31-2019
DIR-809	A1	Device	06-30-2020
DIR-810L	C1	Device	06-22-2020
DIR-810L	A1/B1	Device	03-01-2020
DIR-813	B1	Device	08-18-2020
DIR-815	A1/B1C1	Device	12-15-2019
DIR-816L	A1/B1	Device	12-15-2019
DIR-817LW	A1	Device	12-15-2019
DIR-818L	A1	Device	12-15-2019
DIR-818LW	A1/B1	Device	12-15-2019
DIR-820L	A1/B1	Device	03-01-2020
DIR-820LW	B1	Device	03-01-2020
DIR-822	A1/B1	Device	05-01-2020
DIR-823	A1	Device	05-01-2020
DIR-825	D1	Device	08-26-2020
DIR-825	A1/A2/B1/B2/C1	Device	01-01-2020
DIR-825	E1/E2/F1	Device	01-01-2020
DIR-826L	A1	Device	05-02-2019
DIR-827	A1	Device	02-01-2018
DIR-830L	A1	Device	05-01-2020
DIR-835	A1	Device	06-01-2018
DIR-836L	A1	Device	05-02-2019
DIR-840	A1	Device	05-23-2020
DIR-840	C1	Device	05-21-2018
DIR-840L	A1	Device	05-22-2019
DIR-842	A1/A2/B1/B2	Device	05-01-2020
DIR-845L	A1	Device	03-01-2020
DIR-850L	B1	Device	03-01-2020
DIR-850L	A1	Device	03-01-2020
DIR-850LW	A1	Device	09-15-2020
DIR-850LW	B1	Device	End of Life
DIR-852	A1	Device	End of Life
DIR-855	A1/A2/A3	Device	12-30-2019
DIR-855L	A1	Device	08-31-2019



DIR-857	A1	Device	02-01-2018
DIR-859	A1/A2/A3	Device	01-01-2020
DIR-860L	B1	Device	06-30-2020
DIR-860L	A1	Device	06-22-2020
DIR-862L	A1	Device	02-15-2020
DIR-865L	A1	Device	08-31-2019
DIR-866L	A1	Device	02-15-2020
DIR-868L	ALL	Device	06-30-2020
DIR-880L	A1/A2	Device	01-01-2020
DIR-885L	ALL	Device	06-30-2020
DIR-890L	A2	Device	01-01-2020
DIR-895L	ALL	Device	06-30-2020
DIR-900L	A1/B1	Device	05-01-2018
DIR-905L	A1/B1/B2	Device	09-01-2020
DIS-2024T	F1	Device	02-05-2020
DKT-110	A1/B1	Device	06-22-2020
DKT-200	A1	Device	05-26-2020
DKT-201L	A1	Device	07-01-2020
DKT-202-ES	A1	Device	01-31-2021
DKT-400	ALL	Device	06-22-2020
DKT-405	ALL	Device	06-22-2020
DKT-408	ALL	Device	06-22-2020
DKT-410	B1	Device	End of Life
DKT-50	A1	Device	05-26-2020
DKT-610L	A1	Device	12-15-2019
DKT-620L	A1	Device	12-15-2019
DKVM-16	B2	Device	End of Life
DKVM-2KU	B1	Device	06-27-2020
DKVM-2U	B1	Device	End of Life
DKVM-4K	A6	Device	04-22-2020
DKVM-8E	B2	Device	End of Life
DKVM-IP1	A1	Device	05-30-2020
D-Link SmartPlay	ALL	App	End of Life
D-Link TV Tuner	ALL	App	End of Life
D-LINK-WIFI-AOS	ALL	Mobile APP	02-07-2020
D-LINK-WIFI-IOS	ALL	Mobile APP	02-07-2020
DMC-1000	A1/A2	Device	End of Life
DMC-1001	A1/A2/A3	Device	End of Life
DMC-1002	A1/A2/A3	Device	End of Life
DMC-1530SC	C6	Device	03-21-2020
DMC-1580SC	B6	Device	03-21-2020
DMC-1910R	/A2/A3/A4/A5/A6/A7	Device	End of Life
DMC-1910T	/A2/A3/A4/A5/A6/A7	Device	End of Life
DMC-300M	D5	Device	End of Life

DMC-300SC	D3/D4/D5/D6/D7	Device	End of Life
DMC-515SC	D1/D2/D3/D4/D5/D6	Device	End of Life
DMC-530SC	D1/D2/D3/D4/D5/D6	Device	End of Life
DMC-560SC	D5	Device	End of Life
DMC-615SC	A3	Device	End of Life
DMC-700SC	/B1/B2/B3/B4/B5/B6/	Device	End of Life
DMC-805G	/A2/A3/A5/A6/A7/A8/	Device	End of Life
DMC-810SC	/B2/B3/B4/B5/B6/B7/	Device	End of Life
DMC-920R	2/B3/B4/B5/B6/B7/B	Device	End of Life
DMC-920T	2/B3/B4/B5/B6/B7/B	Device	End of Life
DMC-G01LC	A1	Device	End of Life
DMS-1331	A1	Device	End of Life
DNR-202L	Ax	Device	09-30-2020
DNR-2060-08P	A1	Device	12-15-2019
DNR-322L	Ax	Device	06-30-2020
DNR-326	A2	Device	06-24-2020
DNR-326L	A1/A2	Device	End of Life
DNS-101A	ALL	Software	07-01-2020
DNS-101I	ALL	Software	07-01-2020
DNS-1100-04	A1	Device	08-19-2019
DNS-1200-05	A1	Device	01-07-2019
DNS-1250-04	A1	Device	06-05-2019
DNS-1250-06	A1	Device	06-05-2019
DNS-1550-04	A1	Device	12-15-2019
DNS-1560-04	A1	Device	06-07-2020
DNS-300	A1	Device	End of Life
DNS-312H	A2	Device	End of Life
DNS-313	B1	Device	04-14-2018
DNS-315	A1	Device	09-11-2018
DNS-320	A1/A2/B1/B2	Device	12-15-2019
DNS-320L	A4	Device	06-30-2020
DNS-320LW	A2	Device	12-15-2019
DNS-321	A3	Device	End of Life
DNS-323	C1	Device	End of Life
DNS-325	A2	Device	05-06-2019
DNS-326	A1	Device	End of Life
DNS-327L	A1	Device	06-30-2020
DNS-340L	A1	Device	06-30-2020
DNS-343	B1	Device	End of Life
DNS-345	A2	Device	08-31-2019
DNS-346	A1	Device	06-08-2019
DNS-356	A1	Device	End of Life
DNS-722-4	A1	Device	End of Life
DNS-726-4	A1	Device	End of Life



DP-300+	C2	Device	End of Life
DP-300U	B2	Device	End of Life
DP-301P+	D3	Device	02-24-2021
DP-301U	B2	Device	End of Life
DPE-101GI	A1	Device	End of Life
DPG-2100	A1	Device	End of Life
DP-G301	A2	Device	End of Life
DP-G310	C2	Device	End of Life
DP-G321	C2	Device	End of Life
DPH-10U	A1	Device	End of Life
DPH-120S	A1	Device	End of Life
DPH-125MS	A2	Device	End of Life
DPH-128MS	A1	Device	End of Life
DPH-20U	A1	Device	End of Life
DPH-300S	A1	Device	End of Life
DPH-400EDM	A1	Device	End of Life
DPH-400S	A1	Device	End of Life
DPH-400SE	A1	Device	End of Life
DPH-50U	A2	Device	End of Life
DPH-540	A1	Device	End of Life
DPH-541	A1	Device	End of Life
DPN-301	D1	Device	End of Life
DPN-3012	B1	Device	End of Life
DPN-3012-E	A1	Device	End of Life
DPN-3012-E-01	A1	Device	End of Life
DPN-301L	D1	Device	End of Life
DPN-301T	D1	Device	End of Life
DPN-304	B1	Device	End of Life
DPN-304L	B1	Device	End of Life
DPN-304T	B1	Device	End of Life
DPN-R5402	B1	Device	12-13-2020
DPR-1020	A2	Device	02-24-2021
DPR-1040	A2	Device	06-30-2020
DPR-1040	ALL	Device	04-22-2019
DPR-1061	A3	Device	02-24-2021
DPR-1260	A3	Device	End of Life
DPR-2000	ALL	Device	04-22-2019
DPS-200	A2	Device	12-31-2018
DPS-2500	A1	Device	12-31-2018
DPS-300	A2	Device	10-01-2018
DPS-500	A2	Device	12-31-2018
DPS-500DC	A1	Device	12-31-2018
DPS-510	A1	Device	End of Life
DPS-600	A2	Device	12-31-2018

DPS-900	A2	Device	12-31-2018
DPS-CB150-2PS	A1	Device	End of Life
DPS-CB400	A1	Device	End of Life
DS-510P	A1	Device	End of Life
DSA-3100	B1	Device	End of Life
DSA-3200	A1	Device	End of Life
DSA-5100	A1	Device	End of Life
DSB-C120	A3	Device	End of Life
DSB-C320	B1	Device	End of Life
DSB-H4	D4	Device	End of Life
DSD-150	A3	Device	End of Life
DSL-200	C1	Device	End of Life
DSL-24MF	A1	Device	End of Life
DSL-2520U	ALL	Device	09-09-2020
DSL-2540B	T1	Device	06-27-2020
DSL-2540T	B5	Device	End of Life
DSL-2540U	T1	Device	06-27-2020
DSL-2600U	Z2	Device	06-27-2020
DSL-2640R	ALL	Device	End of Life
DSL-2640S	ALL	Device	End of Life
DSL-2640T	B5	Device	End of Life
DSL-2641R	ALL	Device	End of Life
DSL-2680	A1	Device	End of Life
DSL-2740B	F1	Device	06-27-2020
DSL-2740EL	C1	Device	09-22-2019
DSL-2740M	A1	Device	08-09-2019
DSL-2740R	ALL	Device	End of Life
DSL-2745	A1	Device	07-31-2018
DSL-2750EL	C1	Device	06-27-2020
DSL-2750EL	A1	Device	06-27-2020
DSL-2750EL	ALL	Device	11-23-2019
DSL-2751	D1	Device	11-24-2020
DSL-2751	ALL	Device	11-23-2019
DSL-2760U	D2	Device	06-27-2020
DSL-2780	A1	Device	03-24-2018
DSL-2870B	A1	Device	06-27-2020
DSL-2890AL	ALL	Device	09-09-2020
DSL-2900AL	ALL	Device	09-09-2020
DSL-300G	A1	Device	End of Life
DSL-300G+	A1	Device	End of Life
DSL-300T	A1	Device	End of Life
DSL-30CF	A2	Device	12-13-2020
DSL-320B	D1	Device	09-12-2020
DSL-320B	D2	Device	06-27-2020

DSL-3580L	A2	Device	07-06-2020
DSL-3590L	ALL	Device	09-09-2020
DSL-35MF	B1	Device	06-30-2019
DSL-41MF	A1	Device	End of Life
DSL-500B	ALL	Device	End of Life
DSL-500G	A1	Device	End of Life
DSL-500T	A1	Device	End of Life
DSL-502T	C5	Device	End of Life
DSL-502T	A5	Device	End of Life
DSL-504G	A1	Device	End of Life
DSL-504T	C3	Device	End of Life
DSL-504T	B3	Device	End of Life
DSL-520B	T1	Device	09-12-2020
DSL-520B	A1	Device	End of Life
DSL-526E	T1	Device	06-27-2020
DSL-55MF	A1	Device	06-27-2020
DSL-562T	A1	Device	End of Life
DSL-56SP	ALL	Device	11-24-2020
DSL-6501I	A1	Device	09-08-2020
DSL-6540I	A1	Device	End of Life
DSL-6640I	A1	Device	End of Life
DSL-6641K	A1	Device	06-27-2020
DSL-6740B	C2	Device	02-20-2021
DSL-6740B	ALL	Device	11-23-2019
DSL-6740C	A1	Device	08-11-2019
DSL-6740U	T1	Device	06-27-2020
DSL-6850U	A1	Device	06-27-2020
DSL-7850U	ALL	Device	11-24-2020
DSL-904	A1	Device	End of Life
DSL-905	A1	Device	End of Life
DSL-G604T	ALL	Device	End of Life
DSL-G664T	A1	Device	End of Life
DSM-10	A1	Device	End of Life
DSM-12	A1	Device	End of Life
DSM-120	A3	Device	End of Life
DSM-14	A1	Device	End of Life
DSM-210	A3	Device	07-12-2018
DSM-22	A1	Device	04-15-2019
DSM-232	A1	Device	06-30-2020
DSM-310	A1	Device	03-25-2019
DSM-312	A1	Device	03-25-2019
DSM-320	A5	Device	End of Life
DSM-320RD	A5	Device	End of Life
DSM-330	A1	Device	End of Life



DSM-331	A1	Device	09-04-2018
DSM-350	A1	Device	End of Life
DSM-360	A1	Device	08-29-2018
DSM-380	B1	Device	End of Life
DSM-382	A1	Device	04-15-2019
DSM-510	A3	Device	End of Life
DSM-520	A4	Device	End of Life
DSM-520RD	A1	Device	End of Life
DSM-600	A1	Device	End of Life
DSM-750	A1	Device	End of Life
DSM-8	A1	Device	End of Life
DSM-G600	B2	Device	End of Life
DSM-T100	A1	Device	12-31-2019
DSN-010	A1	Device	05-04-2019
DSN-020	A1	Device	05-04-2019
DSN-030	A1	Device	05-04-2019
DSN-040	A1	Device	05-04-2019
DSN-050	A1	Device	05-04-2019
DSN-1100-10	A1	Device	11-24-2018
DSN-2100-10	A1	Device	04-14-2018
DSN-3200-10	A3	Device	04-14-2018
DSN-3200-20	A3	Device	11-24-2018
DSN-3400-10	A3	Device	11-24-2018
DSN-3400-20	A3	Device	11-24-2018
DSN-4100	A1/B1	Device	End of Life
DSN-4200	A1	Device	End of Life
DSN-610	A2	Device	12-15-2019
DSN-6110	A3	Device	12-15-2019
DSN-6120	A1	Device	12-15-2019
DSN-6210	B1	Device	01-31-2021
DSN-640	A2	Device	12-15-2019
DSN-6410	A3	Device	12-15-2019
DSN-6420	A1	Device	12-15-2019
DSN-650	A1	Device	12-15-2019
DSN-651	A1	Device	12-15-2019
DSN-6510	B1	Device	01-31-2021
DSN-655	A1	Device	12-15-2019
DSN-661	A1	Device	12-15-2019
DSP-P113	A1	Device	12-15-2019
DSP-T115A	A1	Device	12-15-2019
DSP-W110	B1	Device	03-31-2021
DSP-W115	A1	Device	12-15-2019
DSP-W115A	A1	Device	12-15-2019
DSP-W116	A1	Device	12-15-2019



DSP-W215	A1/A2/B1/B2	Device	12-15-2019
DSP-W245	A1	Device	12-15-2019
DSR-500N	A1	Device	12-15-2019
DSS-16+	1/G2/G3/G4/H1/I1/J	Device	End of Life
DSS-24+	D2	Device	02-05-2020
DSS-5+	L2	Device	End of Life
DSS-5E	C1	Device	12-15-2019
DSS-8+	H4	Device	End of Life
DSS-8E	C1	Device	12-15-2019
DSS-8G	A1	Device	End of Life
DU-562M	B1	Device	End of Life
DUB-104	A4	Device	02-03-2019
DUB-1040	A1	Device	02-20-2021
DUB-1210	B2	Device	End of Life
DUB-1310	A1	Device	05-30-2020
DUB-1320	A1	Device	12-15-2019
DUB-1342	A1	Device	05-30-2020
DUB-2240	B2	Device	End of Life
DUB-9240	B2	Device	End of Life
DUB-A2	A4	Device	End of Life
DUB-AV200	A1	Device	End of Life
DUB-AV300	A1	Device	End of Life
DUB-C2	A3	Device	End of Life
DUB-C2AB	A2	Device	End of Life
DUB-C2AE	A2	Device	06-18-2018
DUB-C3AB	A2	Device	End of Life
DUB-C3AE	A2	Device	End of Life
DUB-CR100	B1	Device	End of Life
DUB-CR200	A2G	Device	End of Life
DUB-T210	A2	Device	End of Life
DVA-3061I	A1	Device	End of Life
DVA-G3340S	A5	Device	End of Life
DVA-G3342SB	A1	Device	End of Life
DVA-G3342SD	B1	Device	End of Life
DVA-N6670B	A1	Device	End of Life
DVC-10	A1	Device	End of Life
DVC-1000	A5	Device	End of Life
DVC-1100	A2	Device	End of Life
DVC-20	A1	Device	End of Life
DVC-2000	A2	Device	End of Life
DVG-1401SP	B1	Device	End of Life
DVG-1402S	B2	Device	End of Life
DVG-2001S	ALL	Device	End of Life
DVG-2004S	A1	Device	End of Life

DVG-2024S	A1	Device	06-24-2020
DVG-2032S	B1	Device	End of Life
DVG-2101SP	A1	Device	End of Life
DVG-3004S	A1	Device	End of Life
DVG-3016S	B1	Device	End of Life
DVG-3032S	B1	Device	End of Life
DVG-3104MS	B1	Device	End of Life
DVG-4022S	A1	Device	End of Life
DVG-4032S	B1	Device	End of Life
DVG-4088S	B1	Device	End of Life
DVG-5004S	C1	Device	06-24-2020
DVG-5008SG	A1	Device	06-24-2020
DVG-5102SP	A1	Device	End of Life
DVG-5112S	A1	Device	End of Life
DVG-5121SP	A1	Device	End of Life
DVG-5401SP	A1	Device	End of Life
DVG-5802S	A1	Device	End of Life
DVG-6004S	B2	Device	09-05-2020
DVG-6008S	B1	Device	06-24-2020
DVG-7022S	B1	Device	End of Life
DVG-7044S	B1	Device	End of Life
DVG-7062S	B1	Device	End of Life
DVG-7111S	B1	Device	06-24-2020
DVG-G1402S	B1	Device	End of Life
DVG-N5402GF	B1	Device	06-24-2020
DVG-N5412SP	A1	Device	09-05-2020
DVS-104	A1	Device	End of Life
DVS-210-1	A1	Device	End of Life
DVS-301	A2	Device	End of Life
DVS-310-1	ALL	Device	12-31-2019
DVS-V310-4	A1	Device	01-31-2021
DVX-1000	A1	Device	End of Life
DVX-2000MS	A1	Device	End of Life
DVX-2002F	F1	Device	12-19-2020
DVX-2005F	F1	Device	09-05-2020
DVX-2020	F1	Device	09-05-2020
DWA-110	A1	Device	End of Life
DWA-111	A1	Device	End of Life
DWA-113	A1	Device	End of Life
DWA-120	A1	Device	End of Life
DWA-123	A1/B1/C1	Device	08-26-2020
DWA-125	ALL	Device	08-12-2020
DWA-126	A1	Device	End of Life
DWA-127	A1	Device	08-12-2020

DWA-130	A1/B1/C1/C2/D1/E1	Device	08-12-2020
DWA-131	A1/B1/C1	Device	08-12-2020
DWA-132	A1	Device	08-12-2020
DWA-133	A1	Device	End of Life
DWA-135	A1	Device	End of Life
DWA-140	Ax~D2	Device	08-31-2020
DWA-142	A1	Device	End of Life
DWA-151	A1	Device	12-31-2018
DWA-160	B2	Device	06-30-2020
DWA-160	A1/A2/B1/C1	Device	End of Life
DWA-162	A1	Device	05-31-2020
DWA-180	A1	Device	08-24-2019
DWA-182	A1	Device	08-12-2020
DWA-510	A1	Device	End of Life
DWA-520	A1	Device	End of Life
DWA-525	A2	Device	End of Life
DWA-525	A1	Device	End of Life
DWA-542	A2	Device	End of Life
DWA-547	A1/A2/A3	Device	08-12-2020
DWA-552	A1/A2/A3	Device	08-12-2020
DWA-556	A1	Device	12-15-2019
DWA-566	A1	Device	End of Life
DWA-610	A1	Device	End of Life
DWA-620	A1	Device	End of Life
DWA-642	A2	Device	End of Life
DWA-643	A1	Device	End of Life
DWA-645	A3	Device	End of Life
DWA-645	A2	Device	End of Life
DWA-652	A3	Device	End of Life
DWA-652	A2	Device	End of Life
DWL-2000AP+A	B1/B2/C1/D1	Device	12-15-2019
DWL-2100AP	A1/A2/A3/A4	Device	06-04-2018
DWL-2130AP	A1	Device	End of Life
DWL-2200AP	A2	Device	End of Life
DWL-2230AP	A2	Device	End of Life
DWL-2700AP	B3	Device	End of Life
DWL-3140AP	A1	Device	End of Life
DWL-3150	A1	Device	End of Life
DWL-3200AP	A1/B1/B2	Device	07-11-2018
DWL-3230AP	A1	Device	End of Life
DWL-3260AP	A1/A2/A3	Device	End of Life
DWL-3500AP	A3	Device	End of Life
DWL-50AT	A1/B1/C1/C2	Device	12-15-2019
DWL-7100AP	A2	Device	End of Life

DWL-7130AP	A2	Device	End of Life
DWL-7200AP	B1	Device	End of Life
DWL-7230AP	A2	Device	End of Life
DWL-7700AP	B3	Device	End of Life
DWL-8200AP	A1/A2/A3/A4/B1/B2	Device	End of Life
DWL-8500AP	A3	Device	End of Life
DWL-AG132	ALL	Device	End of Life
DWL-AG530	ALL	Device	End of Life
DWL-AG660	B3	Device	End of Life
DWL-G122	ALL	Device	01-31-2019
DWL-G132	A3	Device	End of Life
DWL-G510	D1	Device	End of Life
DWL-G510	C2	Device	End of Life
DWL-G520	B4	Device	End of Life
DWL-G520+A	C2	Device	End of Life
DWL-G520M	A3	Device	End of Life
DWL-G550	A2	Device	End of Life
DWL-G630	E2	Device	End of Life
DWL-G650	C4	Device	End of Life
DWL-G650+A	E2	Device	End of Life
DWL-G650M	B3	Device	End of Life
DWL-G680	A2	Device	End of Life
DWL-G700AP	B3	Device	End of Life
DWL-G700AP	B2	Device	End of Life
DWL-G710	ALL	Device	End of Life
DWL-G730AP	B1	Device	End of Life
DWL-G810	ALL	Device	End of Life
DWL-G820	B1	Device	End of Life
DWL-M60AT	A5	Device	End of Life
DWL-M60AT	A4	Device	End of Life
DWL-P1012	A2	Device	End of Life
DWL-P200	1/B2/B3/B4/B5/B6/B	Device	End of Life
DWL-P50	A1/A2/A3/A4	Device	End of Life
DWL-R60AT	A3	Device	End of Life
DWM-151	A1	Device	End of Life
DWM-152	A3	Device	End of Life
DWM-156	A9	Device	03-24-2020
DWM-156	A5	Device	03-24-2020
DWM-156	A6	Device	03-24-2020
DWM-156	A7	Device	03-24-2020
DWM-156	A3	Device	End of Life
DWM-157	A1	Device	End of Life
DWM-158	C1	Device	End of Life
DWM-162R	A1	Device	End of Life



DWM-221	A1	Device	End of Life
DWR-111	A1	Device	04-25-2020
DWR-112	A1	Device	End of Life
DWR-113	B1	Device	12-15-2019
DWR-113	A1	Device	06-30-2019
DWR-117	A1	Device	End of Life
DWR-131	A1	Device	04-01-2018
DWR-161	A1	Device	06-30-2019
DWR-330	A1	Device	06-14-2020
DWR-512	B1	Device	05-03-2020
DWR-530	A1	Device	End of Life
DWR-555	A1	Device	01-28-2020
DWR-712	C1	Device	05-03-2020
DWR-730	B1	Device	12-15-2019
DWR-830	A1	Device	12-15-2019
DWR-921	C1	Device	03-30-2021
DWR-922	A1	Device	06-03-2020
DWR-922	A2	Device	06-01-2020
DWR-922B	B2	Device	05-27-2020
DWR-923	A1	Device	04-01-2018
DWR-923	B1	Device	04-01-2018
DWR-925	A1	Device	06-03-2020
DWR-927/N	A1	Device	02-20-2021
DWR-930	A1	Device	12-15-2019
DWR-932	A1	Device	12-15-2019
DWR-932	B1	Device	12-15-2019
DWR-952	C1	Device	03-30-2021
DWS-1008	A1	Device	End of Life
DWS-3024	A3	Device	End of Life
DWS-3024L	A2	Device	End of Life
DWS-3026	A3	Device	End of Life
DWS-3227P	A1	Device	End of Life
DXE-810S	A1	Device	End of Life
DXE-810T	A1	Device	End of Life
DXN-220	C1	Device	02-13-2019
DXN-221	A1	Device	12-15-2019
DXN-222	A1	Device	12-15-2019
DXN-W224	A1/B1	Device	12-15-2019
DXS-1210-10TS	A1	Device	End of Life
DXS-1210-12SC	A1	Device	End of Life
DXS-1210-12TC	A1	Device	End of Life
DXS-1210-16TC	A1	Device	End of Life
DXS-3227	A1	Device	End of Life
DXS-3227P	A1	Device	End of Life

DXS-3250	A1	Device	End of Life
DXS-3250E	A1	Device	End of Life
DXS-3326GSR	A3	Device	End of Life
DXS-3350SR	A3	Device	End of Life
DXS-3600-16S	A1/A2/B1	Device	End of Life
DXS-3600-32S	A1/A2	Device	End of Life
DXS-3600-FAN-BF	A1	Device	End of Life
DXS-3600-PWR-BF	A1	Device	End of Life
DXS-3600-PWRDC-FB	A1	Device	End of Life
DXS-3600-PWR-FB	A1	Device	End of Life
DXS-PWR300DC	A1	Device	End of Life
EBR-2310	A1/B1/C1	Device	12-15-2019
GO-DSL-N151	U1	Device	06-27-2020
GO-PLK-200	A1/B1	Device	End of Life
GO-RT-AC750	ALL	Device	02-29-2020
GO-RT-N150	A1/B1/C1	Device	02-29-2020
GO-RT-N300	A1	Device	08-31-2020
GO-RTW-N300	A1	Device	04-30-2019
GO-RTW-N300	F1	Device	End of Life
GO-SW-16G	B1	Device	End of Life
GO-SW-16GE	G3/H1	Device	End of Life
GO-SW-24G	B1	Device	End of Life
GO-SW-5G	B1	Device	End of Life
GO-SW-5G	C1	Device	End of Life
GO-SW-5G	D1	Device	End of Life
GO-SW-5GE	B1	Device	End of Life
GO-SW-5GE	C1	Device	End of Life
GO-SW-5GE	C3	Device	End of Life
GO-SW-8G	B1	Device	End of Life
GO-SW-8G	C1	Device	End of Life
GO-SW-8G	C2	Device	End of Life
GO-SW-8G	D1	Device	End of Life
GO-SW-8GE	B1	Device	End of Life
GO-SW-8GE	C1	Device	End of Life
GO-SW-8GE	C3	Device	End of Life
GO-USB-N150	B1	Device	08-31-2020
GO-USB-N150	A1	Device	End of Life
KVM-140	A1	Device	05-30-2020
KVM-440	A1	Device	05-30-2020
KVM-450	A1	Device	05-30-2020
MRT-3000	A1	Device	End of Life
SKY600	ALL	Device	End of Life
SPN-14240P	B1	Device	End of Life
VWR-CV	B1	Device	End of Life



WBR-1310	ALL	Device	End of Life
WBR-2200	A1	Device	06-28-2020
WBR-2300	A1	Device	02-29-2020
WBR-2310	A1/B1	Device	End of Life
WCS-1130	A1	Device	04-17-2018
WDA-1320	A1/A2	Device	End of Life
WDA-2320	A2	Device	End of Life
WNA-1330	A1	Device	End of Life
WNA-2330	A1	Device	End of Life
WUA-1340	A1	Device	End of Life
WUA-2340	A2	Device	End of Life

Product End-of-Life Notice
Cisco public

End-of-Sale and End-of-Life Announcement for the Cisco 220 Series Smart Switches

© 2022 Cisco and/or its affiliates. All rights reserved.

Contents

Overview 3
End-of-life milestones 3
Product part numbers 4
Product migration options 7
For more information 8

© 2022 Cisco and/or its affiliates. All rights reserved.

Overview

EOL14636

Cisco announces the end-of-sale Cisco 220 Series Smart Switches. The last day to order the affected product(s) is July 30, 2022. Customers will continue to receive phone support from the Cisco Small Business Support Center (SBSC) as shown in Table 1 of the EoL bulletin. Table 1 describes the end-of-life milestones, definitions, and dates for the affected product(s). Table 2 lists the product part numbers affected by this announcement. For customers with active product warranties, support will be available as stated in the product warranty terms and conditions.

End-of-life milestones

Table 1. End-of-life milestones and dates for the Cisco 220 Series Smart Switches

Milestone	Definition	Date
End-of-Life Announcement Date	The date the document that announces the end-of-sale and end-of-life of a product is distributed to the general public.	January 29, 2022
End-of-Sale Date: HW	The last date to order the product through Cisco point-of-sale mechanisms. The product is no longer for sale after this date.	July 30, 2022
End of Phone Support: HW	The last date to receive phone support as part of the product warranty. After this date, all phone support services for the product are available with additional charges or support fees. In some cases, support may not be available.	July 30, 2023
Last Ship Date: HW	The last-possible ship date that can be requested of Cisco and/or its contract manufacturers. Actual ship date is dependent on lead time.	October 28, 2022
End of SW Maintenance Releases Date: HW	The last date that Cisco Engineering may release any final software maintenance releases or bug fixes. After this date, Cisco Engineering will no longer develop, repair, maintain, or test the product software.	July 30, 2023
Last Date of Support: HW	The last date to receive applicable service and support for the product as entitled by active service contracts or by warranty terms and conditions. After this date, all support services for the product are unavailable, and the product becomes obsolete**. Warranty duration is based on product ship dates; refer to warranty terms and conditions for details.	July 31, 2027

HW = Hardware OS SW = Operating System Software App. SW = Application Software

While Cisco is committed to the End-of-sale milestone, based on the inventory and supply status, Cisco may need to turn off the orderability for SKUs before the End-of-sale date. Cisco may also keep the orderability on after the End-of-sale date. Customers are encouraged to migrate to the replacement products as soon as possible for better availability and support.

© 2022 Cisco and/or its affiliates. All rights reserved.

Product part numbers

Table 2. Product part numbers affected by this announcement

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SF220-24-K9-CN	SF220-24 24-Port 10/100 Smart Switch	CBS220-24T-4G-CN	CBS220 Smart 24-port GE, 4x1G SFP	-
SF220-24-K9-EU	SF220-24 24-Port 10/100 Smart Switch	CBS220-24T-4G-EU	CBS220 Smart 24-port GE, 4x1G SFP	-
SF220-24-K9-NA	SF220-24 24-Port 10/100 Smart Switch	CBS220-24T-4G-NA	CBS220 Smart 24-port GE, 4x1G SFP	-
SF220-24-K9-UK	SF220-24 24-Port 10/100 Smart Switch	CBS220-24T-4G-UK	CBS220 Smart 24-port GE, 4x1G SFP	-
SF220-24P-K9-CN	SF220-24P 24-Port 10/100 PoE Smart Switch	CBS220-24P-4G-CN	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SF220-24P-K9-EU	SF220-24P 24-Port 10/100 PoE Smart Switch	CBS220-24P-4G-EU	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SF220-24P-K9-NA	SF220-24P 24-Port 10/100 PoE Smart Switch	CBS220-24P-4G-NA	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SF220-24P-K9-UK	SF220-24P 24-Port 10/100 PoE Smart Switch	CBS220-24P-4G-UK	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SF220-48-K9-CN	SF220-48 48-Port 10/100 Smart Switch	CBS220-48T-4G-CN	CBS220 Smart 48-port GE, 4x1G SFP	-
SF220-48-K9-EU	SF220-48 48-Port 10/100 Smart Switch	CBS220-48T-4G-EU	CBS220 Smart 48-port GE, 4x1G SFP	-
SF220-48-K9-NA	SF220-48 48-Port 10/100 Smart Switch	CBS220-48T-4G-NA	CBS220 Smart 48-port GE, 4x1G SFP	-
SF220-48-K9-UK	SF220-48 48-Port 10/100 Smart Switch	CBS220-48T-4G-UK	CBS220 Smart 48-port GE, 4x1G SFP	-
SF220-48P-K9-CN	SF220-48P 48-Port 10/100 PoE Smart Switch	CBS220-48P-4G-CN	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-
SF220-48P-K9-EU	SF220-48P 48-Port 10/100 PoE Smart Switch	CBS220-48P-4G-EU	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-

© 2022 Cisco and/or its affiliates. All rights reserved.

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SF220-48P-K9-NA	SF220-48P 48-Port 10/100 PoE Smart Switch	CBS220-48P-4G-NA	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-
SF220-48P-K9-UK	SF220-48P 48-Port 10/100 PoE Smart Switch	CBS220-48P-4G-UK	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-
SG220-26-K9-AR	SG220-26 26-Port Gigabit Smart Switch	CBS220-24T-4G-AR	CBS220 Smart 24-port GE, 4x1G SFP	-
SG220-26-K9-AU	SG220-26 26-Port Gigabit Smart Switch	CBS220-24T-4G-AU	CBS220 Smart 24-port GE, 4x1G SFP	-
SG220-26-K9-BR	SG220-26 26-Port Gigabit Smart Switch	CBS220-24T-4G-BR	CBS220 Smart 24-port GE, 4x1G SFP	-
SG220-28-K9-CN	SG220-28 28-Port Gigabit Smart Switch	CBS220-24T-4G-CN	CBS220 Smart 24-port GE, 4x1G SFP	-
SG220-26-K9-EU	SG220-26 26-Port Gigabit Smart Switch	CBS220-24T-4G-EU	CBS220 Smart 24-port GE, 4x1G SFP	-
SG220-26-K9-IN	SG220-26 26-Port Gigabit Smart Switch	CBS220-24T-4G-IN	CBS220 Smart 24-port GE, 4x1G SFP	-
SG220-26-K9-NA	SG220-26 26-Port Gigabit Smart Switch	CBS220-24T-4G-NA	CBS220 Smart 24-port GE, 4x1G SFP	-
SG220-26-K9-UK	SG220-26 26-Port Gigabit Smart Switch	CBS220-24T-4G-UK	CBS220 Smart 24-port GE, 4x1G SFP	-
SG220-26P-K9-AR	SG220-26P 26-Port Gigabit PoE Smart Switch	CBS220-24P-4G-AR	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SG220-26P-K9-AU	SG220-26P 26-Port Gigabit PoE Smart Switch	CBS220-24P-4G-AU	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SG220-26P-K9-BR	SG220-26P 26-Port Gigabit PoE Smart Switch	CBS220-24P-4G-BR	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SG220-26P-K9-EU	SG220-26P 26-Port Gigabit PoE Smart Switch	CBS220-24P-4G-EU	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SG220-26P-K9-IN	SG220-26P 26-Port Gigabit PoE Smart Switch	CBS220-24P-4G-IN	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-

© 2022 Cisco and/or its affiliates. All rights reserved.

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SG220-26P-K9-NA	SG220-26P 26-Port Gigabit PoE Smart Switch	CBS220-24P-4G-NA	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SG220-26P-K9-UK	SG220-26P 26-Port Gigabit PoE Smart Switch	CBS220-24P-4G-UK	CBS220 Smart 24-port GE, PoE, 4x1G SFP	-
SG220-28MP-K9-AU	SG220-28MP 28-Port Gigabit PoE Smart Switch	CBS220-24FP-4G-AU	CBS220 Smart 24-port GE, Full PoE, 4x1G SFP	-
SG220-28MP-K9-CN	SG220-28MP 28-Port Gigabit PoE Smart Switch	CBS220-24FP-4G-CN	CBS220 Smart 24-port GE, Full PoE, 4x1G SFP	-
SG220-28MP-K9-EU	SG220-28MP 28-Port Gigabit PoE Smart Switch	CBS220-24FP-4G-EU	CBS220 Smart 24-port GE, Full PoE, 4x1G SFP	-
SG220-28MP-K9-NA	SG220-28MP 28-Port Gigabit PoE Smart Switch	CBS220-24FP-4G-NA	CBS220 Smart 24-port GE, Full PoE, 4x1G SFP	-
SG220-28MP-K9-UK	SG220-28MP 28-Port Gigabit PoE Smart Switch	CBS220-24FP-4G-UK	CBS220 Smart 24-port GE, Full PoE, 4x1G SFP	-
SG220-50-K9-AR	SG220-50 50-Port Gigabit Smart Switch	CBS220-48T-4G-AR	CBS220 Smart 48-port GE, 4x1G SFP	-
SG220-50-K9-AU	SG220-50 50-Port Gigabit Smart Switch	CBS220-48T-4G-AU	CBS220 Smart 48-port GE, 4x1G SFP	-
SG220-50-K9-BR	SG220-50 50-Port Gigabit Smart Switch	CBS220-48T-4G-BR	CBS220 Smart 48-port GE, 4x1G SFP	-
SG220-50-K9-EU	SG220-50 50-Port Gigabit Smart Switch	CBS220-48T-4G-EU	CBS220 Smart 48-port GE, 4x1G SFP	-
SG220-50-K9-IN	SG220-50 50-Port Gigabit Smart Switch	CBS220-48T-4G-IN	CBS220 Smart 48-port GE, 4x1G SFP	-
SG220-50-K9-NA	SG220-50 50-Port Gigabit Smart Switch	CBS220-48T-4G-NA	CBS220 Smart 48-port GE, 4x1G SFP	-
SG220-50-K9-UK	SG220-50 50-Port Gigabit Smart Switch	CBS220-48T-4G-UK	CBS220 Smart 48-port GE, 4x1G SFP	-
SG220-50P-K9-AR	SG220-50P 50-Port Gigabit PoE Smart Switch	CBS220-48P-4G-AR	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-

© 2022 Cisco and/or its affiliates. All rights reserved.

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SG220-50P-K9-AU	SG220-50P 50-Port Gigabit PoE Smart Switch	CBS220-48P-4G-AU	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-
SG220-50P-K9-BR	SG220-50P 50-Port Gigabit PoE Smart Switch	CBS220-48P-4G-BR	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-
SG220-50P-K9-EU	SG220-50P 50-Port Gigabit PoE Smart Switch	CBS220-48P-4G-EU	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-
SG220-50P-K9-IN	SG220-50P 50-Port Gigabit PoE Smart Switch	CBS220-48P-4G-IN	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-
SG220-50P-K9-NA	SG220-50P 50-Port Gigabit PoE Smart Switch	CBS220-48P-4G-NA	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-
SG220-50P-K9-UK	SG220-50P 50-Port Gigabit PoE Smart Switch	CBS220-48P-4G-UK	CBS220 Smart 48-port GE, PoE, 4x1G SFP	-
SG220-52-K9-CN	SG220-52 52-Port Gigabit Smart Switch	CBS220-48T-4G-CN	CBS220 Smart 48-port GE, 4x1G SFP	-

Product migration options

Service prices for Cisco products are subject to change after the product End-of-Sale date.

The Cisco Takeback and Recycle program helps businesses properly dispose of surplus products that have reached their end of useful life. The program is open to all business users of Cisco equipment and its associated brands and subsidiaries. For more information, go to: https://www.cisco.com/web/about/ac227/ac228/ac231/about_cisco_takeback_recycling.html.

© 2022 Cisco and/or its affiliates. All rights reserved.

For more information

For more information about the Cisco End-of-Life Policy, go to: https://www.cisco.com/c/en/us/products/eos-eol-policy.html.

**For more information about the Cisco Product Warranties, go to: https://www.cisco.com/c/en/us/products/warranty-listing.html.

To subscribe to receive end-of-life/end-of-sale information, go to: https://cway.cisco.com/mynotifications.

Any authorized translation issued by Cisco Systems or affiliates of this end-of-life Product Bulletin is intended to help customers understand the content described in the English version. This translation is the result of a commercially reasonable effort; however, if there are discrepancies between the English version and the translated document, please refer to the English version, which is considered authoritative.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **https://www.cisco.com/go/offices**.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: https://www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Printed in USA C51-xxxxxx-xx 01/22

© 2022 Cisco and/or its affiliates. All rights reserved.

Product End-of-Life Notice
Cisco public

End-of-Sale and End-of-Life Announcement for the Cisco SG250, SG250X and SF250 Series Smart Switches (Select Models)

© 2021 Cisco and/or its affiliates. All rights reserved.

Contents

Overview 3
End-of-life milestones 3
Product part numbers 4
Product migration options 9
For more information 10

© 2021 Cisco and/or its affiliates. All rights reserved.

Overview

EOL13835 - Amended

Cisco announces the end-of-sale Cisco SG250, SG250X and SF250 Series Smart Switches (Select Models). The last day to order the affected product(s) is October 30, 2021. Customers will continue to receive phone support from the Cisco Small Business Support Center (SBSC) as shown in Table 1 of the EoL bulletin. Table 1 describes the end-of-life milestones, definitions, and dates for the affected product(s). Table 2 lists the product part numbers affected by this announcement. For customers with active product warranties, support will be available as stated in the product warranty terms and conditions.

End-of-life milestones

Table 1. End-of-life milestones and dates for the Cisco SG250, SG250X and SF250 Series Smart Switches (Select Models)

Milestone	Definition	Date
End-of-Life Announcement Date	The date the document that announces the end-of-sale and end-of-life of a product is distributed to the general public.	April 30, 2021
End-of-Sale Date: HW	The last date to order the product through Cisco point-of-sale mechanisms. The product is no longer for sale after this date.	October 30, 2021
End of Phone Support: HW	The last date to receive phone support as part of the product warranty. After this date, all phone support services for the product are available with additional charges or support fees. In some cases, support may not be available.	October 30, 2022
Last Ship Date: HW	The last-possible ship date that can be requested of Cisco and/or its contract manufacturers. Actual ship date is dependent on lead time.	January 28, 2022
End of SW Maintenance Releases Date: HW	The last date that Cisco Engineering may release any final software maintenance releases or bug fixes. After this date, Cisco Engineering will no longer develop, repair, maintain, or test the product software.	October 30, 2022
Last Date of Support: HW	The last date to receive applicable service and support for the product as entitled by active service contracts or by warranty terms and conditions. After this date, all support services for the product are unavailable, and the product becomes obsolete**. Warranty duration is based on product ship dates; refer to warranty terms and conditions for details.	October 31, 2026

HW = Hardware OS SW = Operating System Software App. SW = Application Software

While Cisco is committed to the End-of-life milestones, based on the actual supply and inventory status, Cisco may need to turn off the orderability for SKUs before the End-of-sale date. Cisco may also keep the orderability on after the End-of-sale date.

© 2021 Cisco and/or its affiliates. All rights reserved.

Product part numbers

Table 2. Product part numbers affected by this announcement

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SF250-24-K9-AR	Cisco SF250-24 24-Port 10/100 Smart Switch	CBS250-24T-4G-AR	CBS250 Smart 24-port GE, 4x1G SFP	-
SF250-24-K9-BR	Cisco SF250-24 24-Port 10/100 Smart Switch	CBS250-24T-4G-BR	CBS250 Smart 24-port GE, 4x1G SFP	-
SF250-24P-K9-AR	Cisco SF250-24P 24-Port 10/100 PoE Smart Switch	CBS250-24P-4G-AR	CBS250 Smart 24-port GE, PoE, 4x1G SFP	-
SF250-24P-K9-AU	Cisco SF250-24P 24-Port 10/100 PoE Smart Switch	CBS250-24P-4G-AU	CBS250 Smart 24-port GE, PoE, 4x1G SFP	-
SF250-24P-K9-BR	Cisco SF250-24P 24-Port 10/100 PoE Smart Switch	CBS250-24P-4G-BR	CBS250 Smart 24-port GE, PoE, 4x1G SFP	-
SF250-48-K9-AR	Cisco SF250-48 48-port 10/100 Switch	CBS250-48T-4G-AR	CBS250 Smart 48-port GE, 4x1G SFP	-
SF250-48HP-K9-AU	Cisco SF250-48HP 48-port 10/100 PoE Switch	CBS250-48P-4G-AU	CBS250 Smart 48-port GE, PoE, 4x1G SFP	-
SG250-10P-K9-AU	Cisco SG250-10P 10-port Gigabit PoE Switch	CBS250-8P-E-2G-AU	CBS250 Smart 8-port GE, PoE, Ext PS, 2x1G Combo	-
SG250-10P-K9-CN	Cisco SG250-10P 10-port Gigabit PoE Switch	CBS350-8P-E-2G-CN	CBS350 Managed 8-port GE, PoE, Ext PS, 2x1G Combo	-
SG250-10P-K9-EU	Cisco SG250-10P 10-port Gigabit PoE Switch	CBS250-8P-E-2G-EU	CBS250 Smart 8-port GE, PoE, Ext PS, 2x1G Combo	-
SG250-10P-K9-IN	Cisco SG250-10P 10-port Gigabit PoE Switch	CBS250-8P-E-2G-IN	CBS250 Smart 8-port GE, PoE, Ext PS, 2x1G Combo	-
SG250-10P-K9-NA	Cisco SG250-10P 10-port Gigabit PoE Switch	CBS250-8P-E-2G-NA	CBS250 Smart 8-port GE, PoE, Ext PS, 2x1G Combo	-
SG250-10P-K9-UK	Cisco SG250-10P 10-port Gigabit PoE Switch	CBS250-8P-E-2G-UK	CBS250 Smart 8-port GE, PoE, Ext PS, 2x1G Combo	-
SG250-18-K9-AU	Cisco SG250-18 18-Port Gigabit Smart Switch	CBS250-16T-2G-AU	CBS250 Smart 16-port GE, 2x1G SFP	-

© 2021 Cisco and/or its affiliates. All rights reserved.

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SG250-18-K9-EU	Cisco SG250-18 18-Port Gigabit Smart Switch	CBS250-16T-2G-EU	CBS250 Smart 16-port GE, 2x1G SFP	-
SG250-18-K9-JP	Cisco SG250-18 18-Port Gigabit Smart Switch	CBS250-16T-2G-JP	CBS250 Smart 16-port GE, 2x1G SFP	-
SG250-18-K9-NA	Cisco SG250-18 18-Port Gigabit Smart Switch	CBS250-16T-2G-NA	CBS250 Smart 16-port GE, 2x1G SFP	-
SG250-18-K9-UK	Cisco SG250-18 18-Port Gigabit Smart Switch	CBS250-16T-2G-UK	CBS250 Smart 16-port GE, 2x1G SFP	-
SG250-26-K9-AR	Cisco SG250-26 26-port Gigabit Switch	CBS250-24T-4G-AR	CBS250 Smart 24-port GE, 4x1G SFP	-
SG250-26-K9-AU	Cisco SG250-26 26-port Gigabit Switch	CBS250-24T-4G-AU	CBS250 Smart 24-port GE, 4x1G SFP	-
SG250-26-K9-BR	Cisco SG250-26 26-port Gigabit Switch	CBS250-24T-4G-BR	CBS250 Smart 24-port GE, 4x1G SFP	-
SG250-26-K9-CN	Cisco SG250-26 26-port Gigabit Switch	CBS350-24T-4G-CN	CBS350 Managed 24-port GE, 4x1G SFP	-
SG250-26-K9-EU	Cisco SG250-26 26-port Gigabit Switch	CBS250-24T-4G-EU	CBS250 Smart 24-port GE, 4x1G SFP	-
SG250-26-K9-IN	Cisco SG250-26 26-port Gigabit Switch	CBS250-24T-4G-IN	CBS250 Smart 24-port GE, 4x1G SFP	-
SG250-26-K9-JP	Cisco SG250-26 26-port Gigabit Switch	CBS250-24T-4G-JP	CBS250 Smart 24-port GE, 4x1G SFP	-
SG250-26-K9-KR	Cisco SG250-26 26-port Gigabit Switch	CBS250-24T-4G-EU	CBS250 Smart 24-port GE, 4x1G SFP	-
SG250-26-K9-NA	Cisco SG250-26 26-port Gigabit Switch	CBS250-24T-4G-NA	CBS250 Smart 24-port GE, 4x1G SFP	-
SG250-26-K9-UK	Cisco SG250-26 26-port Gigabit Switch	CBS250-24T-4G-UK	CBS250 Smart 24-port GE, 4x1G SFP	-
SG250-26HP-K9-AR	Cisco SG250-26HP 26-port Gigabit PoE Switch	CBS250-24PP-4G-AR	CBS250 Smart 24-port GE, Partial PoE, 4x1G SFP	-
SG250-26HP-K9-AU	Cisco SG250-26HP 26-port Gigabit PoE Switch	CBS250-24PP-4G-AU	CBS250 Smart 24-port GE, Partial PoE, 4x1G SFP	-
SG250-26HP-K9-BR	Cisco SG250-26HP 26-port Gigabit PoE Switch	CBS250-24PP-4G-BR	CBS250 Smart 24-port GE, Partial PoE, 4x1G SFP	-

© 2021 Cisco and/or its affiliates. All rights reserved.

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SG250-26HP-K9-EU	Cisco SG250-26HP 26-port Gigabit PoE Switch	CBS250-24PP-4G-EU	CBS250 Smart 24-port GE, Partial PoE, 4x1G SFP	-
SG250-26HP-K9-NA	Cisco SG250-26HP 26-port Gigabit PoE Switch	CBS250-24PP-4G-NA	CBS250 Smart 24-port GE, Partial PoE, 4x1G SFP	-
SG250-26HP-K9-UK	Cisco SG250-26HP 26-port Gigabit PoE Switch	CBS250-24PP-4G-UK	CBS250 Smart 24-port GE, Partial PoE, 4x1G SFP	-
SG250-26P-K9-AU	Cisco SG250-26P 26-port Gigabit PoE Switch	CBS250-24P-4G-AU	CBS250 Smart 24-port GE, PoE, 4x1G SFP	-
SG250-26P-K9-BR	Cisco SG250-26P 26-port Gigabit PoE Switch	CBS250-24P-4G-BR	CBS250 Smart 24-port GE, PoE, 4x1G SFP	-
SG250-26P-K9-EU	Cisco SG250-26P 26-port Gigabit PoE Switch	CBS250-24P-4G-EU	CBS250 Smart 24-port GE, PoE, 4x1G SFP	-
SG250-26P-K9-IN	Cisco SG250-26P 26-port Gigabit PoE Switch	CBS250-24P-4G-IN	CBS250 Smart 24-port GE, PoE, 4x1G SFP	-
SG250-26P-K9-NA	Cisco SG250-26P 26-port Gigabit PoE Switch	CBS250-24P-4G-NA	CBS250 Smart 24-port GE, PoE, 4x1G SFP	-
SG250-26P-K9-UK	Cisco SG250-26P 26-port Gigabit PoE Switch	CBS250-24P-4G-UK	CBS250 Smart 24-port GE, PoE, 4x1G SFP	-
SG250-50-K9-AR	Cisco SG250-50 50-Port Gigabit Smart Switch	CBS250-48T-4G-AR	CBS250 Smart 48-port GE, 4x1G SFP	-
SG250-50-K9-AU	Cisco SG250-50 50-Port Gigabit Smart Switch	CBS250-48T-4G-AU	CBS250 Smart 48-port GE, 4x1G SFP	-
SG250-50-K9-BR	Cisco SG250-50 50-Port Gigabit Smart Switch	CBS250-48T-4G-BR	CBS250 Smart 48-port GE, 4x1G SFP	-
SG250-50-K9-CN	Cisco SG250-50 50-Port Gigabit Smart Switch	CBS350-48T-4G-CN	CBS350 Managed 48-port GE, 4x1G SFP	-
SG250-50-K9-EU	Cisco SG250-50 50-Port Gigabit Smart Switch	CBS250-48T-4G-EU	CBS250 Smart 48-port GE, 4x1G SFP	-
SG250-50-K9-IN	Cisco SG250-50 50-Port Gigabit Smart Switch	CBS250-48T-4G-IN	CBS250 Smart 48-port GE, 4x1G SFP	-

© 2021 Cisco and/or its affiliates. All rights reserved.

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SG250-50-K9-JP	Cisco SG250-50 50-Port Gigabit Smart Switch	CBS250-48T-4G-JP	CBS250 Smart 48-port GE, 4x1G SFP	-
SG250-50-K9-NA	Cisco SG250-50 50-Port Gigabit Smart Switch	CBS250-48T-4G-NA	CBS250 Smart 48-port GE, 4x1G SFP	-
SG250-50-K9-UK	Cisco SG250-50 50-Port Gigabit Smart Switch	CBS250-48T-4G-UK	CBS250 Smart 48-port GE, 4x1G SFP	-
SG250-50HP-K9-AU	Cisco SG250-50HP 50-Port Gigabit PoE Smart Switch	CBS250-48PP-4G-AU	CBS250 Smart 48-port GE, Partial PoE, 4x1G SFP	-
SG250-50HP-K9-EU	Cisco SG250-50HP 50-Port Gigabit PoE Smart Switch	CBS250-48PP-4G-EU	CBS250 Smart 48-port GE, Partial PoE, 4x1G SFP	-
SG250-50HP-K9-NA	Cisco SG250-50HP 50-Port Gigabit PoE Smart Switch	CBS250-48PP-4G-NA	CBS250 Smart 48-port GE, Partial PoE, 4x1G SFP	-
SG250-50HP-K9-UK	Cisco SG250-50HP 50-Port Gigabit PoE Smart Switch	CBS250-48PP-4G-UK	CBS250 Smart 48-port GE, Partial PoE, 4x1G SFP	-
SG250-50P-K9-AU	Cisco SG250-50P 50-Port Gigabit PoE Smart Switch	CBS250-48P-4G-AU	CBS250 Smart 48-port GE, PoE, 4x1G SFP	-
SG250-50P-K9-BR	Cisco SG250-50P 50-Port Gigabit PoE Smart Switch	CBS250-48P-4G-BR	CBS250 Smart 48-port GE, PoE, 4x1G SFP	-
SG250-50P-K9-EU	Cisco SG250-50P 50-Port Gigabit PoE Smart Switch	CBS250-48P-4G-EU	CBS250 Smart 48-port GE, PoE, 4x1G SFP	-
SG250-50P-K9-IN	Cisco SG250-50P 50-Port Gigabit PoE Smart Switch	CBS250-48P-4G-IN	CBS250 Smart 48-port GE, PoE, 4x1G SFP	-
SG250-50P-K9-NA	Cisco SG250-50P 50-Port Gigabit PoE Smart Switch	CBS250-48P-4G-NA	CBS250 Smart 48-port GE, PoE, 4x1G SFP	-
SG250-50P-K9-UK	Cisco SG250-50P 50-Port Gigabit PoE Smart Switch	CBS250-48P-4G-UK	CBS250 Smart 48-port GE, PoE, 4x1G SFP	-
SG250X-24-K9-AR	SG250X-24 24-Port Gigabit Smart Switch with 10G Uplinks	CBS250-24T-4X-AR	CBS250 Smart 24-port GE, 4x10G SFP+	-
SG250X-24-K9-AU	SG250X-24 24-Port Gigabit Smart Switch with 10G Uplinks	CBS250-24T-4X-AU	CBS250 Smart 24-port GE, 4x10G SFP+	-

© 2021 Cisco and/or its affiliates. All rights reserved.

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SG250X-24-K9-BR	SG250X-24 24-Port Gigabit Smart Switch with 10G Uplinks	CBS250-24T-4X-BR	CBS250 Smart 24-port GE, 4x10G SFP+	-
SG250X-24-K9-EU	SG250X-24 24-Port Gigabit Smart Switch with 10G Uplinks	CBS250-24T-4X-EU	CBS250 Smart 24-port GE, 4x10G SFP+	-
SG250X-24-K9-JP	SG250X-24 24-Port Gigabit Smart Switch with 10G Uplinks	CBS250-24T-4X-JP	CBS250 Smart 24-port GE, 4x10G SFP+	-
SG250X-24-K9-NA	SG250X-24 24-Port Gigabit Smart Switch with 10G Uplinks	CBS250-24T-4X-NA	CBS250 Smart 24-port GE, 4x10G SFP+	-
SG250X-24-K9-UK	SG250X-24 24-Port Gigabit Smart Switch with 10G Uplinks	CBS250-24T-4X-UK	CBS250 Smart 24-port GE, 4x10G SFP+	-
SG250X-24P-K9-AU	SG250X-24P 24-Port Gigabit PoE Smart Switch with 10G Uplinks	CBS250-24P-4X-AU	CBS250 Smart 24-port GE, PoE, 4x10G SFP+	-
SG250X-24P-K9-BR	SG250X-24P 24-Port Gigabit PoE Smart Switch with 10G Uplinks	CBS250-24P-4X-BR	CBS250 Smart 24-port GE, PoE, 4x10G SFP+	-
SG250X-24P-K9-EU	SG250X-24P 24-Port Gigabit PoE Smart Switch with 10G Uplinks	CBS250-24P-4X-EU	CBS250 Smart 24-port GE, PoE, 4x10G SFP+	-
SG250X-24P-K9-NA	SG250X-24P 24-Port Gigabit PoE Smart Switch with 10G Uplinks	CBS250-24P-4X-NA	CBS250 Smart 24-port GE, PoE, 4x10G SFP+	-
SG250X-24P-K9-UK	SG250X-24P 24-Port Gigabit PoE Smart Switch with 10G Uplinks	CBS250-24P-4X-UK	CBS250 Smart 24-port GE, PoE, 4x10G SFP+	-
SG250X-48-K9-AR	SG250X-48 48-Port Gigabit Smart Switch with 10G Uplinks	CBS250-48T-4X-AR	CBS250 Smart 48-port GE, 4x10G SFP+	-
SG250X-48-K9-AU	SG250X-48 48-Port Gigabit Smart Switch with 10G Uplinks	CBS250-48T-4X-AU	CBS250 Smart 48-port GE, 4x10G SFP+	-
SG250X-48-K9-BR	SG250X-48 48-Port Gigabit Smart Switch with 10G Uplinks	CBS250-48T-4X-BR	CBS250 Smart 48-port GE, 4x10G SFP+	-

© 2021 Cisco and/or its affiliates. All rights reserved.

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
SG250X-48-K9-EU	SG250X-48 48-Port Gigabit Smart Switch with 10G Uplinks	CBS250-48T-4X-EU	CBS250 Smart 48-port GE, 4x10G SFP+	-
SG250X-48-K9-JP	SG250X-48 48-Port Gigabit Smart Switch with 10G Uplinks	CBS250-48T-4X-JP	CBS250 Smart 48-port GE, 4x10G SFP+	-
SG250X-48-K9-NA	SG250X-48 48-Port Gigabit Smart Switch with 10G Uplinks	CBS250-48T-4X-NA	CBS250 Smart 48-port GE, 4x10G SFP+	-
SG250X-48-K9-UK	SG250X-48 48-Port Gigabit Smart Switch with 10G Uplinks	CBS250-48T-4X-UK	CBS250 Smart 48-port GE, 4x10G SFP+	-
SG250X-48P-K9-AU	SG250X-48P 48-Port Gigabit PoE Smart Switch with 10G Uplinks	CBS250-48P-4X-AU	CBS250 Smart 48-port GE, PoE, 4x10G SFP+	-
SG250X-48P-K9-EU	SG250X-48P 48-Port Gigabit PoE Smart Switch with 10G Uplinks	CBS250-48P-4X-EU	CBS250 Smart 48-port GE, PoE, 4x10G SFP+	-
SG250X-48P-K9-NA	SG250X-48P 48-Port Gigabit PoE Smart Switch with 10G Uplinks	CBS250-48P-4X-NA	CBS250 Smart 48-port GE, PoE, 4x10G SFP+	-
SG250X-48P-K9-UK	SG250X-48P 48-Port Gigabit PoE Smart Switch with 10G Uplinks	CBS250-48P-4X-UK	CBS250 Smart 48-port GE, PoE, 4x10G SFP+	-

Product migration options

Service prices for Cisco products are subject to change after the product End-of-Sale date.

The Cisco Takeback and Recycle program helps businesses properly dispose of surplus products that have reached their end of useful life. The program is open to all business users of Cisco equipment and its associated brands and subsidiaries. For more information, go to: https://www.cisco.com/web/about/ac227/ac228/ac231/about_cisco_takeback_recycling.html.

© 2021 Cisco and/or its affiliates. All rights reserved.

For more information

For more information about the Cisco End-of-Life Policy, go to: https://www.cisco.com/c/en/us/products/eos-eol-policy.html.

**For more information about the Cisco Product Warranties, go to: https://www.cisco.com/c/en/us/products/warranty-listing.html.

To subscribe to receive end-of-life/end-of-sale information, go to: https://cway.cisco.com/mynotifications.

Any authorized translation issued by Cisco Systems or affiliates of this end-of-life Product Bulletin is intended to help customers understand the content described in the English version. This translation is the result of a commercially reasonable effort; however, if there are discrepancies between the English version and the translated document, please refer to the English version, which is considered authoritative.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **https://www.cisco.com/go/offices**.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: https://www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Printed in USA C51-2440268-01 10/21

© 2021 Cisco and/or its affiliates. All rights reserved.

Product End-of-Life Notice

End-of-Sale and End-of-Life Announcement for the Cisco Catalyst 2960 Series Switches

EOL9449 - Amended

Cisco announces the end-of-sale and end-of-life dates for the Cisco Catalyst 2960 Series Switches. The last day to order the affected product(s) is October 31, 2014. Customers with active service contracts will continue to receive support from the Cisco Technical Assistance Center (TAC) as shown in Table 1 of the EoL bulletin. Table 1 describes the end-of-life milestones, definitions, and dates for the affected product(s). Table 2 lists the product part numbers affected by this announcement. For customers with active and paid service and support contracts, support will be available under the terms and conditions of customers' service contract.

Table 1. End-of-Life Milestones and Dates for the Cisco Catalyst 2960 Series Switches

Milestone	Definition	Date
End-of-Life Announcement Date	The date the document that announces the end-of-sale and end-of-life of a product is distributed to the general public.	October 31, 2013
End-of-Sale Date	The last date to order the product through Cisco point-of-sale mechanisms. The product is no longer for sale after this date.	October 31, 2014
Last Ship Date: HW	The last-possible ship date that can be requested of Cisco and/or its contract manufacturers. Actual ship date is dependent on lead time.	January 29, 2015
End of SW Maintenance Releases Date: HW	The last date that Cisco Engineering may release any final software maintenance releases or bug fixes. After this date, Cisco Engineering will no longer develop, repair, maintain, or test the product software.	October 31, 2015
End of Vulnerability/Security Support: HW	The last date that Cisco Engineering may release a planned maintenance release or scheduled software remedy for a security vulnerability issue.	October 30, 2017
End of Routine Failure Analysis Date: HW	The last-possible date a routine failure analysis may be performed to determine the cause of hardware product failure or defect.	October 31, 2015
End of New Service Attachment Date: HW	For equipment and software that is not covered by a service-and-support contract, this is the last date to order a new service-and-support contract or add the equipment and/or software to an existing service-and-support contract.	October 31, 2015
End of Service Contract Renewal Date: HW	The last date to extend or renew a service contract for the product.	January 29, 2019
Last Date of Support: HW	The last date to receive applicable service and support for the product as entitled by active service contracts or by warranty terms and conditions. After this date, all support services for the product are unavailable, and the product becomes obsolete.	October 31, 2019

HW = Hardware OS SW = Operating System Software App. SW = Application Software

© 2013 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

Table 2. Product Part Numbers Affected by This Announcement

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
WS-C2960-24-S	Catalyst 2960 24 10/100 LAN Lite Image	WS-C2960+24TC-S	Catalyst 2960 Plus 24 10/100 + 2 T/SFP LAN Lite	-
WS-C2960-24LC-S	Catalyst 2960 24 10/100 (8 PoE) + 2 T/SFP LAN Lite Image	WS-C2960+24LC-S	Catalyst 2960 Plus 24 10/100 (8 PoE) + 2 T/SFP LAN Lite	-
WS-C2960-24LT-L	Catalyst 2960 24 10/100 (8 PoE)+ 2 1000BT LAN Base Image	WS-C2960+24LC-L	Catalyst 2960 Plus 24 10/100 (8 PoE) + 2 T/SFP LAN Base	-
WS-C2960-24PC-L	Catalyst 2960 24 10/100 PoE + 2 T/SFP LAN Base Image	WS-C2960+24PC-L	Catalyst 2960 Plus 24 10/100 PoE + 2 T/SFP LAN Base	-
WS-C2960-24PC-S	Catalyst 2960 24 10/100 PoE + 2 T/SFP LAN Lite Image	WS-C2960+24PC-S	Catalyst 2960 Plus 24 10/100 PoE + 2 T/SFP LAN Lite	-
WS-C2960-24TC-L	Catalyst 2960 24 10/100 + 2T/SFP LAN Base Image	WS-C2960+24TC-L	Catalyst 2960 Plus 24 10/100 + 2T/SFP LAN Base	-
WS-C2960-24TC-S	Catalyst 2960 24 10/100 + 2 T/SFP LAN Lite Image	WS-C2960+24TC-S	Catalyst 2960 Plus 24 10/100 + 2 T/SFP LAN Lite	-
WS-C2960-24TT-L	Catalyst 2960 24 10/100 + 2 1000BT LAN Base Image	WS-C2960+24TC-L	Catalyst 2960 Plus 24 10/100 + 2T/SFP LAN Base	-
WS-C2960-48PST-L	Catalyst 2960 48 10/100 PoE + 2 1000BT +2 SFP LAN Base Image	WS-C2960+48PST-L	Catalyst 2960 Plus 48 10/100 PoE + 2 1000BT +2 SFP LAN Base	-
WS-C2960-48PST-S	Catalyst 2960 48 10/100 PoE + 2 1000BT +2 SFP LAN Lite Image	WS-C2960+48PST-S	Catalyst 2960 Plus 48 10/100 PoE + 2 1000BT +2 SFP LAN Lite	-
WS-C2960-48TC-L	Catalyst 2960 48 10/100 + 2 T/SFP LAN Base Image	WS-C2960+48TC-L	Catalyst 2960 Plus 48 10/100 + 2 T/SFP LAN Base	-
WS-C2960-48TC-S	Catalyst 2960 48 10/100 + 2 T/SFP LAN Lite Image	WS-C2960+48TC-S	Catalyst 2960 Plus 48 10/100 + 2 T/SFP LAN Lite	-
WS-C2960-48TT-L	Catalyst 2960 48 10/100 + 2 1000BT LAN Base Image	WS-C2960+48TC-L	Catalyst 2960 Plus 48 10/100 + 2 T/SFP LAN Base	-
WS-C2960-48TT-S	Catalyst 2960 48 10/100 + 2 1000BT LAN Lite Image	WS-C2960+48TC-S	Catalyst 2960 Plus 48 10/100 + 2 T/SFP LAN Lite	-

Product Migration Options

Customers are encouraged to migrate to the Cisco Catalyst 2960-Plus Series Switches. Information about this product can be found at: http://www.cisco.com/en/US/products/ps13024/index.html.

Customers may be able to use the Cisco Technology Migration Program (TMP) where applicable to trade-in eligible products and receive credit toward the purchase of new Cisco equipment. For more information about Cisco TMP, customers should work with their Cisco Partner or Cisco account team. Cisco Partners can find additional TMP information on Partner Central at http://www.cisco.com/web/partners/incentives_and_promotions/tmp.html.

Customers may be able to continue to purchase Cisco Catalyst 2960 Series Switches through the Cisco Certified Refurbished Equipment program. Refurbished units may be available in limited supply for sale in certain countries

© 2013 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

on a first-come, first-served basis until the Last Date of Support has been reached. For information about the Cisco Certified Refurbished Equipment program, go to: http://www.cisco.com/go/eos.

Service prices for Cisco products are subject to change after the product End-of-Sale date.

The Cisco Takeback and Recycle program helps businesses dispose properly of surplus products that have reached their end of useful life. The program is open to all business users of Cisco equipment and its associated brands and subsidiaries. For more information, go to: http://www.cisco.com/web/about/ac227/ac228/ac231/about_cisco_takeback_recycling.html.

For More Information

For more information about the Cisco Catalyst 2960-Plus Series Switches, visit http://www.cisco.com/en/US/products/ps13024/index.html, or contact your local account representative.

To request information about the Cisco Catalyst 2960-Plus Series Switches, send an e-mail to 2960-plus@cisco.com.

For more information about the Cisco End-of-Life Policy, go to: http://www.cisco.com/en/US/products/products_end-of-life_policy.html.

For more information about the Cisco Product Warranties, go to: http://www.cisco.com/en/US/products/prod_warranties_listing.html.

To subscribe to receive end-of-life/end-of-sale information, go to: http://www.cisco.com/cisco/support/notifications.html.

Subscribe for RSS Notifications for End-of-Life and End-of-Sale Notices

To subscribe to the End-of-Life and End-of-Sale RSS Feed, insert the following URL into your RSS application: http://www.cisco.com/web/feeds/products/end_of_life_rss.xml.

Any authorized translation issued by Cisco Systems or affiliates of this end-of-life Product Bulletin is intended to help customers understand the content described in the English version. This translation is the result of a commercially reasonable effort; however, if there are discrepancies between the English version and the translated document, please refer to the English version, which is considered authoritative.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Printed in USA C51-730121-01 11/13

© 2013 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

End-of-Sale and End-of-Life Announcement for the Cisco Catalyst C2960C switches

© 2023 Cisco and/or its affiliates. All rights reserved.

Contents

Overview 3
End-of-life milestones 3
Product part numbers 4
Product migration options 5
For more information 5

© 2023 Cisco and/or its affiliates. All rights reserved.

Overview

EOL13189 - Amended

Cisco announces the end-of-sale and end-of-life dates for the Cisco Catalyst C2960C switches. The last day to order the affected product(s) is October 30, 2020. Customers with active service contracts will continue to receive support from the Cisco Technical Assistance Center (TAC) as shown in Table 1 of the EoL bulletin. Table 1 describes the end-of-life milestones, definitions, and dates for the affected product(s). Table 2 lists the product part numbers affected by this announcement. For customers with active and paid service and support contracts, support will be available under the terms and conditions of customers' service contract.

End-of-life milestones

Table 1. End-of-life milestones and dates for the Cisco Catalyst C2960C switches

Milestone	Definition	Date
End-of-Life Announcement Date	The date the document that announces the end-of-sale and end-of-life of a product is distributed to the general public.	October 31, 2019
End-of-Sale Date: HW	The last date to order the product through Cisco point-of-sale mechanisms. The product is no longer for sale after this date.	October 30, 2020
Last Ship Date: HW	The last-possible ship date that can be requested of Cisco and/or its contract manufacturers. Actual ship date is dependent on lead time.	January 29, 2021
End of SW Maintenance Releases Date: HW	The last date that Cisco Engineering may release any final software maintenance releases or bug fixes. After this date, Cisco Engineering will no longer develop, repair, maintain, or test the product software.	October 30, 2021
End of Vulnerability/Security Support: HW	The last date that Cisco Engineering may release a planned maintenance release or scheduled software remedy for a security vulnerability issue.	October 31, 2025
End of Routine Failure Analysis Date: HW	The last-possible date a routine failure analysis may be performed to determine the cause of hardware product failure or defect.	October 30, 2021
End of New Service Attachment Date: HW	For equipment and software that is not covered by a service-and-support contract, this is the last date to order a new service-and-support contract or add the equipment and/or software to an existing service-and-support contract.	October 30, 2021
End of Service Contract Renewal Date: HW	The last date to extend or renew a service contract for the product.	January 28, 2025

© 2023 Cisco and/or its affiliates. All rights reserved.

Milestone	Definition	Date
Last Date of Support: HW	The last date to receive applicable service and support for the product as entitled by active service contracts or by warranty terms and conditions. After this date, all support services for the product are unavailable, and the product becomes obsolete.	October 31, 2025

HW = Hardware OS SW = Operating System Software App. SW = Application Software

Product part numbers

Table 2. Product part numbers affected by this announcement

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
WS-C2960C-12PC-L	Catalyst 2960C Switch 12 FE PoE, 2 x Dual Uplink, Lan Base	WS-C2960L-16PS-LL	^Catalyst 2960L 16 port GigE with PoE, 2 x 1G SFP, LAN Lite	-
WS-C2960C-8PC-L	Catalyst 2960C Switch 8 FE PoE, 2 x Dual Uplink, Lan Base	WS-C2960CX-8PC-L	Cisco Catalyst 2960-CX 8 Port PoE, LAN Base	-
WS-C2960C-8PC-L	Catalyst 2960C Switch 8 FE PoE, 2 x Dual Uplink, Lan Base	WS-C2960L-8PS-LL	^Catalyst 2960L 8 port GigE with PoE, 2 x 1G SFP, LAN Lite	-
WS-C2960C-8TC-L	Catalyst 2960C Switch 8 FE, 2 x Dual Uplink, Lan Base	WS-C2960CX-8TC-L	Cisco Catalyst 2960-CX 8 Port Data Lan Base	-
WS-C2960C-8TC-L	Catalyst 2960C Switch 8 FE, 2 x Dual Uplink, Lan Base	WS-C2960L-8TS-LL	^Catalyst 2960L 8 port GigE, 2 x 1G SFP, LAN Lite	-
WS-C2960C-8TC-S	Catalyst 2960C Switch 8 FE, 2 x Dual Uplink, Lan Lite	WS-C2960L-8TS-LL	^Catalyst 2960L 8 port GigE, 2 x 1G SFP, LAN Lite	-
WS-C2960CPD-8PT-L	Catalyst 2960C PD PSE Switch 8 FE PoE, 2 x 1G, PoE+ LAN Base	WS-C3560CX-8PT-S	Cisco Catalyst 3560-CX PD PSE 8 Port PoE, 1G Uplinks IP Base	-
WS-C2960CPD-8TT-L	Catalyst 2960C PD Switch 8 FE, 2 x 1G, PoE+ LAN Base	WS-C3560CX-8PT-S	Cisco Catalyst 3560-CX PD PSE 8 Port PoE, 1G Uplinks IP Base	-

© 2023 Cisco and/or its affiliates. All rights reserved.

Product migration options

Customers may be able to use the Cisco Technology Migration Program (TMP) where applicable to trade-in eligible products and receive credit toward the purchase of new Cisco equipment. For more information about Cisco TMP, customers should work with their Cisco Partner or Cisco account team. Cisco Partners can find additional TMP information on Partner Central at: https://www.cisco.com/web/partners/incentives_and_promotions/tmp.html.

Customers may be able to continue to purchase the Cisco Catalyst C2960C switches through the Cisco Certified Refurbished Equipment program. Refurbished units may be available in limited supply for sale in certain countries on a first-come, first-served basis until the Last Date of Support has been reached. For information about the Cisco Certified Refurbished Equipment program, go to: https://www.cisco.com/go/eos.

Service prices for Cisco products are subject to change after the product End-of-Sale date.

The Cisco Takeback and Recycle program helps businesses properly dispose of surplus products that have reached their end of useful life. The program is open to all business users of Cisco equipment and its associated brands and subsidiaries. For more information, go to: https://www.cisco.com/web/about/ac227/ac228/ac231/about_cisco_takeback_recycling.html.

For more information

For more information about the Cisco End-of-Life Policy, go to: https://www.cisco.com/c/en/us/products/eos-eol-policy.html.

For more information about the Cisco Product Warranties, go to: https://www.cisco.com/c/en/us/products/warranty-listing.html.

To subscribe to receive end-of-life/end-of-sale information, go to: https://cway.cisco.com/mynotifications.

Any authorized translation issued by Cisco Systems or affiliates of this end-of-life Product Bulletin is intended to help customers understand the content described in the English version. This translation is the result of a commercially reasonable effort; however, if there are discrepancies between the English version and the translated document, please refer to the English version, which is considered authoritative.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **https://www.cisco.com/go/offices**.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: https://www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Printed in USA C51-743071-01 03/23

© 2023 Cisco and/or its affiliates. All rights reserved.

SHINKAWA

SHINKAWA Electric Co., Ltd.
Shinkojimachi Building 3F, 4-3-3 Koji-machi, Chiyoda-ku, Tokyo 102-0083 Japan
TEL +81-3-3263-4417 FAX +81-3-3262-2171

9 Dec. 2019

To whom it may concern;

Release: VK Parts Alart

Dear Valued Partners,

Please be informed that as of 9 Dec. 2019, we have used up all the VK parts kept in stock for overseas customers, and regret tell you that we have **no longer able to take any more VK orders** as from now on.

VK means VK transducer system parts including RS, RW, RD, VL, VW and VK.

Please make sure to switch completely to FK series as there are no more exceptions for any customers any more.

If you have any questions, please let us know.

Thank you.

R. Toshimitsu

SHINKAWA ELECTRIC CO., LTD.

Sensor Technology Department,
Shinkawa Electric Co., Ltd.

ANNEXURE P/27 (COLLY.)

BEFORE THE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH
NEW DELHI

APPEAL NO.12 (THC) OF 2013
AND
OA No.17(THC) of 2013
AND
OA No.32 (THC) of 2013
IN
MARKET WELFARE ASSOCIATION VS. DISTRICT MAGISTRATE & ORS.

AND

FASHION MARKET WELFARE ASSOCIATION Vs. DISTRICT MAGISTRATE SAS NAGAR & ORS.

AND

SADHU SINGH & ORS. VERSUS CHIEF ADMINISTRATOR & ORS.

INDEX

N. DOH. 12-3-15

S. NO.	PARTICULARS	PAGE NO.
1.	FINAL GUIDELINES FOR IN-USE GENERATOR SETS ON BEHALF OF THE CENTRAL POLLUTION CONTROL BOARD, PARIVESH BHAWAN, CBD CUM OFFICE COMPLEX, EAST ARJUN NAGAR, DELHI – 110032.	251 – 256

S S Bala

(S.S.Bala)
Scientist 'E'

Delhi
February 25th, 2015

NATIONAL GREEN TRIBUNAL
NEW DELHI
Dy No.: 905/2015

Guidelines for in-use Generator sets

(Noise and Emissions)

IN-USE GENSETS: Guidelines for Noise and Emission Control

Consequent upon recognizing a fact that genset is a source of air and noise pollution in urban India, the emission standards for petrol & kerosene gensets (up to 19 kilowatt) were notified on 5th October, 1999 which have been subsequently revisited and revised on 07.08.2013. The noise limits for petrol & kerosene genset are in place since 25.09.2000. Similarly, emission standards for diesel gensets (up to 800 kilowatt) were notified on 17.05.2002 which have been revisited and revised on 11.12.2013. The noise limits for diesel gensets are in place since 17.05.2002. These norms are enforced, at manufacturing stage, through notified institutes/laboratories, wherein Central Pollution Control Board functions as nodal agency. Emission norms for diesel gensets (above 800 kilowatt) have been separately notified on 11.07.2002 and being implemented. The standards are likely to be notified shortly for natural gas/LPG run gensets or diesel/petrol & natural gas/LPG gensets.

In the matter of Appeal no. 12(THC) of 2013: Market Welfare Association Vs. District Magistrate & Ors; O.A. No. 17(THC) of 2013: Fashion Market Welfare Association Vs. District Magistrate & Ors, SAS Nagar & Ors; and O.A. No. 32(THC) of 2013: Sadhu Singh & Ors. Vs. The Chief Administrator & Ors., Hon'ble National Green Tribunal (PB) has directed CPCB to prepare guidelines for compliance monitoring and measures to be taken for controlling the pollution by in-use gensets. The Hon'ble Tribunal specifically desired to know life time of locally manufactured gensets and diesel gensets used for agriculture purpose in addition to possibility of checking emission standards as done in vehicles. As a matter of fact, every engine is subjected to wear and tear, which leads to deterioration in its performance i.e. higher noise levels and emission. Generally public complaints are received for gensets having capacity less than 60 kilowatt or so, installed at market places or in residential areas. In the instant care, the Market Welfare Associations of Mohali have installed diesel gensets for their members and power so generated, being used by the shop keepers in case of power failure.

The Punjab Pollution Control Board (PPCB) prescribed emission limits to these Market Welfare Associations for gensets while in-use which is not envisaged in the Environment (Protection) Rules, 1986. These associations have provided stacks of appropriate height to channelize smoke/emission as reported. The associations were not able to comply with the said stipulations for emission prescribed by PPCB. Market associations raised the issue before Hon'ble Punjab and Haryana High Court. The cases were transferred to the National Green Tribunal by the Hon'ble High Court in 2013. Union of India (UOI) through this Ministry was impleaded as one of the respondents, at a later stage.

The concept of monitoring of a genset during its use is a copy of concept of PUC certificate, for (in-use) vehicles, as applicable. Vehicle can be taken to PUC certificate booth or booth/van can be parked on road side for testing of a vehicle but, testing machines cannot be lifted to basement(s) or top floor(s) for monitoring where generators are installed. Each genset manufactured after May 2005 would be complying with emission and noise norms, at manufacturing stage, as per prevalent notified standards. The issue of noise standards for in-use gensets i.e. standards/guidelines to control noise problem has reportedly been discussed in 21st meeting of the 'National Committee on Noise Pollution Control' held on 26.09.2014 in the Central Pollution Control Board.

NGT vide its order on 24.10.2013 asked the Member Secretary, PPCB for a meeting with CPCB and Ministry to finalize the policy as to how best can the DG set be subject to emission standards without asking for providing porthole, monitoring platform Etc. First meeting of officials of CPCB, PPCB and the MoEF&CC was held in the Ministry in the Chamber of Dr. Rashid Hasan, Advisor on 07.11.2013 and second meeting in the office of Member Secretary, CPCB on 15.01.2014 in the matter. CPCB organized a meeting of officials of CPCB, SPCB and MoEF&CC on 01.09.2014. A draft guidelines has been developed. Another meeting has been organized on 23.01.2015 in the Ministry in the matter.

Member Secretary, CPCB appeared personally on 21.04.2014 in the matter and submitted before NGT that CPCB would be able to evolve appropriate methodology for checking the emission of DG sets. NGT directed that on receipt of such report or recommendations from CPCB, MoEF&CC would take official view of the matter. CPCB undertook emission monitoring of a few in-use gensets and submitted the report to Hon'ble NGT (PB), New Delhi on 22.05.2014.

On suggestion of the Ministry, the draft guidelines have been circulated by CPCB among various State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) for inputs. A few SPCBs/PCCs have provided their comments in the matter. Some of them are not is agreement to the recommendations of 'National Committee on Noise Pollution Control' in respect of noise limits. Issues have been decided. Following guidelines for installation of gensets, Do's & don't for Operation & Maintenance, Common facility for power back up; active life of Gensets, and Phasing out of Gensets are suggested.

1. Installation of Gensets

i. Gensets be installed with stand alone or isolated foundation with proper anti-vibration packing/pad, etc;

ii. Smoke of a gensets be channelized/emitted in a manner that it is not a nuisance in the neighbourhood;

iii. Genset be installed in the basement, roof top, ground floor, front/back offset of the premises/building, in, in order of priority. However, due care be taken so that it is not a nuisance in the neighbourhood; and

iv. The developer for new market/malls, high rise building or a gated green field colony shall necessarily install a source of standby power back up and installation of genset by individuals be prohibited. Developer shall necessarily install a system to harvest solar or wind energy, as applicable as a source of electricity apart from solar geysers.

2. Phasing out old Generator sets

Phasing out of old generators as per following schedule may be enforced by concerned SPCB/PCC, area SDM and Police.

i. Any generator set having engines not engraved with manufacturer's name and date of manufacturing not to be allowed to operate on or after 01.06.2015;

ii. Any diesel generator set without certified acoustic enclosure as per GSR 371(E), dated 17th May 2002 not to be allowed to operate on or after 01.06.2015; and

iii. Generator sets manufactured on or after 17th May 2002 be scrapped and dismantled after its useful life, i.e., 15 years from the date of manufacturing or 50,000 hours of operation, which ever earlier.

3. Phasing out age old Diesel Gensets for agricultural applications

Gensets being operated for agricultural applications are away from habitation. The phasing out of diesel gensets may be undertaking as per the following:

i. Any genset being used for agriculture purpose, having engines not engraved with manufacturer's name and date of manufacturing not to be allowed to operate after 01.06.2016;

ii. Any diesel generator set without certified acoustic enclosure as per GSR 371(E), dated 17th May 2002 not to be allowed to operate on or after 01.06.2016; and

iii. All gensets manufactured on or after 17th May 2002 be discarded after its useful life i.e., 16 years from the date of manufacturing or 60,000 hours of operation, whichever earlier.

4. Maintenance of Diesel Gensets.

It is the responsibility of genset owner to maintain the genset. Proper maintenance as per following can reduce the pollution level and increase the Genset life.

i. Do 's

- Inspect the pre cleaner for dirt /dust accumulation and it may be cleaned once in a week;
- Check vacuum indicator for red band and clean the outer element only by compressed air, with pressure not more than 60 psi, if required;
- Drain the water and sediment from water separator and fuel tank before starting;
- Maintain coolant condition as per specifications;
- Check lube-oil pressure every morning after starting;
- Check engine log book of previous shift and reset the engine, if required;
- Clean the engine externally every day;
- Check any leakage of engine oil, coolant and fuel before start up and top up the engine oil, if required;
- Prime the engine before starting;
- Check battery condition and electrical connection before starting as per O&M manual;
- Start the engine and operate it without load/idle idle for 2-3 minutes for any leakage or abnormal sound. Do corrections, if necessary;
- Start the engine on electrical mode and check for proper functioning of safety controls;
- Idle the engine for three minutes before shut off;
- Carry out recommended schedule maintenance checks; and
- Use genuine parts while replacing them during break down or preventive maintenance.

Don 't

- Operate the engine with choked or ruptured air cleaner element;
- Operate the engine with vacuum indicator removed;
- Remove inner element for cleaning;
- Operate the engine without diesel tank cap and strainer;
- Operate the engine without radiator pressure cap;
- Operate the engine without thermostat;
- Operate the engine with lubricating oil level below 'L' mark or above 'H' mark;
- Crank the engine more than 30 seconds continuously;
- Operate the engine with dirty radiator core;
- Over extend the filters and lubricating oil change period;
- Allow dirt or any debris to enter oil system during oil change;
- Operate the engine without support of exhaust and intake piping;
- Operate the engine with low oil pressure or with high coolant temperature.

5. **CPCB Proposal for Continued action plan:** Meanwhile, CPCB in association with the manufacturers and in consultation with "Standing Committee on emission for off-Road Vehicles and construction equipments" may explore the methods of monitoring of in-use generator sets. A study project will simultaneously be undertaken to suggest emission limits and noise limits for in-use diesel Gensets.

6. **Conclusion:** Fixing of life of genset i.e. 15 years for residential and commercial purpose and 16 years for agricultural purpose would help in controlling air and noise pollution due to use of gensets, since, it is a difficult proposition to monitor noise and emission levels at par with the PUC certificate system, as applicable for in-use vehicles.

-x-x-x-x-x-x-

BEFORE THE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI

Appeal No. 12(T_{HC}) of 2013
And
Original Application No. 17(T_{HC}) of 2013
And
Original Application No. 32(T_{HC}) of 2013

In the Matter of :-

Market Welfare Association Vs. District Magistrate &Ors.
And
Fashion Market Welfare Association
Vs.
District Magistrate, SAS Nagar &Ors.
And
Sadhu Singh &Ors. Vs. The Chief Administrator &Ors.

CORAM : HON'BLE MR. JUSTICE SWATANTER KUMAR, CHAIRPERSON
HON'BLE MR. JUSTICE M.S. NAMBIAR, JUDICIAL MEMBER
HON'BLE MR. DR. D.K. AGRAWAL, EXPERT MEMBER
HON'BLE PROF. A.R. YOUSUF, EXPERT MEMBER

Present: **Appellant:**
Respondent No.4:
(In Appeal No. 12(T_{HC}) of 2013 and O. A. No. 17(T_{HC}) of 2013)

Appearance not marked
Ms. Gurinderjit, Advocate

Mr. Vikas Malhotra and Mr. M.P. Sahay, Adv. for MoEF, Mr. R. N. Jindal, Director

Ms. Alpana Poddar, Adv. for CPCB

	Date and Remarks	Orders of the Tribunal
	Item No. 08-10 **March 11, 2015**	**<u>Appeal No. 12(T_{HC}) of 2013, Original Application No. 17(T_{HC}) of 2013 and Original Application No. 32(T_{HC}) of 2013</u>** Learned counsel appearing for CPCB submits that after deliberation with different Authorities and concerned States they have prepared the National guidelines for 'in-use generator sets (noise and emissions)'. Copy thereof has been placed on record. Since the guidelines have been prepared by the CPCB in exercise of their statutory powers, we direct the CPCB to put these guidelines on their website as well as direct all the States to ensure the implementation of these guidelines expeditiously and without default. In view of the above nothing survives in these cases. Consequently, Appeal No. 12(T_{HC}) of 2013, Original Application

		No. 17(T_{HC}) of 2013 and Original Application No. 32(T_{HC}) of 2013 stand disposed of while leaving the parties to bear their own costs. .....,CP (Swatanter Kumar) .....,JM (M.S. Nambiar) .....,EM (Dr. D.K. Agrawal) .....,EM (Prof. A.R. Yousuf)

No. RT-11036/16/2018-MVL
Government of India
Ministry of Road Transport and Highways
(MVL Section)
Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dated the, 20th April, 2020

To,

The Principal Secretaries/ The Secretaries/ Department of Transport
The Commissioners
of all the States and Union Territories.

Subject: Compliance to the Hon'ble Supreme Court orders in regard to registration of BS IV vehicles

Madam / Sir,

I am directed to refer to this Ministry's letter dated 6th March, 2020 vide which the reference was cited to the Hon'ble Supreme Court order dated 24.10.2018 passed in the matter of W.P (C) No. 13029 of 1985, M.C. Mehta V/s Union of India wherein the Hon'ble Supreme Court had directed that - *"Therefore in exercise of the power vested in this Court under Article 142 of the Constitution, we read down sub-rule 21 of Rule 115 and direct that sub-rule of Rule 115 shall be interpreted and understood to read that no motor vehicle conforming to the emission standard Bharat Stage-IV shall be sold or registered in the entire country with effect from 01.04.2020" (Copy enclosed).*

2. Further, the Hon'ble Supreme Court in its order dated 27.03.2020 in the matter of W.P (C) No. 13029 of 1985, M.C. Mehta V/s Union of India had passed following directions (copy enclosed):-

" It is stated by Mr. K.V. Vishwanathan, learned senior counsel appearing on behalf of the applicant / Federation of Automobile Dealers Association that 1,05,000 two wheelers, 2250 passenger cars and 2000 commercial vehicles are there which have been sold but not registered throughout India. Unsold vehicles are stated to be 7,00,000 two wheelers, 15,000 passenger cars and 12,000 commercial vehicles.

With the With the consent of Mr. A.N.S. Nadkarni, learned Additional Solicitor General and Mr. K.V. Vishwanathan, learned senior counsel, it is ordered that sold vehicles be registered by the concerned authorities by 30.04.2020. However, at the same time we direct the applicant to furnish details of the purchasers, on affidavit, of the aforesaid vehicles through e-mail, within seven days from today. Details of registration shall also be furnished to this Court.

... ..

It is stated that there are 7,00,000 two-wheelers which are unsold throughout India with different dealers. Similarly, passenger vehicles are 15,000 and commercial vehicles are 12,000. In Delhi and NCR region, we are not allowing sale and registration

Scanned with Cal

of these kind of vehicles any more. However, in the remaining part of the country, due to the situation which has arisen due to lockdown, it is ordered that not beyond 10% of the vehicles, except with the Dealers in Delhi and NCR region, are permitted to be sold out of the aforesaid number of vehicles to make up the good of six days which were available before the lock-down has been ordered in the country. Details of the sale shall be furnished by the applicant and there shall be no violation of the order passed by this Court. Sales to be done within ten days of the lifting of the lock-down operating in the concerned cities and not beyond it and on an affidavit number of vehicles sold shall be stated by the applicant/Federation of Automobile Dealers Association and only those vehicles shall be permitted to be registered about which affidavit is filed. If out of the vehicles which are permitted to be sold some of them remain unsold then obviously there is no question of any further extension of time for sale of these kind of vehicles. Particulars shall be given on an affidavit with engine and chassis numbers by the applicant/Federation of Automobile Dealers Association of the sale of vehicles before the registration is made, within seven days of the sale."

3. In view of above, the compliance to Hon'ble Supreme Court's orders may strictly be personally ensured while registering only above such BS IV vehicles by passing suitable instructions to NIC and registering through VAHAN. Further, it may be ensured that only the officers of the Transport Department finalise the registration of such BS IV vehicles which are incompliance to the Hon'ble Supreme Court orders.

Yours faithfully,

(Dr. Piyush Jain)
Director (MVL)
Tele/Fax: 23714974
e-mail: director-morth@gov.in

Encl : As above

Copy to -

Shri Gautam Ghosh,DDG, NIC Building, CGO Complex, Lodhi Road, New Delhi-110003 (Email- ggh@nic.in) - Please take necessary action to ensure compliance of Hon'ble Supreme Court directions while facilitating registering the BS IV vehicles through VANAN 4.0 to the State / UT Governments

Scanned with Cal

No. RT-11036/16/2018-MVL
भारत सरकार
Government of India
सड़क परिवहन और राजमार्ग मंत्रालय
Ministry of Road Transport and Highways
(MVL Section)
Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dated the, 6th March, 2020

To

The Principal Secretaries/The Secretaries (Transport), Department of transport of all the States/UT Administrations.

Subject: Registration of only BS VI vehicles from 1st April, 2020.

Sir/Madam,

I am directed to refer to the this Ministry's notification G.S.R. 889(E) dated 16.09.2016 vide which the Government has mandated mass emission standard for BS-VI throughout the country with effect from 1st April, 2020 to bring down pollution across the country. Further, this Ministry has also issued GSR 178 (E) dated 20th February, 2018 on the subject matter. However, the Hon'ble Supreme Court vide its order dated 24th October, 2018 has directed that no new motor vehicle conforming to the emission standard Bharat Stage-IV shall be sold or registered in the entire country with effect from 01.04.2020. The Hon'ble Supreme Court's in its order dated 24.10.2018 (copy enclosed) in the matter of W.P (C) No. 13029 of 1985, M.C. Mehta V/s Union of India has passed following directions:-

"Therefore, in exercise of the power vested in this Court under Article 142 of the Constitution, we read down sub-rule 21 of Rule 115 and direct that sub-rule 21 of Rule 115 shall be interpreted and understood to read that no motor vehicle conforming to the emission standard Bharat Stage-IV shall be sold or registered in the entire country with effect from 01.04.2020."

2. The compliance to Hon'ble Supreme Court order be strictly ensured.

Yours faithfully,

(S. K. Geeva)
Under Secretary to the Govt. of India
Tel: 23739074
Email id- geeva.sk@nic.in

Copy To

Shri Gautam Ghosh, DDG, National Informatics Centre (refer to this Ministry letter of even number dated 4th Feb, 2020).

Scanned with CamScanner

ITEM NO.1 SECTION PIL-W

S U P R E M E C O U R T O F I N D I A
RECORD OF PROCEEDINGS

Writ Petition(s)(Civil) No(s). 13029/1985

M.C. MEHTA Petitioner(s)

VERSUS

UNION OF INDIA & ORS. Respondent(s)

(ONLY I.A. NO. 45883/2020 AND I.A. NO. 45912/2020 AND I..A. NO. 48113/2020(EXTENSION OF TIME) TO BE LISTED ON 27.3.2020 MR. CHANDRA PRAKASH AND MUDIT SHARMA, ADVOCATES
IA No. 45883/2020 - INTERVENTION/IMPLEADMENT
IA No. 45912/2020 - MODIFICATION)

Date : 27-03-2020 These matters were called on for hearing today.

CORAM :
HON'BLE MR. JUSTICE ARUN MISHRA
HON'BLE MR. JUSTICE DEEPAK GUPTA

For applicant(s)/petitioner(s)
Mr. K.V. Vishwanathan,Sr.Adv.
Mr. R. Basant,Adv.
Mr. Mudit Sharma,Adv.
Mr. Rishikesh Chitaley,Adv.

For Respondent(s)
Mr. A.N.S. Nadkarni,ASG
Mr. S.S. Rebello,Adv.
Mr. Gurmeet Singh Makker, AOR
Mr. Mukesh Kumar Maroria, AOR

UPON hearing the counsel the Court made the following
O R D E R

The Court convened through Video Conferencing.

IA Nos. 45883/2020, 45912/2020 & 45912/2020

It is stated by Mr. K.V. Vishwanathan, learned senior counsel appearing on behalf of the applicant/Federation of Automobile Dealers Association that 1,05,000 two-wheelers, 2250 passenger cars

and 2000 commercial vehicles are there which have been sold but not registered through out India. Unsold vehicles are stated to be 7,00,000 two wheelers, 15,000 passenger cars and 12,000 commercial vehicles.

With the consent of Mr. A.N.S. Nadkarni, learned Additional Solicitor General and Mr. K.V. Vishwanathan, learned senior counsel, it is ordered that sold vehicles be registered by the concerned authorities by 30.04.2020. However, at the same time we direct the applicant to furnish details of the purchasers, on affidavit, of the aforesaid vehicles through e-mail, within seven days from today. Details of registration shall also be furnished to this Court.

With respect to unsold vehicles as the manufacturer should have been ready because of deadline set for BS-VI compliant vehicles, there is no justification to extend the time which was fixed long time ago. This is not something new which has occurred, it would be further injurious and further burden on human health to be caused by pollution of BS-IV vehicles when BS-VI vehicles are supposed to be produced by the manufacturers well in advance considering the deadline of 31st March, 2020.

It is stated that there are 7,00,000 two-wheelers which are unsold through out India with different dealers. Similarly, passenger vehicles are 15,000 and commercial vehicles are 12,000. In Delhi and NCR region, we are not allowing sale and registration of these kind of vehicles any more. However, in the remaining part of the country, due to the situation which has arisen due to lock-down, it is ordered that not beyond 10% of the vehicles, except

with the Dealers in Delhi and NCR region, are permitted to be sold out of the aforesaid number of vehicles to make up the good of six days which were available before the lock-down has been ordered in the country. Details of the sale shall be furnished by the applicant and there shall be no violation of the order passed by this Court. Sales to be done within ten days of the lifting of the lock-down operating in the concerned cities and not beyond it and on an affidavit number of vehicles sold shall be stated by the applicant/Federation of Automobile Dealers Association and only those vehicles shall be permitted to be registered about which affidavit is filed. If out of the vehicles which are permitted to be sold some of them remain unsold then obviously there is no question of any further extension of time for sale of these kind of vehicles. Particulars shall be given on an affidavit with engine and chassis numbers by the applicant/Federation of Automobile Dealers Association of the sale of vehicles before the registration is made, within seven days of the sale.

The application for impleadment is allowed to the extent of intervention and these applications are accordingly, disposed of.

(NARENDRA PRASAD)
ASTT. REGISTRAR-cum-PS

(ANAND PRAKASH)
BRANCH OFFICER

IS 3034 : 1993

Indian Standard

FIRE SAFETY OF INDUSTRIAL BUILDINGS: ELECTRICAL GENERATING AND DISTRIBUTING STATIONS — CODE OF PRACTICE

(Second Revision)

1 SCOPE

This standard lays down the fire safety requirements regarding building construction, various process hazards and facilities, storage areas, etc, pertaining to electricity generating stations (where electricity is generated from conventional sources using coal, oil, gas turbines, diesel generator sets, and the distributing stations).

NOTE — This standard does not deal with the fire safety requirements of nuclear power plants and hydro-electric power stations.

2 REFERENCES

The Indian Standards listed in Annex A are necessary adjuncts to this standard.

3 GENERAL

3.1 The main fire risk areas in a thermal power station are:

a) Control room;
b) Switch gear room;
c) Cable ways and races;
d) Coil and oil storage;
e) Coal handling system including conveyor belts;
f) Transformer houses;
g) Coal houses;
h) Coal mills; and
j) Bunkers.

3.2 The following are also the areas having high damage potential in a thermal power station:

a) Turbo-generator including lubricating and jacking oil systems, turbo-generator supporting structures and floor areas around the turbine;
b) Hydrogen cooling and seal oil equipment;
c) Boiler feed pump turbine including lubricating and jacking oil services, and supporting structures including floor areas around the pump;
d) Burner front areas of the boiler including fuel oil lighting up headers and pipe work basement floor immediately beneath the burner front, and the boiler casing area above the burner wind box;
e) Oil filled generator, station unit and auxiliary transformers, reactor tranformers including associated cooler and conversation tanks;
f) Auxiliary boilers, oil burner pumps;
g) Diesel driven pump/engine units and their fuel and storage tanks;
h) Bulk hydrogen stores; and
j) Hydrogen generation plant.

3.3 Apart from mechanical hazards of gas turbines, the hazards from fire mainly arise from fuel explosion fires due to leak in the fuel system or lubricating and seal oil systems. Surface temperatures of combustible chambers will be higher than ignition temperature of fuel and lube oil.

3.4 The distribution stations such as load despatch centres and sub-stations also cause fire hazards arising from oil-field transformers, switch gear, cable galleries/tunnels, etc.

3.5 The planning for the fire protection scheme should start right from the design stage of the plant, thereby ensuring that adequate and suitable fire protection measures, both active and passive are incorporated not only while finalising the plant design itself, but right up to the completion stage.

3.6 In the fire protection system for the power plant, due consideration shall be given to the danger of smoke logging in all locations, in addition to safeguarding against other likely gaseous toxic products, the provision of adequate means of escape shall also be given due consideration in the interest of life safety.

4 BUILDING CONSTRUCTION AND RELATED REQUIREMENTS

4.1 The structural elements of all buildings of an electrical generating/distributing station shall be of Type 1 construction, complying with the requirements as given in IS 1642 : 1989.

4.2 Provision for smoke ventilation, preferably of automatic type shall be made, over the generator floor to permit escape of heat and large volumes of smoke likely to be generated. The requirements of fire venting shall conform to the provisions contained in relevant Indian Standards.

4.3 A normal ventilation rate of minimum 2 cycles per hour shall be maintained for large area turbine halls. For extraction of smoke from fire, a volume change rate of 12 changes per hour shall be obtained depending on fire load, room height, size, etc. In case the start of the smoke extraction is delayed, the volume change rate shall have to be increased even up to 30 changes per hour. Smoke vents of approved design shall be incorporated in cable tunnels/galleries, plant rooms, switch board rooms, etc and provision made for the attachment of portable extraction unit, if not already served by a fixed smoke extraction installation.

4.4 To achieve compartmentation, the plant shall be sub-divided into individual fire areas, to be maximum extent feasible. Reduce the spread of fire between such areas and the consequential damage, and also to achieve easy control and extinguishment of fire. Such subdivision by fire barriers or separation walls of minimum 2 hours fire resistance shall be provided in the following cases:

a) Where turbine hall houses more than one unit, a fire barrier/separation wall shall be provided for each unit beneath the operating floor in the turbine and electrical bays;
b) Between TG hall and control room/computer room/instrument room;
c) Between TG hall and electrical switchgear room (unit-wise barriers needed);
d) Between the TG hall and cable galleries (unit-wise barriers needed);
e) Between TG hall and boiler house;
f) Between TG hall and coal pulverisers;
g) Between TG hall and administrative building;
h) Between staircases and lift shafts and the rest of the building;
j) Between storage of flammable liquids and rest of the building;
k) Between transformer yard/outdoor transformers and other nearby building, in case a clear distance of 15 m is not available;
m) Between individual oil-field transformers containing oil in excess of 2 000 litres in case clear distance as specified in IS 1646 : 1982 is not maintained;
n) Between battery rooms and other adjoining areas, and
p) Between cable galleries of each unit.

4.5 The doors provided in the separation walls between these fire areas shall be self-closing fire-check doors of fire rating equal to that of the fire wall.

4.6 Windows/Ventilators/Glass panels in fire separation walls (for example, for control rooms or computer rooms) shall be provided with preferably clear fire resisting glass panels of minimum 45 minutes fire resistance or with automatic fire resistant shutters or automatic water curtain.

4.7 Cellular or foamed plastic materials (such as expanded polystyrene, polyurethane foam etc) shall not be used as interior finish or insulation in any part of the building. Where interior finish (wall linings, false ceilings, etc) is unavoidable, they shall be non-combustible material and of Class 1 flame spread (*see* IS 12777 : 1989).

4.8 Air conditioning for the control room shall provide a pressurised environment to preclude the entry of smoke in the event of a fire outside the control room.

4.9 Plastic ducts, including fire retardant types shall not be used for ventilating systems.

4.10 Provision shall be made in all fire areas of the plant for removal of all liquids, including fire fighting water, directly to safe areas. The drainage facilities shall be adequate to cater to all of the following emergencies:

a) The spill of the largest single container of any flammable or combustible liquids in the area;
b) A minimum flow of 3 600 lpm for fire fighting operations for at least 20 minutes; and
c) A maximum design discharge of fixed fire suppression system operating for a minimum of 20 minutes.

4.11 Floor draining from areas containing flammable or combustible liquids shall incorporate suitable flame traps or flame arresters, conforming to IS 11006 : 1984.

4.12 The building or compartment housing the coal pulverising equipment shall be constructed in accordance with IS 3595 : 1984. The doorway openings in the separating walls shall be provided with sills of not less than 15 cms height with provision of ramps on either side.

4.13 Switch gear wherever applicable, oil-circuit breakers and transformers shall be housed preferably in detached single storey building of Type 1 construction (*see* IS 1642 : 1989).

4.14 The building used for storage purposes shall confrom to the requirements of IS 3594 : 1991.

4.15 The safety distance separating various buildings shall be in accordance with IS 1643 : 1988, and the means of exit requirement shall be in accordance with IS 1644 : 1988.

4.16 Distance separating fuel oil storage tanks, open storage of oil drums, etc shall be in accordance with the relevant statutory requirements.

4.17 The power station buildings and switch yards shall be provided with lightning protection conforming to IS 2309 : 1989.

5 POWER STATION FACILITIES

5.1 Coal Storage and Handling

The safety requirements for the coal storage and handling and other associated equipments in the power station shall conform to the provisions contained in IS 3595 : 1984. However, certain aspects which need special attention are enumerated below.

5.1.1 The belt conveyor system installed for handing coal shall preferably be of enclosed type so as to prevent the escape of dust in the power house area and these shall be thoroughly bonded and grounded to minimize static discharges. Dust collectors should preferably be located outdoors, wherever necessary.

5.1.2 The conveyor belt shall preferably be of fire resistant material conforming to IS 3181 : 1978. The openings in the walls and floors through which the conveyor belt system passes shall be adequately protected with properly designed water spray nozzles capable of providing the necessary particle size and pressure, to cover top and bottom sides of the conveyors near the openings. These water spray nozzles shall be controlled by an automatic valve actuated by fire detectors with a manual override.

5.1.3 Regular inspection with remedial maintenance shall be undertaken to reduce coal spillage problems and therefore the fire risks.

5.1.4 Special care shall be taken against the risk of fire while belts are being vulcanised or when welding is being carried out in the vicinity of conveyors.

5.1.5 The major fire hazard in bunkers is caused by stagnant coal which may remain for long periods in bunkers even though they are continuously in use. The chances of the stagnant coal catching fire are greatly aggravated by any draught of air through the coal in the bunkers. In the event of a fire in the bunkers, the two main hazards are the production of highly toxic CO gas and also generation of thick smoke in a confined space. Therefore, it is highly essential to ensure proper ventilation to the bunker area.

5.2 Turbo-Generators

5.2.1 While many of the older units are open design and air cooled, all newer and larger units are totally enclosed and hydrogen, or water cooled, or use a combination of liquid and gas for cooling. The stator winding may be liquid cooled and the rotor gas cooled by use of hydrogen. Mechanical of electrical failure of the generators are possible with resultant fire hazards.

5.2.2 Some of the air cooled generators are provided with CO_2 extinguishing systems for the windings. Hydrogen cooling is generally used for larger machines (capacity exceeding 200 MW). The generator control equipment is usually provided with devices to monitor the hydrogen gas pressure and purity. To prevent gas leakages, oil pressure gland seals (oil seals) are provided. One of the essential fire safety requirements in hydrogen cooled generators is to maintain the H_2 purity at about 95 percent to make explosion risks minimum. However, there is explosion hazard in the oil system and also in the event of hydrogen leak through the oil seals. The hazard of a TG fire incident may be increased if hydrogen is released in the event of mechanical failure or severe vibration. Fire is the most common result of H_2 leakage. A few incidents have occurred where escaping H_2 has mixed with air and exploded.

5.2.3 The H_2 cylinders used for cooling shall be placed outdoors or in a separate well ventilated room with exhaust. Where H_2 is supplied from a central storage outside, an emergency shut-off valve shall be installed on the supply line at an accessible location which may be operated from the control room. When H_2 cooled generators are taken out of service for inspection, or repairs, and during restoration to service, an inert gas, such as CO_2 shall be used to purge the line to prevent the formation of an explosive H_2 air mixture.

5.2.4 Periodical checks for H_2 leaks shall be made at the generator and sealing system.

5.2.5 Major fire risks in turbo-generators arise from the leakage or escape of combustible lubricating and hydraulic fluids contained in the lubricating or governor seals, and jacking oil systems. The risk normally extends to the floor areas which house the lubricating systems and within the radius of an oil spray pattern cascading from a failure of bearing oil supply headers.

5.2.6 A bund wall shall surround and contain the main labricating oil, jacking and flushing oil package unit are, to prevent spread of oil to surrounding floor areas.

5.2.7 Concrete or concrete protected steel shall be used for the supporting structure of turbo-generator units. Exposed steel construction is acceptable if protected by an automatic deluge sprinkler system (if, facilities exist for 'leg-wetting').

5.3 Fuel Oil Storage

5.3.1 The fire safety requirements for all the fuel oil storage facilities in the power plant shall conform to the relevant statutory requirements. Apart from these, some of the other important requirements are:

a) Only the minimum quantity required for day's requirements shall be stored in the TG house presmises;

b) All internal storage tanks shall be provided with a trough or catchpit, having the same capacity as the tank, for collecting leakages, which shall be equipped with a drain pipe, leading back to the main supply tank or safer areas; and

c) All above ground storage tanks installed in-doors shall comply with the following provisions:

   i) The individual capacity of any tank shall not exceed 10 000 litres;

   ii) The aggregate capacity of such tanks shall not exceed 2 00 000 litres; and

   iii) The building/compartment housing storage tanks shall be segregated from other building/compartment by separating walls, and all openings shall be protected by fire resisting doors of 2 hours rating and a brick or concrete liquid-tight ramp at least 150 mm in height.

5.3.2 An in-door storage tank shall not be filled otherwise than from open air through a permanently fixed metal pipe, the inlet of which shall be fitted with a screwed cap or valve. The fill pipe, shall extend into the tank so that its outlet is within 5 cm of the tank bottom.

5.3.3 All oil tanks shall be fitted with a vent pipe leading into open air, the open end being covered with a standard flame arrester conforming to IS 11006 : 1984.

5.3.4 For storage located in-doors, overflow pipes shall be carried outside the building, and deliver the oil into a catch pit or other safe position and the pipe shall terminate in a water seal container at least 30 cm below the surface of water.

5.3.5 *Outdoor Oil Storage*

5.3.5.1 External hydrant system for the power plant should be extended to cover the outdoor storage tanks with 63 mm double outlet covering the entire area. The oil tanks should also be protected by 38 mm fixed water monitors at vantage points so as to provide water for cooling of the tanks.

5.3.5.2 The oil storage tanks should also have fixed foam fire extinguishing system in conformity with IS 12835 (Part 1) : 1989.

5.4 Lubrication Oil Risks

5.4.1 The fire risk of the lubrication system of the turbo generator may be considerably reduced by using completely separate circuits for the lubricating system and the control system. The risks arise from an escape of combustible lubricants and hydraulic fluids contained in the systems.

5.4.2 An oil fire generally follows an escape of fluid on to hot steam surfaces, impregnation and absorption of oil into laggings and leakage into electrical equipment.

5.4.3 The continuous ieakage and absorption of combustible oils into lagging covering steam pipes, turbine casing, etc give rise to lagging oil fires.

5.4.4 The seal oil and the jacking oil systems are also subject to the same risks.

5.4.5 There shall be arrangement for collecting leakages of lubricating oil from the distributing pipe installations by adopting any one of the following methods:

a) By running the oil lines in steel-lined trough, specially provided for this purpose; and

b) By employing the double pipe system that is running the pressurised supply pipe inside a large pipe acting as a leakage collector, which shall also act as a return pipe.

5.4.6 Where it is not practicable to separate oil risks from hot pipes and components sufficiently shielding/deflecting plates and protection cladding shall be provided at suitable point and place.

5.5 Boiler Plant

5.5.1 The details in respect of the fire safety aspects of the boiler plant installation and auxiliary equipment shall conform to the provision contained in IS 8633 : 1977.

5.5.2 The fuel delivery to the burners shall be of proper temperature and pressure as recommended by the manufacturer.

5.5.3 *Furnace and Its Control Unit*

The manually operated dampers of the boilers shall be such that they may not close off more than 80 percent of the internal cross-sectional area of the smoke pipe.

5.5.4 The automatically operated dampers of the boilers shall be of type to maintain safe damper openings at all times and arranged to prevent starting of burner unless the damper is opened at least 20 percent of the internal cross-sectional area of the smoke pipe.

5.5.5 Readily accessible shut off valves shall be provided in oil supply line near each oil burner.

5.5.6 Every boiler shall be equipped with the following safety control devices:

a) Electrical ventilation interlocking mechanisms which would prevent the fuel pumping circuit from being put into operation without closing the ventilating fan-motor circuits;

b) Pre-ventilation time delay which would prevent the furnaces from being fired until and unless the furnace had been ventilated for a pre-determined period of time;

c) Anti-flooding device to prevent abnormal discharge of oil at the burner; and

d) Flame failure safeguard which would automatically cut off flow of fuel in the event of accidental extinguishment of the burner flame.

5.5.7 No maintenance work shall be undertaken on a furnace without completely purging the interior of all traces of flammable gases and vapours and unless satisfactory results are obtained by checking with a cumbustible gas indicator (explosive meter).

6 ELECTRICAL EQUIPMENT AND INSTALLATIONS

6.1 General Requirements

6.1.1 The electrical equipment and installations of the power stations shall conform in all respects to the relevant guidelines given in IS 1646 : 1982.

6.1.2 Gasoline, benzene, ether, alcohol and similar flammable cleaning fluids shall not be used on energized electrical apparatus. The use of such flammable cleaning fluids on de-energized apparatus may, however, be permitted provided the apparatus is not energized within half an hour of such use.

6.1.3 None of the flammable solvents mentioned in 6.1.2 shall be used in the vicinity of electrical equipment from which spark may be received.

6.1.4 Every electrical equipment shall be kept free of deposits of oil, grease, carbon dust, etc.

6.1.5 Each and every electrical equipment shall be effectively earthed to avoid any flask/spark.

6.2 Cables and Cable Galleries etc

6.2.1 The fire protection requirement for cable galleries, cable runs, etc shall conform to the provisions contained in IS 12459 : 1988, including the fire protection requirements such as segregation of cable runs into compartments, use of fire resistant cables in critical areas and groups of cables, sealing of penetrations in the walls and floors by use of fire stops, fire detection and alarm systems, and the extinguishing systems.

6.3 Transformers

6.3.1 All transformer installations shall comply with the provisions of IS 1646 : 1982 in addition to the following:

a) As a protection against excessive damage due to occurrence of faults, transformers fitted with conservators shall be protected with Buchoz Relay;

b) All transformers shall be equipped with oil temperature alarms or excess current relay protection;

c) The bushings, insulators, and contacts of taps changing gears shall be kept scrupuluosly clean at all times; and

d) The level and dielectric strength of the transformer oil shall be checked at periodic intervals, and in the event of presence of a large quantity of sludge the oil shall be renewed.

6.3.2 In addition to the usual cable clamps above floor level, cables shall also be clamped immediately below floor level. Each cable or group shall, where possible, be protected by a pipe or cover of heat resisting material rising to a height of at least 45 cm above floor level or terminating just below cable gland, sealed at the bottom and filled with sand or small pebbles.

6.3.3 Whenever possible, all jute shavings shall be removed from cables in switch rooms, basements and tunnels.

6.3.4 Where cables rest on the floor of tunnel or basements, they shall be separated into groups by vertical barriers of tile brick, or concrete and the trenches so formed shall be filled with small pebbles. Alternatively, the cables may be separately clamped and each cable run shall be separated by a minimum clear space of 75 mm.

6.3.5 The cable shall not be routed near hot steam pipe, turbine, pulverised coal pipe and near hot gas ducts. Wherever it is unavoidable fire resistant cables shall be used.

6.3.6 Power cables and control cables shall run in separate trenches, wherever possible.

6.4 Battery Room

6.4.1 Motor generator sets and/or convertors or rectifiers together with necessary switch and control gear shall be mounted separately (preferably in separate rooms as far as possible) and away from the batteries.

6.4.2 The storage batteries in all attendant equipment, except compact metal clad unit shall be mounted away from all other apparatus, in a position free from dust, and shall be well ventilated.

6.4.3 The batteries shall stand directly on durable, non-absorbant and non-conducting material, such as glass, porcelain or glassed earthenware. The materials shall rest on a bench which shall be kept dry and insulated from earth. If constructed of wood it shall be slatted and treated with anti-sulphuric enamel.

6.4.4 The batteries shall be so arranged on the bench that a potential difference exceeding 12 V shall not exist between adjoining cells. The batteries exceeding 20 V shall not be bunched or arranged in circular formation.

6.4.5 All combustible materials within a distance of 60 cm measured horizontally shall be protected with hard asbestos sheets or similar material. No object shall be suspended directly over the batteries.

6.4.6 The charging circuit shall be provided with double or triple pole switches and fuses. Where a motor generator is employed, the motor shall be provided with double or triple pole switches and fuses and automatic battery and cutout shall be placed in the generator circuit. Any sub-circuit shall be provided with a fuse rated at not more than 7 ampere in each live conductor.

6.4.7 The charging control panels shall be of durable, non-ignitable, non-absorbant, non-conducting material and together with rectifiers, transformers and supports for resistance of lamps, shall be on a bench which shall be kept dry and insulated from earth. If constructed of wood, it shall be slatted and treated with anti-sulphuric enamel.

6.4.8 If batteries are charged through resistance or lamps, unless enclosed in metallic enclosure, shall be at least 60 cm away from the nearest battery.

6.4.9 All permanent wiring shall be securely run and protected, against mechanical injury and efficient terminals or connection shall be supplied from which connection to batteries may be made. Rubber insulated wiring or any other type of combustible insulated wiring, if on insulators, shall not be run in such a position that a fire arising at any battery could reach it. All conductors connecting the supply terminals to batteries shall have either rubber or tough compound insulation without tape or braid.

6.4.10 If the source of supply in the mains has one conductor earthed, the lamps or other resistances shall be connected on an earthed lead and the batteries connected direct to earth conductors.

6.4.11 No celluloid cased storage batteries shall be allowed for use.

6.4.12 All china clay or other insulators shall be kept free of dust, and all casing, conducts, wood or metal work likely to be affected by acid spray or fumes shall be protected by acid resisting paint, varnish or compound, All exposed current carrying metal and terminals shall be coated with petroleum jelly.

6.4.13 Suitable exhaust fans shall be provided for the removal of gas from the battery rooms. Battery rooms shall be provided with ventilation to limit the concentration of hydrogen to one percent by volume.

7 ILLUMINATION

7.1 For effective fire fighting purposes, the minimum illumination required for all working places, such as turbine houses etc is 100 lux, and for control rooms is 150 lux.

8 FIRE PROTECTION MEASURES

8.1 Electrical generating and distribution stations come under the occupancy classification of Industrial Buildings, G-3 (*see* IS 1641 : 1989).

8.2 The extent and nature of the fire protection measures as well as exit facilities to be provided will depend on various factors like size and location of the station, risks involved, availablity of outside help for major fire fighting. However, all the power stations, irrespective of their size, shall provide for adequate the protection/fire fighting arrangement and exit facilities.

8.3 Generating stations may vary in size from small municipal stations to large multi-unit power stations, including super thermal power stations.

8.4 The modern trend is to locate power station in relatively remote areas with hardly any other assisting fire service within reasonable distance. This isolated location makes it all the more necessary for power stations to have an independent full fledged and well maintained fire fighting service of their own. Further, in order to enable quick response to any fire outbreak and to limit the response time to accepted standards, that is, within 5 minutes, it is necessary that a well trained and adequate fire fighting services is available within the premises.

8.5 Turbo-Generators and Supporting Structures

8.5.1 The fixed water spray type protection system shall be used for controlling a fire involving large quantities of lubricating oil on turbine generators. This shall consist of two systems of water protection, one for areas below the operating floor of the turbo generator and designed to extinguish pool fires and also providing protection against heat generated by three-dimensional or spray fires. The other is a water spray system for oil fires at or around the bearing housings. Fixed CO_2 or dry chemical extinguishing systems have been found to be inadequate for basic protection of turbo-generator because of the likelyhood of re-ignition and, further, these extinguishing media may not be sufficient to cope with a long duration fire. However, in some cases fixed dry chemical or CO_2 systems backed by water spray systems should be provided.

8.5.2 Fixed high velocity water spray systems, designed to discharge a flow of 10 lpm/m^2 shall cover completely all oil systems, oil piping, pumps, coolers and all similar associated equipments including adjacent floor areas. The water spray systems shall be divided into convenient zone, and each zone shall have sufficient number of projectors to cover the risk adequately. The number and groups of projection zones are related to, the size of turbo-generator unit and its lubricating plant and auxiliaries. Typical zone arrangements shall cover the following areas of seal oil systems, coolers and pipe work, governor gear, excitor, main lubricating tank and pumps, lubricating oil pipe work, turbo generator and boiler feed pump, exposed steel equipment, foundation support legs, rate of rise fire detectors in accordance with IS 2175 : 1988 shall be provided. The heat detectors shall be provided at strategic points and arranged to give early warning of any unusual high temperature conditions in the area.

8.5.3 Automatic control of the extinguishing systems in this area is more effective than manual control. However, manual over-ride shall also be provided. Zone control deluge operating valve shall be carefully sited so as to be operable without fire or smoke hazard to the operator during a fire. This may be achieved by careful location of the valve assemblies away from protection zones, or by enclosures of the valves in protective cubicles, at the same time affording the operator a good view of the protected zones. Access routes to control valves shall not involve exposure hazards to the operating persons.

8.5.4 The water spray systems shall incorporate isolation facilities so as to enable periodic testing, maintenance etc.

8.5.5 Normally all cut off valves shall be locked open.

8.5.6 The internal hydrant (landing valves) shall be provided for protection of the turbo-generator building including turbine operating floors and basement areas.

8.5.7 The hydrant system shall have sufficient pressure to allow the generation of low expansion foam from hand branches for fighting static/running oil fires.

8.6 Turbine Driven Feed Pumps

8.6.1 The fixed high velocity water spray system shall cover completely all the systems, oil pipe to the pumps, coolers and other similar associated equipment including adjacent floor areas, as for the main turbine. The fire detection system as well as the water spray system shall be of the same type as for the turbo-generator.

8.6.2 To enable fire fighting to be successfully carried out facilities shall be provided for easy smoke disposal, by provision of sufficient cont-rollable top and bottom ventillation.

8.6.3 In the event of a fire involving or close to a turbo-generator or its auxiliaries, it may be safer to shut down the unit so as to limit the. damage only to that directly resulting from the fire.

8.7 Hydrogen Equipment

8.7.1 Any hydrogen equipment that is sited in the turbo generator shall be positioned in such a way that the area and the equipment are well ventilated and directed into the open air.

8.7.2 Spark free tools shall be used in an area where gas may be present.

8.8 Transformers

8.8.1 No fixed fire protection equipment (such as high velocity spray) is required on transformers below 10 MVA or in the case of oil filled transformers with oil capacity of 2 000 litres and below. For all other transformers high velocity water spray system shall be provided. This system shall be separately mounted and designed to take into account the possibility of a transformer explosion. The water spray deluge valve house shall be located outside the transformer fire zones and protected from radient heat and other fire effects. The actuation of this system shall be automatic but manual operating valves shall also be provided.

8.8.2 The high velocity spray system for the transformers should be well designed to have adequate coverage of the entire transformer unit including the conservation tanks, the bushings and the bottom area. The positioning of the nozzles should be such to protect all surfaces of the transformer and to give discharge rate for the system not less than 10 lpm/m^2 of the area to be protected. The

automatic high velocity water spray shall be of pre-active with quartzoid bulbs.

8.8.3 Fire barriers walls shall be provided between transformers where they are less than 15 m apart or where the oil capacity exceeds 2 000 litres.

8.8.4 The transformer shall be so designed as to permit the safe testing of the fire protection system, with discharge of water, while on load.

8.8.5 There shall be arrangements for containment of the spilled oil. For generator transformers and other large transformers the drainage system as well as storage, pit shall be sufficient to accommodate at least the total volume of the oil and an allowable volume of fire fighing water. The drain pipes shall be provided with standard type of flame arresters.

8.8.6 The fire protection systems covering the generator transformers, associated oil conservator tank and cooler batteries shall be designed to meet the single risk concept so that simultaneous deluge over all the three risk zones is possible.

8.8.7 The electrical clearances for high velocity spray system shall be as given in Table 1.

8.9 Switch Gear

8.9.1 Gas filled circuit breakers (such as SF_6 or sulphur-hexafluoride) and vaccum breakers are the least fire hazardous as compared to the oil breakers or air-blast breakers. Hydrant protection shall be in close proximity to these risks.

8.9.2 For an enclosed switch gear room automatic Clean Agents or CO_2 total flooding extinguishing system is considered preferable to water spray. Switch rooms shall be provided with controllable ventilators.

8.9.3 All cable entries in the switch gear room shall be effectively sealed by use of fire stops (*see* IS 12459 : 1988).

8.9.4 All switch gear rooms shall be kept clear and free from any accumulated debris or flammable material.

8.9.4.1 The following 6.6 kV and 415 V switch boards may preferably be housed in separate rooms:

a) Unit switch boards (with separate room for boards of each unit),

b) Station switch boards, and

c) Unit switch boards.

8.9.5 Switch gear rooms shall be pressurised by the ventilation system to prevent ingress of dust. Suitable interlocks shall be provided to switch off the pressurised ventilation system before the centralised extinguishing gas system is to be put into operation.

Table 1 Clearance from Water Spray Equipment to Live Un-Insulated Electrical Components

(*Clause* 8.8.7)

Nominal Line Voltage	Nominal Voltage to Ground	Design BIL	Minimum Clearance
kV	kV	kV	mm
To 15	To 9	110	178
23	13	150	254
34.5	20	200	330
46	27	250	432
69	40	350	635
115	66	550	940
138	80	650	1 118
161	93	750	1 321
196-230	114-132	900	1 600
		1 050	1 930
287-380	166-220	1 175	2 210
		1 300	2 489
		1 425	2 769
		1 550	3 048
500	290	1 675	3 327
		1 880	3 607
500-700	290-400	1 925	3 886
		2 100	4 267
		2 300	4 674

NOTES

1 BIL values are expressed as kilovolts (kV), the number being the crest value of the full wave impulse test that the electrical equipment is designed to withstand.

2 When the design BIL is not available, and when nominal voltage is used for the design criteria, the highest minimum clearance listed for this group shall be used.

8.9.6 Smoke detectors of ionisation and optical types shall be employed in the switch gear rooms on cross-zoning principle with suitable time delay devices incorporated. Proven intelligent, micro processor based detection/suppression system shall be preferred.

8.9.7 Fixed automatic gaseous extinguishing of local application type shall be ideal in the switch gear system.

8.10 Control Room

8.10.1 For control room of Class I and II of power generating units as well as distribution stations shall have fire barrier/separation walls between the main TG hall/any other adjacent

room. The control room shall have 2 hours fire resistance with smoke stock fire check doors of the same rating.

8.10.2 All cable entries/openings in the control room shall be effectively sealed.

8.10.3 The room shall be kept clear and free of any waste material whenever glass panels are provided, it shall be of clear fire resisting glass having minimum 45 minutes fire resistance or fitted with automatic resistant shutters/ automatic water curtain.

8.10.4 The AC system shall be automatically switched off before. the extinguishing system is put into operation.

8.10.5 Smoke detectors of ionisation and optical types shall be provided in the Control room on cross-zoning principle with suitable time delay devices incorporated. Proven intelligent, micro-processor based detection/suppression system shall be preferred.

8.10.6 'ON' and 'OFF' type sprinkler system, CO_2 or Clean Agents extinguishing system shall be provided for control room. In this case 'ON' and 'OFF' type should be preferred.

8.11 Cable Galleries

8.11.1 The experience of Power Station cable fires had been that in many cases, several units, if not the whole station, got seriously affected by a single fire. PVC is not easily flammable but burns freely in fairly high temperature conditions producing copious quantities of dangerous fumes and gases including HCL gas. These gases are toxic and highly corrosive. The cable galleries, separating rooms etc shall be provided with facilities for ventillation and means for controlling it from outside. Apart from the need to clear smoke and toxic gases in the event of a fire, ventillation may be necessary for temperature control of the galleries on areas.

8.11.2 To limit the spread of fires along cable ways fire barriers shall be installed in accordance with the requirements of IS 12459 : 1988.

8.11.3 Access and exit ways large enough to allow a man wearing breathing apparatus and carrying other fire fighting equipment to pass through shall be provided. The distance between such exit ways shall not exceed 30 m in the cable runs. The cable galleries or runs shall be provided with automatic fixed fire fighting installations using water, CO_2 Clean Agents or Water Mist or high expansion foam. However, water spray sprinkler system is generally preferred. The design of sprinklers and projectors shall ensure that no rack or cable is left unprotected. Automatic sprinkler system for the cable galleries shall be designed for a density of not less than 12 lpm/m^2 over area of 232 m^2. Water spray system shall have the same density.

8.11.4 Smoke detectors of ionisation and optical type shall be provided in the control room on cross-zoning principle with suitable time delay devices. Proven intelligent micro processor based detection/suppression system shall be provided. Alternatively heat detectors of linear type covering all the cable racks/trenches shall be installed.

8.11.5 Where high expansion foam or gas exgtinguishing systems are used, the system shall actuate only after all persons inside have been evacuated.

8.11.6 Self-contained BA sets shall be available for ready use by trained personnel at strategic points near the entry to the cable galleries.

8.11.7 All cable galleries/tunnels shall be maintained in a neat and tidy conditions. These shall not be used for storage/dumping of scrap or any other article including electrical spares.

8.11.8 The means of escape shall be clearly indicated and all exit ways shall be kept clear. The controlled access procedure shall be enforced for the cable galleries, tunnels etc for employees on regular work or inspection duties.

8.11.9 Floors of all cable galleries/tunnels shall have a slope of suitable gradient leading to a sump of adequate capacity for collecting seepage and other water including water used for fire fighting. An automatic sump pump of suitable capacity shall be installed at each sump to pump out the water to the surface drain.

8.12 Coal Storage and Handling Equipment

8.12.1 Coal handling plant shall be provided with an early warning fire detection system for moving and stationery fire detectos such as rate of rise/infra-red/linear heat detectors/optical beam should be adopted.

8.12.2 The fire protection measures for open storage of coal and coal handling equipment, as prescribed in IS 3595 : 1984 shall be provided. In addition, the following measures shall also be complied with.

8.12.2.1 After determining the location and extent of a fire in a coal storage yard, the coal should be dug out and the heated coal removed. Moisture accelerates oxidation, and therefore it has got to be ensured that the seat of the fire is attacked. For this, the use of Extended Branch Pipe (*see* IS 11101 : 1984) shall be helpful.

8.12.2.2 Caution has to be exercised while applying extinguishing water jets on coal and coal handling equipment to avoid raising of a coal dust cloud which may result in a dust explosion.

8.12.2.3 For enclosed structures adequate explosion venting provision shall be made.

8.12.2.4 Static electricity hazards shall be minimised by the permanent bonding and grounding of all equipment including conveyor belts, pulley idlers, motor drives, etc.

8.12.2.5 Automatic sprinkler system shall be designed for a minimum of 10 lpm/m^2 density over 232 m^2 area. Water spray system shall have the same density.

8.12.2.6 Conveyors that are below grade or enclosed present special hazards for fire fighting, and need to be maintained properly.

8.12.2.7 The actuation of detection system shall automatically shutdown the conveyor belts in the area involved.

8.12.2.8 On detection of a fire dust collectors and fans shall automatically shut-down.

8.12.2.9 Carbon monoxide (CO) gas detection system shall be desirable for pulverizers to give early warning about conditions leading to fires and explosions.

8.12.2.10 The planed hydrant system should cover the coal storage and handling areas/ equipments also. The escape route in overhead conveyor system, adequate means of escape shall be provided particularly in long enclosed conveyor belts. In the later case, exit doors shall be provided at intervals of not greater than 50 metres, fitted with escape rungs, which would enable persons inside the closed conveyor system to escape in case of fire/explosion.

8.13 Boiler Plant Fire Protection

8.13.1 Boiler furnaces shall be protected with automatic sprinkler water spray, foam or foam water sprinkler systems covering the burner front oil hazard.

8.13.2 Boiler furnaces and boiler front areas shall be provided with automatic fire detection systems based on rated type fire detection system in accordance with IS 2175 : 1988.

8.13.3 Boiler front fire protection systems shall be designed to cover the fuel oil burners and igniters, adjacent fuel oil piping and cable up to a 6 m distance from the burner and igniter including structural numbers and walk-ways at these levels. The sprinkler systems shall be designed for a density of 10 lpm/m^2 over 232 m^2 area. Water spray system shall have the same density.

8.13.4 Entire boiler plant shall be protected by wet riser system with landing valves at all levels and connected to the hydrant water mains.

8.14 Electrostatic Precipitator

8.14.1 Once a fire is detected the ESP unit should go into emergency shut-down immediately. Once the flow of air and fuel to the fire have been stopped and the electrostatic precipitator has been shut-down and de-energised, the precipitator doors may be opened and water jet/spray directed as required.

8.15 Gas Turbine Generators

8.15.1 Certain areas of the turbine operate at high temperature and have slow cooling rate after shut-down. Surface temperature of the combustion chamber will be higher than the ignition temperature of fuel and lube oil.

8.15.2 The lubricating and hydraulic seal oil systems require similar type of fire protection as in the case of steam turbine driven generators. Isolated installations may be protected with an automatic sprinkler water spray system.

8.15.3 Where the generator is installed in an enclosure, a CO_2 system may be provided.

8.15.4 In gas turbine generator and accessory compartments, to extinguish fires in electrical equipment by CO_2 system, the rate of discharge shall be such that a 34 percent concentration is attained within one minute after actuation, and 30 percent concentration shall be maintained throughout the deceleration period but not less than twenty minutes. All metal surfaces shall be cooled to below auto-ignition temperature of the oil. The minimum concentration as mentioned above shall be achieved after taking into account the possible leakage.

8.15.5 The fuel system shall be inter-locked with automatic fire extinguishing system so that the fuel supply is automatically shut off upon operation of the fire extinguishing system.

8.15.6 The emergency shut down controls shall provide tripping arrangement for over-speed, excessive vibration, flame-out and high exhaust temperature.

8.16 Water Supplies for Fire Fighting

8.16.1 The water supplies for fire fighting for Power Stations shall by and large, conform to the provisions contained in IS 9668 : 1990 and internal Hydrant System to IS 3844 : 1989 and External Hydrant System to IS 13039 : 1991. In addition, the following requirements shall also be taken into account.

8.16.1.1 The water supplies shall be planned on the basis of the requirement of the largest fixed fire extinguishing system demand plus the maximum demand from the hydrant mains of not less than 3 600 l/m for minimum of 4 hours duration for power stations falling under the category of classes 1 and 2, and for a minimum of 3-hours duration for the lower categories. Pumping capacity of the water supply system for fire fighting shall be based on the requirements mentioned above. It shall be ensured that no tapping is done from the fire

fighting mains to meet the requirements of process units or other services. The water mains shall be of adequate size as prescribed in relevant Indian Standards and shall be of wrought or mild steel (located and wrapped) pipe [galvanised and ungalvanised/UPVC/GRP/ Centrifugal cast (spun) iron/stainless steel]. If the mains are laid in high corrosive situations, it may be desirable to cathodic protection or coating and wrapping or both, if required.

8.16.1.2 The fire fighting pumps shall be of automatic starting with manual stopping and in conformity with IS 12469 : 1988.

8.16.1.3 The main reservoir shall have replenishment arrangement for complete re-filling operation which shall preferably be accomplished automatically.

8.16.1.4 The water mains shall be looped around the main power block and the pipe sizes shall be designed to cater to future expansion, needs.

8.16.1.5 The interior fire protection mains/risers shall be considered as an extension of the yard main and shall be provided with at least 2 valve connections with sectional control valves.

8.16.1.6 For the entire power station area only. 'Branch Pipe Universal' conforming to IS 2871 : 1983 shall be provided in the hose cabinets as spray nozzles having sheet-off capability shall be ideal for use on electrical equipment.

8.17 Manual Fire Alarm System

8.17.1 The entire plant area, including administrative and other buildings shall be provided with manual fire alarm system with call boxes deployed at various strategic locations. The system shall conform to the requirements given in IS 2189 : 1988. The control panels of the fire alarm system shall be located both in the plant control room as well as the fire station control room.

8.18 Lightening Protection

8.18.1 Lightening protection for the power station building and outdoor bulk oil storage areas shall be provided.

8.19 Emergency Power

8.19.1 All generator units require emergency power for operation of the turning gear, bearing oil pumps, seal oil pumps control units, besides meeting the requirements of emergency services like emergency lighting of all vital areas, means of escape, fire fighting pumps etc. A set of station batteries is a reliable supply for each load. Separate battery banker shall be provided for each unit and control centre. In addition, emergency stand by power is necessary in the form of diesel generator. These units will provide backup power to the station battery system and shall be designed to have capability of sufficient power for automatic and 'dead' start. In addition, emergency lamps with adequate illumination shall be provided at strategic locations which shall automatically operate on the failure of the mains supply.

9 FIRE PROTECTION FOR POWER PLANTS DURING CONSTRUCTION

9.1 The potential fire hazards during construction of Power Stations are considerable, and call for observance of stringent fire precautions. An above average level of fire protection is necessary during this phase due to life safety consideration of the large number of on-site personnel, high value of materials, and long duration of the construction period.

9.2 The availability of essential fire protection equipment, and minimisation of fire risks during construction activities are particularly important.

9.3 Construction schedule shall be co-ordinate so that planned permanent fire protection systems are installed and placed into services as soon as possible, at least prior to the introduction of any major fire hazards.

9.4 Minimum fire detection and fire extinguishing measures shall have to be provided for all locations where fire hazards are present, like storage of construction materials, storage of flammable materials, fire safety of welding and cutting and other building operations.

9.5 A fire trained supervisor shall be available at the construction site to ensure that all essential fire safety precautions are observed.

9.6 Where practical, the permanent fire hydrant system for the plant shall be installed well ahead of the completion of the project so that fire fighting water supplies shall be available even during construction period. Where this is not practicable, a minimum number of water tanks of not less than 1.25 lakh litres capacity with replenishing arrangements shall be available at strategic locations in the plant area which may be utilised as emergency water supply for fire fighting even after commissioning of the plant. A minimum of 2 hours duration water supply for fire fighting shall be available at the construction site.

9.7 Portable Fire Extinguishing System

9.7.1 In addition to the fixed water extinguishing systems, sufficient number of first aid fire fighting equipment like different types fire extinguishers shall be available for development at various fire risk areas as per IS 2190 : 1992. It is essential that the fire extinguishers are inspected, maintained in accordance with IS 2190 : 1992.

9.8 Maintenance of Fire Protection System/ Equipment

9.8.1 All the fire protection system/equipment or devices shall be inspected and maintained regularly to ensure for their safe operation at all times. The suggested schedule for each inspection, testing and maintenance is given in Table 2. Proper records of such maintenance shall be maintained.

10 REQUIREMENT OF MAJOR FIRE FIGHTING APPLIANCES/EQUIPMENT AND MANPOWER

10.1 On account of the reason that the power stations are generally located in relatively remote areas with hardly any other assisting fire service within reasonable distance, it is necessary for the power stations to be provided with an independent full-fledged and well maintained fire service of their own. Quick response to a fire outbreak by fire fighting service is vital as it makes a difference between a small tie or a major fire with catastrophic loss. In other words, power station fire brigades shall be in a position to tackle a fire, control and extinguish it before any damage is done.

10.2 Requirement of Major Fire Fighting Appliances/Equipments

10.2.1 *Major Appliance/Equipment for Power Stations of Installed Capacity Less than 50 MW* (*Class IV Power Stations*)

10.2.1.1 There may not be any need for any major fire fighting appliances for generating stations of this category provided the station is located within 8 km from the nearest municipal fire brigade possessing adequate fire fighting appliances. In case it is located at a further distance, or if the municipal fire appliances are not available, a Trailer Fire Pump conforming to IS 944 : 1979, or a higher capacity Portable Pump conforming to IS 12717 : 1989 shall be provided with skeleton fire staff.

10.2.1.2 The Power Station shall have a hydrant system, and also at least 3 Static water tanks deployed at strategic locations, of minimum 1.25 lakh litres capacity. The following shall be provided:

a) The v/m equipment, minimum of 25 lengths of 63 mm dia fire fighting hose of 20 m lengths each (15 lengths of type 'A' of IS 636 : 1988, and 10 lengths U/L hose conforming to IS 4927 : 1992);

b) Branch Pipe Universal, conforming to IS 2871 : 1983 — 4 No.

c) Foam-making Branches FB 5x — 2 No.

Table 2 Fire Equipment Inspection, Testing and Maintenance Frequency Schedule

(*Clause* 9.8.1)

Item	Weekly	Monthly	Semiannual	Annual
Supervisory Alarm Circuits	X	T		
Fire and Smoke Detectors		A	M/T	
Manual Fire Alarms		T	M/T	
Sprinkler Water Flow Alarms		M/T		
Sprinkler and Water Spray Systems	X	A	M	T
Foam Systems	X	A	M	T
Halogenated Agents, Chemical and CO_2 Systems	X	A	M	T
Fire Pumps and Booster Pumps	T	M		T
Water Tanks and Alarms	X	A	M/T	
P I V's and OS and Y Valves	X	X		M/T
Fire Hydrants and Associated Valves		X	M/T	
Fire Hose and Standpipes		X		
Portable Fire Extinguishers and Hose Nozzles		X		M
Fire Bridage Equipment		X		T
Fire Doors	X	T		
Smoke Vents		X		M/T
Emergency Lighting		X/T		
Radio Communication Equipment		T		

where

X = Inspection

T = Operational Test

M = Maintenance

A = Alarm Test (Transmitters)

NOTES

1 Testing of these systems should be done where possible after necessary precautions have been taken to eliminate any hazardous conditions which would result from the discharge of the extinguishing agent.

2 On systems where flow testing is not practical, a representative number of nozzles should be removed and checked for signs of blockage. In these cases the annual test will consist of a trip test of deluge preaction valves or valve operations as applicable.

3 This is a test to verify pump operability only.

4 Performance tests to be conducted under load to verify that the pumps meet design conditions.

5 Valves not locked to be inspected weekly. Valves locked or electrically supervised to be inspected monthly.

6 Testing of standpipes to include water flow at highest elevations.

d) Foam-making FB 10 x — 1 No.

e) Mechanical Foam compound [IS 4989 (Part 1) : 1985] — 200 L

f) BA sets (Positive Pressure type) — 4 No.

g) Blower and Exhauster for fire-fighting as per IS 941 : 1985 — 2 No.

h) Water Jel Blankets (Fire Blankets) (1.80 × 1.50 m) — 2 No.

j) Water Jel Blankets (for burns) (0.90 × 0.75 m) — 4 No.

k) Water Jel Container — 1 No.

10.2.2 The above scales of equipment and fire protection systems shall be equally applicable to load despatch centres in the grid systems, and also for major distribution stations (220 kV substations and abo).

10.2.3 *For Generating Stations of Installed Capacity from 50 MW to 199 MW (Class III)*

The following equipments shall be provided:

Type of Appliances	*No.*	*Manning Pattern*
1. Foam and CO_2 C/T (Conforming to IS 951 : 1987)	1	Round the clock
2. Water Tender Type 'B' conforming to IS 950 : 1980	1	Reserve
3. Large capacity portable pump conforming to IS 12717 : 1989	1	Reserve
4. Portable Water/Foam Monitors	2	(No separate manpower required)
5. B A sets (Positive Pressure type)	8 sets	
6. High Pressure Charging sets (for B A Sets)	1 No.	(at HQ)
7. Blower and Exhauster for fire fighting, conforming to IS 941 : 1985	2 No.	
8. Water Jel Blankets (1.80 × 1.50 m)	4 No.	
9. Water Jel Blankets (0.90 × 0.75 m)	8 No.	
10. Water Jel Container	2 No.	
11. Foam compound	1 000 litres	
12. Dry Chemical Powder Trailer of 150 kg capacity	1 No.	

10.2.4 *For Major Power Stations Having Installed Capacity Over 200 MW up to 999 MW (Class II)*

The following equipments shall be provided:

Type of Appliances	*No.*	*Manning Pattern*
1. Foam and CO_2 C/T	1	Round the clock
2. Dry Chemical Tender 2 000 kg conforming to IS 10993 : 1984	1	Round the clock
3. Water Tender type 'B'	1	
4. High Capacity Portable Pump (conforming to IS 12717 : 1989)	1	Reserve
5. Portable Water/ Foam Monitors	2	No separate manpower required
6. 13.5 m Light alloy extension ladder with props	1	No separate manpower required
7. B A sets (Positive Pressure type)	18	
8. High Pressure Charging Set	1	
9. Trailer/Portable Flood Light Unit	1	
10. Jeep 4 × 4	1	
11. Blower and Exhauster	4	
12. Water Jel Blankets (1.80 × 1.50 m)	8 No.	
13. Water Jel Blankets (0.90 × 0.75 m)	16 No.	
14. Water Jel Container	4 No.	
15. Foam Compound	20 000 litres	
16. Dry Chemical Powder Trailer of 150 kg capacity	1 No.	
17. High Expansion Foam Generator	1 No.	

10.2.5 *Super Thermal/Power Stations Having Installed Capacity Exceeding 1 000 MW (Class I)*

The following equipments shall be provided:

Type of Appliances	*No.*	*Manning Pattern*
1. Foam and CO_2 C/T	1	Round the clock
2. Water Tender type 'B'	1	Round the clock

Type of Appliances	*No.*	*Manning Pattern*
3. Dry Chemical Tender 2 000 kg	1	Round the clock
4. Emergency Tender conforming to IS 949 : 1985	1	As reserve
5. Hydraulic Platform 22 m Height (indigenously fabricated)	1	As reserve
6. Portable Water/Foam Monitors	4	Reserve
7. 13.5 m light alloy extension ladders	2	
8. Trailer/Portable Flood Light Unit	1	
9. Jeep 4 × 4	1	
10. B A sets (Positive Pressure type)	24	
11. High Pressure Charging Set	1 set	
12. Blower and Exhauster	4 No.	
13. Water Jel Blankets (1.80 × 1.50 m)	16 No.	
14. Water Jel Blankets (0.90 × 0.75 m)	32 No.	
15. Water Jel Containers	8 No.	
16. Foam Compound	50 000 litres	
17. Dry Chemical Powder Trailer of 150 kg capacity	1 No.	
18. High Expansion Foam Generator	2 No.	

NOTE — Considering the large area of the Super Thermal Power Stations and also for facilitating quick turnouts it may be necessary to deploy the operational equipment at two fire stations, a main Fire Station and Sub-Fire Station, both having update communication arrangement to help easy mobilisation in case of emergency.

10.3 Requirement of Manpower for Manning the Fire-fighting Appliances

10.3.1 The manpower requirements has to be based on the number of fire fighting appliances to be kept manned round the clock (day and night). The scales of manpower required for each type of appliance shall be as per the norms prescribed by the Standing Fire Advisory Council of the Government of India and also as per guidelines given in IS 6070 : 1983. The fire crew, computed as per the scales prescribed above shall work in three shifts. A reserve of $33\frac{1}{3}$ percent of the total strength required for shift duties shall also be provided, to cater for leave, absence, training requirements, etc. it has to be ensured that the designated strength of crew for each shift is available for speedy turn at all times for quick response to fire calls.

10.3.2 For generating stations of installed capacity less than 50 MW the following minimum manpower shall be maintained:

Assistant Station Officer — 1

Leading Fireman (L/F)/
Fireman (F/M) — 1 (per shift)

The norms shall apply for manpower requirements for major substations also.

10.3.2.1 In addition to the full time fire fighting staff, selected members of the security/plant staff shall have also to be imparted basic training in fire fighting/fire prevention duties who may also be utilised for fire fighting duties in emergency.

10.3.3 For Class III, Class II, and Class I category Power Stations the manpower requirements shall be computed as per scales laid down by the Standing Fire Advisory Council/ IS 6070 : 1983.

10.3.4 In addition to the above, one qualified fire officer of senior rank shall also be necessary for each power station, depending upon the category, as overall incharge of the Power Station Fire Brigade for ensuring proper training, control and supervision of the entire fire fighting staff. He shall also be responsible for all the fire protection arrangements in the Power Station.

10.3.5 Considering the large area of Super-thermal Power Stations, facilitate quick turn out it may be necessary to deploy the operational manpower at two Fire Stations — a Main Fire Station and a Sub Fire Station, both having up-to-date communication facilities to help easy mobilisation in case of emergency.

10.4 Fire Stations

10.4.1 Power Stations authorised for full time Fire Brigades with major fire fighting appliances shall have well designed Fire Stations for housing appliances and fire fighting staff. They shall be so located that the response time for fire appliances are kept to a minimum not to exceed 5 minutes. The design of the Fire Stations shall conform to the Standard Fire Station requirements as prescribed by the Standing Fire Advisory Council.

11 FIRST-AID FIRE FIGHTING

In the entire Power Station area, first-aid fire fighting equipment like fire extinguishers shall be deployed. It is essential that these extinguishers are periodically inspected and maintained in accordance with the provisions contained in IS 2190 : 1991.

12 FIRE EMERGENCY ORDERS

12.1 Each Power Station shall have a Fire Emergency Plan formulated so as to facilitate organised actions to be taken in case of fire by staff at various levels, during day-light hours as well as night. These orders shall also contain the instructions on fire prevention measures and the fire fighting organisation.

12.1.1 The Fire Emergency Orders shall also contain a Mutual Aid Scheme for mobilising assistance by way of equipment and trained manpower from neighbouring units, if available.

12.2 Periodical mock fire drill shall be conducted so as to check the alertness and efficiency of Plant staff as well as fire fighting staff, and records maintained.

ANNEX A

(*Clause* 2)

LIST OF REFERRED INDIAN STANDARDS

IS No.	*Title*	*IS No.*	*Title*
636 : 1988	Non-percolating flexible fire fighting delivery hose (*third revision*)	1646 : 1982	Code of practice for fire safety of buildings (general): Electrical installations (*first revision*)
941 : 1985	Specification for blower and exhauster for fire fighting (*second revision*)	2175 : 1988	Specification for heat sensitive fire detectors for use in automatic fire alarm system (*second revision*)
944 : 1979	Functional requirements for 1 800 l/min trailer pump for fire brigade use (*second revision*)	2189 : 1988	Code of practice for selection, installation and maintenance of automatic fire detection and alarm system (*second revision*)
949 : 1985	Functional requirements for emergency (rescue tender) for fire brigade use (*second revision*)	2190 : 1992	Code of practice for selection, installation and maintenance of portable first-aid fire extinguishers (*third revision*)
950 : 1980	Functional requirements for water tender type B for fire brigade use (*second revision*)	2309 : 1989	Code of practice for the protection of buildings and allied structures against lighting (*second revision*)
951 : 1987	Functional requirements for crash tender for air fields (*third revision*)	2871 : 1983	Specification for branch pipe, universal for fire fighting purposes (*first revision*)
1641 : 1988	Code of practice for fire safety of buildings (general): General principles of fire grading and classification (*first revision*)	3181 : 1978	Fire resistant conveyor belting for underground use in coal mines (*first revision*)
1642 : 1989	Code of practice for fire safety of buildings (general): Details of construction (*first revision*)	3594 : 1991	Code of practice for fire safety of industrial buildings: General storage and warehousing including cold storage (*first revision*)
1643 : 1988	Code of practice for fire safety of buildings (general): Exposure hazard (*first revision*)	3595 : 1984	Code of practice for fire safety of industrial buildings: Coal pulverizers and associated equipments (*first revision*)
1644 : 1988	Code of practice for fire safety of buildings (general): Exit requirements and personal hazard (*first revision*)		

IS No.	*Title*
3844 : 1989	Code or practice for installation and maintenance of internal hydrants and hose-reel on premises (*first revision*)
4927 : 1992	Specification for unlined flax canvas hose for fire fighting (*first revision*)
4989 (Part 1) : 1985	Specification for foam concentrate (compound) for producing mechanical foam for fire fighting: Part 1 Protein foam (*second revision*)
4989 (Part 2) : 1984	Specification for foam concentrate (compound) for producing mechanical foam for fire fighting: Part 2 Aqueous film forming foam (AFFF)
4989 (Part 3) : 1987	Specification for foam concentrate (compound) for producing mechanical foam for fire fighting:Part 3 Fluoro protein foam
6070 : 1983	Code of practice for selection, operation and maintenance of trailer fire pumps, portable pumps, water tenders and motor fire engines (*first revision*)
8633 : 1977	Technical requirements for location of boilers installations and boiler houses
9668 : 1990	Code of practice for provision and maintenance of water supplies and fire fighting
10993 : 1984	Functional requirements for 2 000 kg dry powder tender for fire brigade use
11006 : 1984	Flash back arrestor (flame arrestor)
11101 : 1984	Specification for extended branch pipe for fire brigade use
11360 : 1985	Specification for smoke detectors for use in automatic electrical fire alarm system
12459 : 1988	Code of practice for fire-protection of cable runs
12469 : 1988	Pumps for fire fighting applications
12717 : 1989	Functional requirements of fire fighting equipment — High capacity portable pump-set (1 000-1 600 l/min)
12777 : 1989	Fire safety — Flame spread of products — Method for classification
13039 : 1991	Code of practice for provision and maintenance of external hydrant system
12835 (Part 1) : 1989	Code of practice for design and installation of fixed fire extinguishing system: Part 1 Low expansion foam

ANNEX B

(*Foreword*)

COMMITTEE COMPOSITION

Fire Safety Sectional Committee, CED 36

Chairman	*Representing*
SHRI J. N. VAKIL	Tariff Advisory Committee, Bombay
Members	
SHRI K. RAVI (*Alternate* to Shri J. N. Vakil)	
DR R. K. BHANDARI	Institution of Engineers (India), Calcutta
SHRI R. P. BHATLA	Engineers India Ltd, New Delhi
SHRI M. M. KAPOOR (*Alternate*)	
SHRI S. N. CHAKRABORTY	Tariff Advisory Committee, Madras
SHRI P. K. MAJUMDAR (*Alternate*)	
SHRI P. K. CHATTERJEE	Ministry of Defence (DR & DO), New Delhi
SHRI V. K. SHARMA (*Alternate*)	
CHIEF FIRE OFFICER	Municipal Corporation of Bombay, Bombay
SHRI D. PADMANABHA	Tata Consulting Engineers, Bombay
SHRI G. P. MONNAIAH (*Alternate*)	
DEPUTY CHIEF ENGINEER (P & D)	Northern Railway, Ministry of Railways, New Delhi
EXECUTIVE ENGINEER (P & D) (*Alternate*)	
SHRI S. K. DHERI	Municipal Corporation of Delhi, Delhi
SHRI R. C. SHARMA (*Alternate*)	
SHRI S. R. DORAISWAMY	Ministry of Defence (Engineer-in-Chief's Branch), New Delhi
SHRI S. N. LAKSHMANNA (*Alternate*)	
FIRE ADVISER	Ministry of Home Affairs, New Delhi
SHRI P. N. GHOSH	In personal Capacity, New Delhi
SHRI C. P. GOSAIN	Central Public Works Department, New Delhi
SHRI S. C. GUPTA	Lloyds Institution (India) Pvt Ltd, New Delhi
SHRI SANJEEV ANGRA (*Alternate*)	
SHRI M. R. KAMATH	Mather and Platt Ltd, Bombay
SHRI K. R. EASWARAN (*Alternate*)	
SHRI V. M. MADGE	The Hindustan Construction Co Ltd, Bombay
SHRI A. B. PHADKE (*Alternate*)	
BRIJ MALHOTRA	State Bank of India, Bombay
SHRI G. B. MENON	In Personal Capacity, Delhi
SHRI S. R. NARASIMHAN	Central Electricity Authority, New Delhi
SHRI RAJENDRA SINGH (*Alternate*)	
PRESIDENT	Institution of Fire Engineers India, New Delhi
SHRI V. M. RANALKAR	Ministry of Petroleum and Natural Gas, New Delhi
SHRI HARISH R. SALOT	Vijay Fire Protection System Pvt Ltd, Bombay
SHRI RAJESH K. SALOT (*Alternate*)	
SHRI N. L. N. SHARMA	Bharat Heavy Electricals Ltd, Hyderabad
SHRI M. L. KHURANA (*Alternate*)	
DR T. P. SHARMA	Central Buildings Research Institute (CSIR), Roorkee
DR GOPAL KRISHAN (*Alternate*)	
SHRI R. SUNDARARAJAN	National Thermal Power Corporation Ltd, New Delhi
SHRI S. K. CHATTOPADHAYAY (*Alternate*)	
SHRI SUNLL DAS	Metallurgical Engineering Consultants (India) Ltd, Ranchi
SHRI R. N. CHACHRA (*Alternate*)	
SHRI M. S. TYAGI	Ministry of Labour, Kanpur
SHRI P. K. SAKSENA (*Alternate*)	
SHRI D. VENUGOPAL	Loss Prevention Association of India Ltd, Bombay
SHRI T. V. MADHUMANI (*Alternate*)	
SHRI Y. R. TANEJA, Director-in-Charge (Civ Engg)	Director General, BIS (*Ex-officio Member*)

Member Secretary

SHRI HEMANT KUMAR
Joint Director (Civil Engineering), BIS

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act*, 1986 to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director (Publications), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards : Monthly Additions'.

This Indian Standard has been developed from Doc : No. CED 36 (4775)

Amendments Issued Since Publication

Amend No.	Date of Issue
Amd. No. 1	February 2005

भारतीय मानक ब्यूरो
Bureau of Indian Standards
सी. डी. रोम मुद्रण
CD ROM PRINT
मुंबई (Mumbai)

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002.
Telephones: 323 01 31, 323 33 75, 323 94 02

Telegrams: Manaksanstha
(Common to all offices)

Regional Offices:

		Telephone
Central	: Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	323 76 17 323 38 41
Eastern	: 1/14 C. I. T. Scheme VII M, V. I. P. Road, Kankurgachi KOLKATA 700054	337 84 99, 337 85 61 337 86 26, 337 91 20
Northern	: SCO 335-336, Sector 34-A, CHANDIGARH 160022	60 38 43 60 20 25
Southern	: C. I. T. Campus, IV Cross Road, CHENNAI 600113	235 02 16, 235 04 42 235 15 19, 235 23 15
Western	: Manakalaya, E9 MIDC, Marol, Andheri (East) MUMBAI 400093	832 92 95, 832 78 58 832 78 91, 832 78 92

Branches : AHMEDABAD. BANGALORE. BHOPAL. BHUBANESHWAR. COIMBATORE. FARIDABAD. GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. KANPUR. LUCKNOW. NAGPUR. NALAGARH. PATNA. PUNE. RAJKOT. THIRUVANANTHAPURAM. VISHAKHAPATNAM.

ANNEXURE P/30

कार्यालय, मुख्य कारखाना निरीक्षक, झारखंड (राँची) 834 002
(Email id: cifoffice123@gmail.com / cifjhr2020@gmail.com)
Letter no: 286

प्रेषक,

मुख्य कारखाना निरीक्षक, झारखंड
श्रम भवन, राँची

सेवा में,

दखलकार / कारखाना प्रबंधक
मेसर्स मैथन पावर लिमिटेड, दाम्भूई, निरसा, धनबाद

राँची / दिनांक: 30.03.2021

विषय: मेसर्स मैथन पावर लिमिटेड, दाम्भूई, निरसा, धनबाद (निबंधन संख्या: FCA1535400248101) कारखाना भवन का झारखंड कारखाना नियमावली 1950 के नियम 3A के अन्तर्गत निर्गत किये गये कुल सैंतालिस (47) स्थाईत्व प्रमाण पत्रों {Stability test certificates

(i) KKE/STAT/2021/Stability/6006 to 6015 date 22.03.2021 (Total 10 Certificates Lot 1)
(ii) KKE/STAT/2021/Stability/6016 to 6025 date 22.03.2021 (Total 10 Certificates Lot 2)
(iii) KKE/STAT/2021/Stability/6026 to 6035 date 22.03.2021(Total 10 Certificates Lot 3)
(iv) (a) KKE/STAT/2021/Stability/6036 to 6040 date 22.03.2021(Total 05 Certificates Lot 4)
(b) KKE/STAT/2021/Stability/6042 to 6046 date 22.03.2021(Total 05 Certificates Lot 4)
(v) KKE/STAT/2021/Stability/6047 to 6053 date 22.03.2021(Total 07 Certificates Lot 5)

Issued by M/s K.K. Engineering, Ranchi के संबंध में ।

प्रसंग: Your letter Ref: MPL/FY 21/21-03/019 दिनांक 22.03.2021

महाशय,

उक्त विषय एवं प्रसंग का निदेश किया जाय ।

झारखंड कारखाना नियमावली 1950 के नियम 3A के अन्तर्गत विहित प्रपत्र 34 (Prescribed Form 34) में उक्त प्रमाण पत्रों को निर्गत किया गया है उपर्युक्त निर्गत स्थायित्व प्रमाण पत्रों (Stability Certificates) को नियमानुसार प्रेषित किया गया जिसकी स्वीकार्यता निम्नांकित शर्त्तों के साथ दिया जाता है ।

(क) कारखाना भवन के प्रत्येक संरचना का अनुरक्षण / पेन्टिंग आवश्यकता के अनुसार किया जायेगा ।

(ख) किसी संरचना पर अभिकल्पित सुरक्षित लोड क्षमता (Designed Safe Load capacity) & Load as per Dynamic model analysis report से अधिक लोड किसी परिस्थिति में नहीं दिया जायेगा ।

(ग) निर्धारित काल अवधि के बाद समुचित जाँच सुनिश्चित करना अनिवार्य होगा ।

(घ) सक्षम व्यक्ति द्वारा निर्धारित शर्तों का अनुपालन प्रभावी ढंग से करना अनिवार्य होगा।

भवदीय

मुख्य कारखाना निरीक्षक, झारखंड
श्रम भवन, राँची

ANNEXURE P/31A

OFFICE OF CHIEF INSPECTOR OF FACTORIES. BOKARO

LETTER NO - 02

From,

Dy Chief Inspector of Factories,
Bokaro

To,

The Occupier,
Sri. Ashsh Khanna
M/s MAITHON POWER LIMITED
Address: Villaage- Dambhui,Post- Barbindia
Ps: Nirsa
District: Dhanbad, Jharkhand
Pin: 828205

(Kind Atten: Shri Vijayant Ranjan Factory Manager,)

Jamshedpur, Dated 24.01.24

Sub: - Compliance of provision under Factories Act. And Rules made there under.

महाशय

उपर्युक्त प्राविषय के संदर्भ में सूचित करना है कि आपका कारखाना कारखाना अधिनियम 1948 कि धारा 2(cb) के अनुसार परिसंकटग्रस्त कारखानों की श्रणी में चिन्हित है । आपके कारखानें से संबंधित निम्नलिखित जॉच प्रतिवेदन कि आवश्यकता है अतः आप से आग्रह है कि कारखानें से संबंधित निम्नलिखित जानकारी /प्रतिवेदन यथासीघ्र अघोहस्ताक्षरी के कार्यालय में प्रस्तुत करना सुनिश्चित करेंगे ।

1. Safety Audit Report. 2024
2. I. The dust, vibration & noise level test report.
   II. Time weighted mean average PPM level in work site
3. The Fatigue & Dynamic model analysis of structure, column & load bearing.
4. Medical Examination: {Refer Section 41C of the Factories Act and Rule 62 NH }
   The medical test report in form no-24 (Refer Rule 62NH (1)(C) } and form no-33 {Refer Rule 62NH (2)} .
5. Latest Map Approval of the Factory Building: {Refer Section 6 and Rule 3A }
6. Total Horse Power installed in plant- DG- and Transformer -

विश्वासभाजन

24.01.24

उप मुख्य कारखाना निरीक्षक
बोकारो ।

REPORT OF

SAFETY AUDIT

CONDUCTED AT

MAITHON POWER LIMITED, JHARKHAND

{ A joint venture of TATA POWER & DVC}

Coast of River Barakar, North Dombhuin village, Taluka Maithon, Dhanbad, Jharkhand 828205

Conducted By:- Progressive Industrial Consultant

1st Floor, Sarswati Bhawan, Kalpanapuri Chowk, Adityapur, Jamshedpur, Dist: Saraikla – Kharswan, Jharkhand : 832 109.

E-mail: Info@picjsr.com

Tel: +91 657 7966424, +91 99555 99112, 98016 21786

ACKNOWLEDGEMENT

We express our sincere thanks to the management and employees of MAITHON POWER LIMITED, NIRSA, JHARKHAND, for their co-operation and unstinted help without which SAFETY AUDIT could not have been possible. The courtesy and cordiality extended to the audit team is highly appreciated.

Progressive Industrial Consultants

TABLE OF CONTENT

SL. NO.	TITLE	PAGE NO.
PART - 1	GENERAL	4
1.1	Introduction	4
1.2	Audit Scope	5
1.3	Audit Objectives	6
1.4	Audit Team	6
1.5	Audit Methodology	6-8
1.6	Audit Date	8
1.7	General Information of the Factory	9-10
1.8	Key Storage Details	10
1.9	Workers & Shift	11
2.0	Audit Report	11
PART - 2	EXECUTIVE SUMMARY	12-14
PART - 3	AUDIT OBSERVATIONS & RECOMMENDATIONS	15-47
1.1	Safety Management System Audit – Element wise	15-32
1.2	Plants Area Visited and Its Details with Audit Evidence (Photographs)	33-47
PART- 4	AUDIT CONCLUSION	48
PART - 5	ANNEXURES	49
	OH&S Policy	49
	EHS Organization Structure	50

PART -1
GENERAL

1.1 INTRODUCTION

Safety audit is on improvement over the conventional safety inspection, it encompasses every components of the total system, that is, the management's safety policy, safety training, features of the processes, storages, raw materials including supporting raw materials and that of the design, layout and construction of the plant, operating procedures, personal protection standard, accident records, emergency procedures etc.

In other words, this is a method which will reasonably give an indication as to how well a factory's program are working in all its aspects, how hazards are being recognized and controlled and how unsafe acts of work-methods are being eliminated.
The idea is that top management must take an active and interested part in the development and operation of the safety programs.

The broad objectives of the audit are to study critically the safety efforts being made by the management to prevent incidents and to ensure the extent of compliance of the safety rules and regulations.

The Management of Maithon Power Limited, Dhanbad requested Progressive Industrial Consultants, Jamshedpur to conduct a comprehensive safety audit of their work site at Maithon, Nirsa, District Dhanbad, Jharkhand - 828205. Accordingly, experts from Progressive Industrial Consultants conducted the occupational safety & health (OSH) audit from. 14th June 2024 to 15th June 2024. The support extended by the senior officials and the other employees of Maithon Power Limited, Jharkhand during the audit and in the preparation of this document is well appreciated.

1.2 AUDIT SCOPE

The scope of the OSH audit is to cover the following aspects:

- ✓ Identification of areas of OSH management system that require improvement;
- ✓ Assessment of effectiveness of the measures taken for controlling OSH hazards;
- ✓ Recommendation of measures to strengthen the OSH system.

The OS&H audit was carried out with reference to the applicable principal safety statutes namely, the Factories Act, 1948 and the Jharkhand Factories Rules, 1950; the Electricity Act, 2003 and the Electricity Rules, 2005; Static and Mobile Pressure Vessels (unfired) Rules 1981; the Gas Cylinders Rules, 2004; Manufacture, Storage &Import of Hazardous Chemicals (MSIHC) Rules, 1989; the Air Act, 1981 and the Rules framed there under; the Water Act, 1974 and the Rules framed there under; etc.; relevant standards & codes of practice; and good engineering practices in the industry.

IS 14489:1998 – "Code of Practice on Occupational Safety and Health" is used as a guide in the selection of key elements of the audit system and the records to be Examined during the audit. It was also used to prepare the audit checklist. The audit, in particular, covered OSH management system and technical aspects required for the safe operation of the plant.
This standard does not cover audit of environmental management system for which a separate Indian Standard IS/IS0 14001 is available.
The important elements of OH&S system, which were Examined during the audit, are:

- Access & plant layout
- Physical condition of the plant & effectiveness of existing controls
- Health and safety policy
- Safety organization, Safety committee & Safety budget
- Safety education & training
- Safety inspection
- Accident/Incident reporting, investigation and analysis
- First aid and Occupational Health Centre
- Built in safety system
- Lifting machines & lifting tackles
- Personal protective equipment
- Fire protection
- On site emergency preparedness
- Compliance evaluation with statutory requirements
- Illumination, Ventilation and Noise

1.3 AUDIT OBJECTIVES

The audit was conducted with the following objectives:

- To carry out a systematic, critical appraisal of all potential hazards involving personnel, plant, services and operation method.
- To determine organization's effectiveness of compliance evaluation procedure for the Health & Safety related legal requirements and those of the company's written safety policies, objectives and progress.
- To review and critically assess the existing safety programs to prevent and control the hazards in the plant with the focus on finding adequacy.
- To identify the opportunities for improving effectiveness for implementation of safety systems, procedures, plans and programs and also for improving the existing procedures.

1.4 Audit Team

The audit was conducted by:

a) MR. Shashi Kant Singh, Lead Auditor, Progressive Industrial Consultants, Jamshedpur.

b) MR. Anish Kumar Singh, Auditor from Progressive Industrial Consultants, Jamshedpur

c) MR. Nikhil Bajaj, Auditor from Progressive Industrial Consultants, Jamshedpur

1.5 Audit Methodology

1.5.1 The objectives for carrying out the safety audit are to assess the effectiveness of the safety and health systems in the plant, identification of the areas of improvement and checking conformity of compliance evaluation procedure of the systems and procedure with the statutory requirements in force.

The audit was conducted on sample basis strictly in accordance with the guidelines provided in IS: 14489:1998 (code of practice on occupational safety and health audit) with due emphasis on:

a) Existing safety management system.
b) Implementation of statutory acts and rules in force and compliance to Annex C (clause 4.3.3.1) of IS 14489: 1998.
c) Identification of potential hazards in the facility.
d) On site & off-site emergency plan and emergency procedures
e) Preventive maintenance program
f) Safety training/ education program for employees
g) Environment management
h) Hazardous waste

1.5.2 Opening Meeting:

Opening Meeting was organized by MR. Amit Chatterjee along with head safety and other Departmental Heads of Maithon Power Ltd., Dhanbad. The meeting was held on 14th June 2024 at 10.00 AM in the Conference room.

Sri. Shashi Kant Singh and Mr. Anish Kumar Singh, Lead Auditor discussed about the scope and methodology of safety audit. After the opening meeting, plant visit schedule was discussed and finalized with the EHS team.

1.5.3 The audit assignment is being carried out at the request of the management of Maithon Power Limited, Jharkhand. This shows their keenness to ensure compliance with all the applicable safety provisions under the statutes and make their plant safer. The audit process was coordinated by Maithon Power Limited, Jharkhand.

1.5.4 The safety audit is not an inspection of each and every activity, but is a sample inspection of the workplace and checking of key documents. The coverage will be limited to the field visits to the plant and departments or areas planned to be inspected by the management, information provided to the audit team, and documents produced for verification.

1.5.5 The safety audit is not a fault-finding exercise but is an identification of areas for improvement in OSH, based on observations, discussions with personnel at various levels, and reference to the documents & records made available for verification.

1.5.6 After completing the opening meeting, plant visit schedule was discussed with the

team and finalized.

1.5.7 The auditors carried out field visits along with the coordinators concerned. During the visits to work areas, the auditors made observations with reference to the OHS hazards. During the field visits, the auditors discussed with site personnel at various levels and collected information on the job activities and conditions in the areas of concern.

1.5.8 Information on the OSH was also collected through examination of documents and records. The information gathered through interviews of the site personnel was verified through scrutiny of the records.

1.5.9 The audit observations made through field visits, interviews and examination of documents & records.

1.5.10 Closing Meeting:

After completion of the audit, closing meeting was held in the in the Conference room on 15.06.2021 at 5.00 PM along with head safety and his Team.

The lead auditor highlighted salient audit observations & recommendations.

1.6 Audit Date

The Safety audit was carried out at 10.15 AM to 4.30 PM on 14.06.2024 &15.06.2024 at Maithon Power Limited, Jharkhand plant along with Maithon Power Ltd team.

1.7 General Information of the Factory

Maithon Power Limited (MPL) is a coal-based electricity generation thermal power plant. It is joint venture of Tata power & Damodar valley corporation. The venture implemented 1050 MW (2 X 525 MW) in Nirsa, District -Dhanbad in the Indian state of Jharkhand. This project is India's first 525 MW unit thermal power plant and the first PPP venture plant in the country. This project is India's first public private power project. Area of Maithon Power Ltd is approximately 1116 acres.

MPL has two Units with installed capacity of 1050 MW (2X 525 MW). Unit # 1 was commissioned in September 2011 and Unit # 2 started generation in July 2012.

Coal is transported both by Road and Rail. About 70 % of coal is procured by Road and 30% is transported by Rail. Coal handling Plant is responsible for unloading, stacking and dispatching coal to crusher house from where Pulverized coal is fed to boiler.

Other dept are Towers, Steam Turbines and Generators, 400 KV switch yard, DM Plant, Hydrogen generation and bottling plant, Chlorination plant, LDO/HFO Tank farm, Compressor house, DG Sets, Water Pump house including Fire Water Pump including Fire Water Pump house, Fire station, OHC etc.

INNOVATIVE TECHNOLOGY:

THE HUMAN TOUCH: At, the greatest accomplishment is a fully dedicated and trained manpower and a total quality management works ethos. It is largely because of the participative work culture and unmatched excellence in manpower and management that of MAITHON POWER LIMITED, JHARKHAND is rapidly moving ahead by leaps and bounds.

CERTIFICATION: M/s Maithon Power Limited system is ISO 45000,9000 certify company

1.7 GEOGRAPHICAL BACKGROUND

Location and Topography: -

The assessment site is located at Maithon, Nirsa Dhanbad, in Jharkhand. Its geographical co-ordinates are Latitude 23°47'N and Longitude 86°43'E/ with mean sea level 456 ft above. The nearest Kumardhubi Railway station is about 9 km from the Plant. The town is Nirsa which is located about 2.0 km distance in north-west direction from the Maithon Power Limited plant. The district Head Quarter- Dhanbad is located about 35.0 km distance from the Maithon Power Limited Plant site. The nearest airport "Dhanbad Airport" at Dhanbad, Jharkhand is located about 35.0 km distance from the Maithon Power Limited plant. Maithon dam is about 9.5 km distance in from the Plant Location. Damodar is the most important river of this reason. Damodar flows for about 77km through the district -Dhanbad being joined by the Barakar at its eastern border near Chirkunda.

Population: -

Population of Dhanbad district is about 2684487 (as per 2011 census), Density 3400/sq.Miles. MPL nearby population is about 29343 living in around 21 villages.

Climate: -

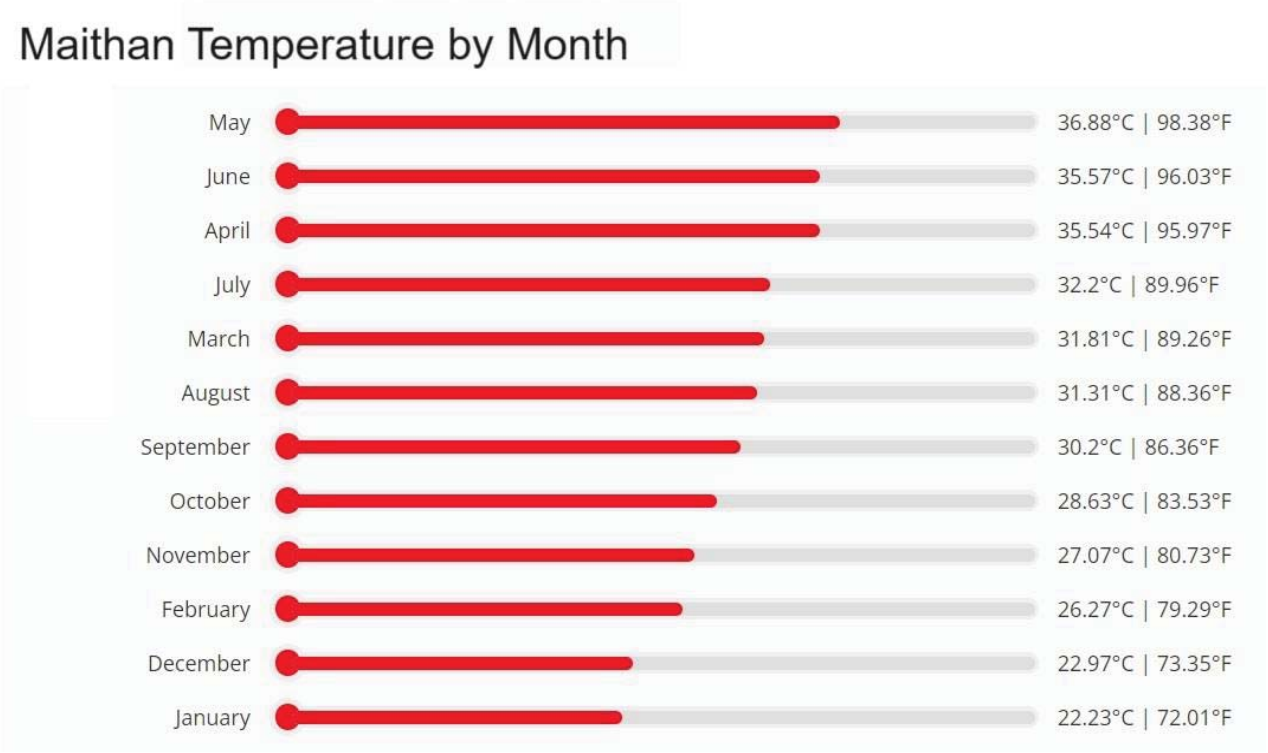
Meteorological features of the Chotanagpur plateau can broadly be summarised as follows

- ✓ Temperature
  - ➢ Mean monthly during summer : 32 – 42 deg. C
  - ➢ Mean monthly during winter : 14 – 24 deg. C
  - ➢ Absolute maximum : 46 – 48 deg. C
  - ➢ Absolute minimum : 2 deg. C

- ✓ Rainfall
  - ➢ Mean annual :1020mm
  - ➢ Mean monthly (rainy season) :230mm

- ✓ Humidity
  - ➢ Maximum relative humidity :85%(July -September)
  - ➢ Minimum relative humidity :10%(march -April)

- ✓ Wind
  - ➢ Mean velocity : 3 – 9 kmph
  - ➢ maximum velocity : 140 Kmph
  - ➢ Predominated wind direction : North westerly direction Nov to may
    South Easterly direction July to October



Climate Maithan: Weather by Month

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Nov	Oct	Dec	Year
Record high °C (°F)	31.0 (87.8)	36.0 (96.8)	40.0 (104.0)	45.0 (113.0)	47.0 (116.6)	44.0 (111.2)	38.0 (100.4)	37.0 (98.6)	35.0 (95.0)	36.0 (96.8)	33.0 (91.4)	31.0 (87.8)	47.0 (116.6)
Average high °C (°F)	25.66 (78.19)	29.65 (85.37)	34.72 (94.5)	38.6 (101.48)	40.19 (104.34)	37.97 (100.35)	34.24 (93.63)	33.29 (91.92)	32.4 (90.32)	31.0 (87.8)	30.12 (86.22)	26.24 (79.23)	32.84 (91.11)
Daily mean °C (°F)	22.23 (72.01)	26.27 (79.29)	31.81 (89.26)	35.54 (95.97)	36.88 (98.38)	35.57 (96.03)	32.2 (89.96)	31.31 (88.36)	30.2 (86.36)	28.63 (83.53)	27.07 (80.73)	22.97 (73.35)	30.06 (86.11)
Average low °C (°F)	16.59 (61.86)	19.91 (67.84)	24.56 (76.21)	27.66 (81.79)	29.29 (84.72)	29.97 (85.95)	27.76 (81.97)	27.2 (80.96)	26.21 (79.18)	23.88 (74.98)	21.39 (70.5)	17.26 (63.07)	24.31 (75.76)
Record low °C (°F)	13.0 (55.4)	15.0 (59.0)	16.0 (60.8)	19.0 (66.2)	18.0 (64.4)	23.0 (73.4)	23.0 (73.4)	25.0 (77.0)	20.0 (68.0)	19.0 (66.2)	18.0 (64.4)	11.0 (51.8)	11.0 (51.8)
Average precipitation mm (inches)	1.96 (0.08)	8.06 (0.32)	6.6 (0.26)	18.94 (0.75)	24.78 (0.98)	48.15 (1.9)	117.49 (4.63)	101.79 (4.01)	102.01 (4.02)	42.26 (1.66)	0.1 (0.0)	5.46 (0.21)	39.8 (1.57)
Average precipitation days (≥ 1.0 mm)	0.36	1.0	1.27	2.45	2.27	4.55	7.0	7.73	6.09	3.09	0.0	0.55	3.03
Average relative humidity (%)	41.86	37.39	29.55	38.07	44.19	52.32	67.88	73.88	75.43	65.99	47.32	41.98	51.32
Mean monthly sunshine hours	8.49	8.49	10.78	12.68	13.19	12.98	11.54	11.42	9.44	10.28	10.19	8.48	10.66

Departments/Sites Visited

1. Coal Handling Plant
2. CCR and TG Building
3. Boilers and Ash Handling Plant
4. Acid and Alkali Storage areas, Chlorination plant
5. LDO / HFO storage area
6. Occupation Health Centre
7. Transformer Area and 400 KV switch yard
8. Mechanical Workshop and Compressor house
9. Fire Department and Hydrant Pump House
10. Hydrogen generation and bottling plant
11. Safety Department
12. Road and security Gate

1.8 List of Bulk chemicals

List of Bulk Chemicals

Sl. no.	Material Code.	Name of chemical	UoM	Pack	Nos.	Qty.
1	3000016495	ALUM	KG	20	1025	20500
2	3000016670	POLY ELECTROLYTE	KG	50	39.5	1975
3	3000016393	POLY (NALCO)	KG	25	14	350
4	3000016491	TSP	KG	5	34	170
5	3000016340	PAC	KG	25	220	5500
6	3000016508	AMMONIA	L	5	260	1300
7	3000016702	HYDRAZINE	KG	210	0.65	140
8	3000016609	CHLORINE TONNERS	KG	900	5	4500
Sl. No.	**Material Code.**	**Name of chemical**			**Tank-A**	**Tank-B**
9	3000055058	SULPHURIC ACID	MM		1600	1900
10	3000016355	CAUSTIC LYE	MM		1800	100
Sl. No.	**Material Code.**	**Name of chemical**			**Tank-A**	**Tank-B**
11	3000055050	HYDROCHLORIC ACID COMMERCIAL	MM		500	1800
Note:						

1.9 Details Of statutory Requirement

Sl. No.	**Description**	Test date	Due date	License no
1.	Factory License		31.12.2030	FCA 1535400248101
2.	CTE	03.07.2008		
3.	CTO	01.01.2020	31.12.2024	JSPCB/HO/RNC/CTO 5926045/2020/2
4.	PESO License hydrogen	23.08.2023	30.09.2028	G/HO/JH/05/77(G289 06)
5.	PESO License chlorine	11.08.2023	30.09.2028	G/EC/JH/06/319(G29 886)
6	Petroleum class c	14.11.2023	31.12.2026	P/HQ/JH/15/1060 (P259489)
7	Hazardous waste	06.01.2021	23.12.2025	JSPCB/HO/RNC/HM W-360249/2017/5
8	Stability	20.03.2024	20.09.2026	KTS/2023/MPL/01 dated 20.03.2024
9	Boiler	10.02.2024 18.12.2023	09.02.2025 17.12.2024	BR/8922 & BR/8971

1.10 Workers & Shifts

The company employs permanent employees & contract workers, inside the plant premises and operates in three shifts (A, B & C) and in General shift (8.30AM to 5.00PM). The employees break up is as follows:

Staff	–	219
Contract Workers	-	3458

1.11 Audit Report

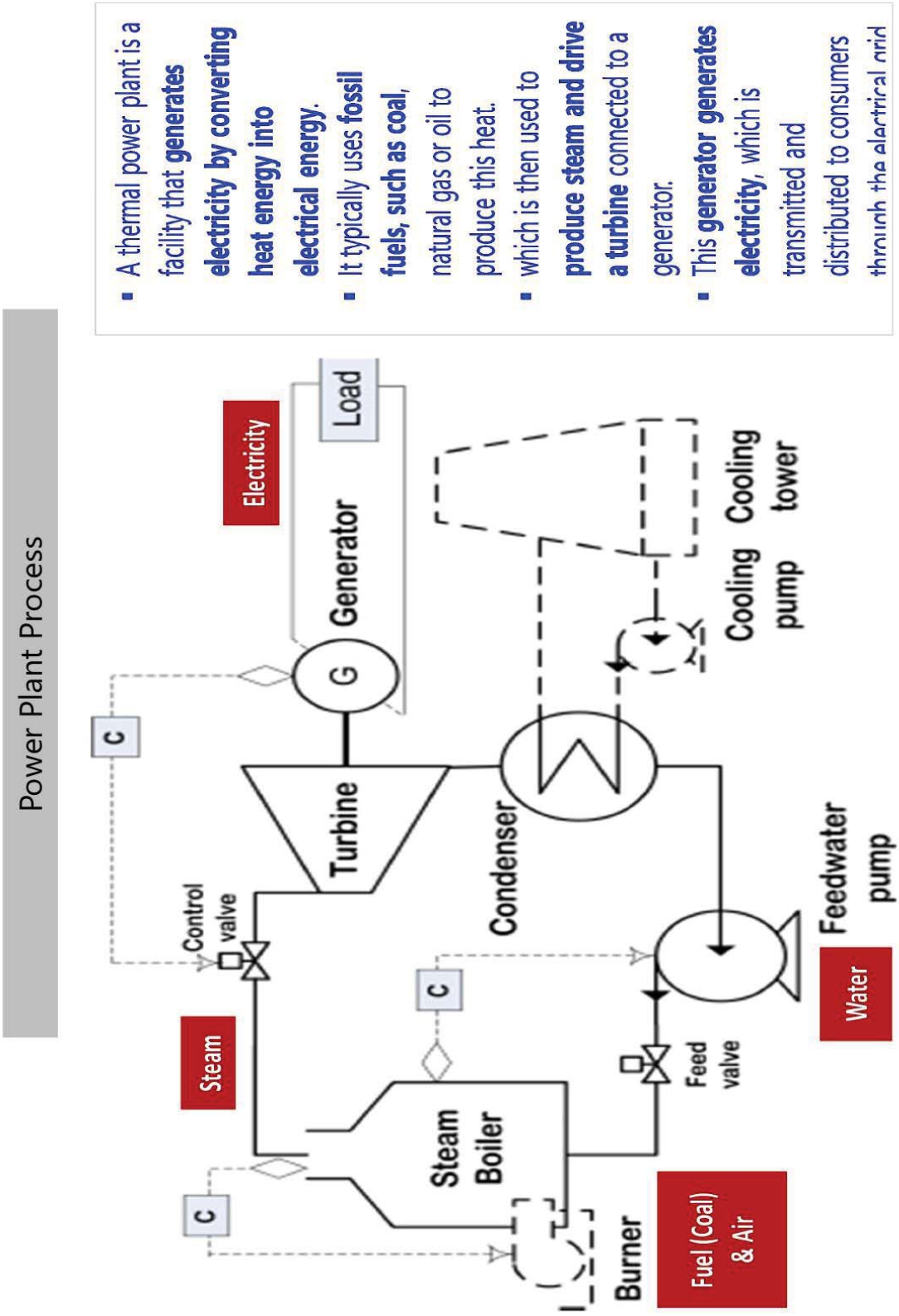
Based on the information collected, records/documents perused, observations made and interviews held with employees at various levels during field visits, 'Observations and Recommendations' are presented in the audit report.

These recommendations are of two types:

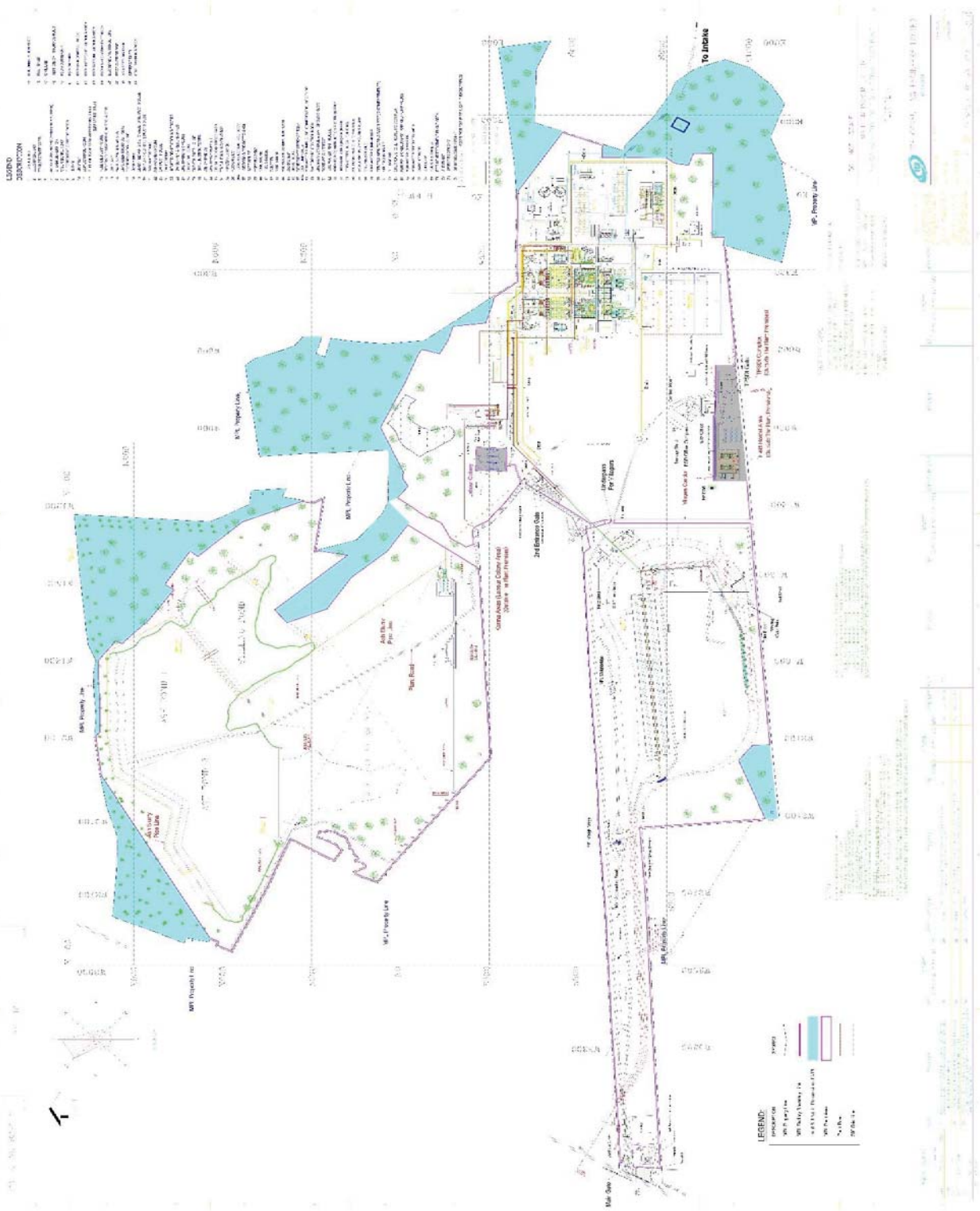
- For improvement in the system's specified requirements; and
- For more effective implementation of the specified requirements of the system. It is up to the management of MAITHON POWER LIMITED, JHARKHAND, Jamshedpur to determine the extent, the way and means of actions to improve the OH & S system as per recommendations of the audit team. However, the recommendations regarding compliance with statutory and legal requirements are to be fully implemented.

Progressive Industrial Consultants has exercised great care and diligence in conducting the safety audit to ensure quality and impartiality, and in suggesting recommendations. However, this report is not deemed to be any Warranty or a Certificate on the OH&S management system in Maithon Power Limited, Jharkhand,

Process flow Diagram:



Approved Map:



PART – 2
EXECUTIVE SUMMARY

1. The safety management systems in the plant are good. Majority of the Legal documents are in place and within validity period. License, Consents, Certification etc. are in place.

2. The company has declared 'Occupational Health & Safety Policy' signed by the CEO& Managing Director (Occupier) As per JFR, 1950, Rule 62 BH.
   The OH&S Policy and other policies need to be reviewed time to time and copies of the policy to be displayed at conspicuous places within the factory premises in a language understand by the majority of workers. System of giving weightage for safety performance of employees in career progression is proposed to be implemented as a statutory requirement, which is evident.

3. SOPs/WIs is displayed at shop floor in pictorial form in all local languages. Good practice to help employees for better understanding about the job steps along with the associated hazards for accident prevention.

4. Security at the Main Gate and Safety briefing for visitors is appreciated need general briefing on Emergency situations.

5. Adherence to speed limits of 16 Km/Hr which is as per norm of Jharkhand Factory Rule 1950 by all vehicles is appreciated.

6. PPE Matrix area wise has been displayed at shop floor which will inculcate the effectiveness of usage of PPE by the employees.

7. The storage chemicals and gasses area are good and is as per the statutory requirement.

8. Although safety posters are displayed at various locations of the plant but display of a few more statutory warning notices and Do's & Don'ts preferably in local language (Hindi and Bengali) especially within the shop floor will create more awareness amongst employees towards occupational health & safety and to be regularly clean for visibility.

9. The general housekeeping of the plant is satisfactory and is appreciated, continuous efforts are required to further improve the overall housekeeping of the entire plant. A systematic housekeeping inspection plan may be developed for all sections of the plant comprising of a team of Sectional heads, HR head and EHS department. The frequency of such housekeeping inspection may be one plant area per week. Suitable

time bound action plan should be initiated on the findings of the inspection report.

10. A training policy for OH&S and life saving rule should be developed to ensure that all employees including senior management personnel are exposed to training during a year need to include Lifesaving rule and other safety related topics for creating a safe environment.

11. Statically data of the company shown no any accident, fatal or reportable, Frequency and severity rate zero during the last past five years shows seriousness of management is about safety.

12. The Assembly points provided in each area but review required as per fire load calculation and based on process safety risk management.

13. External audit had been conducted by NSC, as per IS 14489: 1998/2018 and compliances are evident.

14. Safety Committee has been constituted in compliance with Rule62-C of Bihar factory Rules 1950 with equal representation from Management and workers and the committee meets every month, and the function and duties of the safety committee members is as per norms of Rule 62 -C -7 of Jharkhand factory rule 1950.

15. Permit to Work System is well defined as 'Work Permit' is one of the important tools for prevention of incidents. System is working perfectly.

16. All energy source are identified and LOTO system for working with electrical and other energized equipment are implemented within the plant perfectly. But There are some scopes for improvements.

17. The cables are required to be laid properly in cable trays in cable gallery with proper fire protection system (application of fire resistance paint, laying of LHS cable, regular cleaning of dust etc).

18. The electrical hand tools calibration records to be maintained.

19. The test dates of all earth pits inside the plant are as per norms. All earth pits are tested periodically, preferably once in a period of every one year during dry season on a dry day. The ER value is maintained < 1.0 Ohm, is appreciated.

20. Two-day induction training on safety for workmen with training videos and models is effectively done.

21. Occupational Health Centre is capable of tackling Medical Emergencies and provided with two ambulances as per Jharkhand Factory Rule 1950 62AH-12.

22. Pre-employment medical examination and annual health check up is done for each employee including contract employees. The annual health checkups was last held in 2020 As per J.F.R, 1950, Rule 62 NH (1) (b), the workers employed in a 'hazardous process' are medically Examined by MO once in a period of 6 months, in respect of occupational health hazard to which they are exposed.

23. Fire services activities are under the responsibility of security and fire services of Maithon Power Ltd. A dedicated fire fighting team with good numbers of trained fire fighters are there as per Rule 62 of Jharkhand Factory Rule, 1950.

24. Fire fighting training imparted to employees. Refresher training programs on fire fighting for employees should also be organized at regular intervals.

25. Found Inspection tags on portable fire extinguishers at various locations of plant but some extinguishers were kept on ground and has to be hanged as per norms, at some location's emergency equipment found missing and proper access to be provided to meet safe handling, Fire fighting equipments were tested as per norms.

26. Most electrical installations and machines are found earthed properly.

27. The single line diagram and schematic diagram are found on record for electrical HT/LT installations.

28. Signage/warning notice on the entry gate of electrical installations are observed as per norms i.e. with danger sign and skull signage's also.

29. The LT insulation tests are needed to be conducted in all LT electrical installation in line with CEA 2010 regulation no 33.

30. The emergency lights are available at most of the areas and with backup power system.

31. In switchyard gated were found unlocked to be protected from unauthorised entries.

32. The diesel generating sets of capacity 2 x 2000 KVA in DG house are well maintained.

33. Handling, storage & import of hazardous are as per MSIHCR-1989.

34. Hazardous waste Management system was found maintained as per Hazardous Waste (Management & Handling) Rules.

35. As per Rule 62 (18) of JFR, 1950, each first aid fire fighting equipment is properly marked with serial number, date of last refilling and date of last inspection with properly trained first aider, which is complied as per norms.

36. The flameproof fittings are noticed in Hydrogen Plant and other gasses plant areas and pipe lines are as per norms of painted with distinguish colour.

37. Fire sealing/painting for electrical cables is not evident at several location inside plant premises.

38. The storage of Hydrogen, other gasses and dust, area is good and found as per the norms of statutory requirement. Fire load calculated by an agency HSM Solution, Ahmadabad but Categories wise hazard identification not conducted in plant to be categorized and consequences analysis to be conducted by a team with following considerations-
    - ✓ List types of process events possible such as fire, explosion, or toxic release (worst case and probable case)
    - ✓ Estimate potential release quantities
    - ✓ Estimate distance to different levels of concern, such as toxic concentrations, thermal effects, overpressure or significant environmental effects
    - ✓ Estimate safety and health effects on the site and the community for people who potentially could be affected.

39. Mechanical Integrity of equipment, pressure vessel, piping & component are well maintained

40. The classification of hazardous areas having flammable gases, vapours and dust for electrical installation has been done but review required as per norms of IS 5571.

41. Showers and Eye Showers are evident but proper water pressure to be maintained.

42. The fitness and pollution certificates of all heavy vehicles within the plant premises are available with the drivers as per Motor Vehicle Act 1988.

43. All wire rope slings are kept in designated and safer place but some place wire rope and other equipments are lying on shop floor to protect them from any wear and tear.

44. The battery bank in power house is well maintained but free movement and with provision of neutralizing material.

45. All statutory requirement like lifting tools tackles, pressure vessel inspection date and other test date and due date were displayed.

46. Ergonomics projects in process hazard are evident but need more focus.

47. Well documented Integrated safety management system observed.

48. Internal Risk assessment of all activities conducted but need in more clarity and training to employees.

SUMMARY OF ALL EMERGENCY DEVICES

Area	Smoke Detector	MCP	HOOTER	MONITOR MODULE FOR SPRINKLER	HEAT Detector	BEAM Detector	RELAY MODULE	TOTAL

During safety audit following Documents Examined and Discussed with concerns during visit.

1. Quantitative Risk assessment (Including Individual Societal and technical risks), HAZOP, HIRA, Risk level and other risk assessments. Need some improvement.

2. Reliability check of critical equipments with inspection procedure of the all interlocks and safety devices control system.

3.SOP for Preventive and periodic maintenance.

4.Documents related to Process safety information's, Alarm Trip devices, interlocks list with inspection and malfunction procedure.

5.SOP of air emission management and found within parameter required and need display of data at prominent places.

6. SOP of Chemical hazards and prohibited substances in the work places and list of chemical inventory, need Hazardous area classification as per IS code 1572 and its compliances.

7. SOP of communication, participation and consultation.

8. List of confined spaces and their operation and maintenance procedure, 64 no of identified confined spaces are there need training on confined space and equipments used during the

job.

9.SOP of EHS Accident &Incident Investigation and one accident happened in past (25.8.2023)

10. Emergency properness and response plan include demography, risk of neighboring plants connecting road and approved map.

11. Environmental Aspect and Impact Analysis need training and participation of major group of employees and some targets for improvement.

12. Examined Ergonomics project (one project with objective target and analysis)

13.SOP of work permit system and found working good but need some clarity among contract employees.

14.SOP of Contract management documents with pre-employment with performance evaluation, need approval of their safety management plan.

15. Examined SOP of Industrial hygiene programme and it is found OK

16. Examined SOP of Industrial waste management, plan procedure and found working as per norms.

17. SOP of STP & its KPI and found within limit and with care of oxygen concentration need hazardous area classification with compliances.

18. Examined SOP of LOTO and Energy source identification document and found system working perfectly.

19. Examined SOP and documents related to Machine guarding need some improvement with audit as per Factories Act 21 (need reliability check of emergency equipments).

20.Examined of SOP of confined space and its lists, but observed some gap in permit system for confined system.

21.Examinedd SOP for monitoring measurement analysis and performance evaluation found as per norms.

21. Noise and illumination survey report and found within limit but during visit found low illumination at some places and high noise level need survey again.

22. Examined SOP and documents related to safe electrical programme and found working ok

but need some improvements as shown in photographs displayed below report.

23. Examined SOP for Scrap and Spillage mapping but during visit found need more attention.

24. Traffic control management, visitor, contract and MPL employee entry related documents.

25.Examinedd SOP for Supplier engagement and Ware house safety, found system working as per norms.

26. Examined Rubber mat and Earth pit test report found OK.

27. Document Examined of fire load calculation and their compliances, Fire surveillance and extinguishing management and found system is well working.

28. Examined SOP and HIRA of various safety related systems like transportation, visitor management, PPE, training and found system is working but review needed.

PART – 3
AUDIT OBSERVATIONS & RECOMMENDATIONS

1.1 Safety Management System – Element wise

(A) OH&S Policy:

Observation	Recommendation
• The Organization has an Occupational Health & Safety Policy signed by Mr. Praveer Sinha, CEO & Managing Director and displayed at prominent places. This Policy expresses Top Management's commitment.	• As per JFR, 1950, Rule 62 BH, the policy should be signed by the occupier. Recommended The policy to be reviewed and updated time to time and copies of the policy is already displayed at conspicuous places within the factory premises in a language understand by majority of workers.
• The policy is not effectively communicated to employees (observed during plant area visit).	• Suitable training may be imparted to the employees for effectual communication of the policy to make the policy more effective.
• The weightage for safety is so far being given in the Annual Appraisal for executives.	• As per JFR, 1950, Rule 62 BH (5) (b), the safety performance of employees should be considered in the career progression. Substantial more weight age should be given for safety aspect in annual appraisal system.
• Ash, corporate Environment policy, E waste Management policy, water stewardship policy are evident.	• Appreciated, need training policy.

(B) OH&S Organization set up:

Observation	Recommendation
▪ In MPL safety department established, consists of four qualified safety officer including Chief Safety and all safety officer reporting to chief safety as per norms, directly reporting to the Plant Head & Factory Manager, and having practical experience and knowledge of safety.	▪ This is in compliance with the Rule 62 B (5) of JFR, 1950.
▪ The duties assigned to the safety officer are in line with those prescribed in the statutory provisions. No additional duties are assigned to them. The duties assigned to them relate to advice on safety issues, carry out safety inspections/safety training, coordinate safety committee meetings, accident investigation and establish/improve safety management systems.	▪ This is in compliance with the statutory provision under Rule 62 B (4) of JFR, 1950.

(C) Health, Environment & Safety Improvement Plan/Target:

Observation	Recommendation
▪ monthly safety report is prepared by the EHS department comprising of and submitted to the top management in each month for information. The monthly safety report for FY 2023-24 was verified.	▪ Good practices and should be continued.
▪ Annual Business Plan (ABP) for EHS is in place.	▪ Observed system for achieving the OH&S target w.r.to the key strategies, KPI, UOM and responsibility
▪ Comprehensive report is prepared as per manufacture, Storage and import of Hazardous chemical Rules 1989 / 2000, Schedule 11.	▪ System working.
▪ Environmental Hazard Identification and Risk Identification (HIRA), is prepared.	▪ HIRA prepared for plant for various activity does not cover all aspect. Recommended HIRA to be reviewed audited by third party
▪ Aspect Impact of Environment issues are prepared.	▪ KPI prepared and follow the system, Good practices.

▪ Stack monitoring report and treated effluent report prepared and report observed as per statutory requirements.	▪ Compliances to statutory requirements.
▪ Spittoons, clean, cold Drinking, washroom etc (requirements of J.F.R 1950) are as per requirements.	▪ Compliances to statutory requirements.

(D) Safety Committee:

Observations:	Recommendation:
▪ The Safety Committee is in place. The Chief O&M (Factory Manager) is the chairman of the committee. The committee comprises with equal number of management and worker's representatives and chief safety is working as secretary of the committee. The meeting is held on of every month. Minutes of the meetings are maintained.	▪ This is in compliance with section 41-G of The Factories Act, 1948 and Rule 62 C of JFR, 1950.
▪ The date of commencement of the Safety Committee is from Jul' 2023. The validity of term for 2 years. Duties and Rights are communicated and documented with all members.	▪ The function and duties of the members of safety committee already documented, communicated & displayed as prescribed in Rule 62 C (7) of the JFR, 1950. The Safety Committee members may be trained about their role and responsibility for effective functioning in line of the above mentioned rules.
▪ The committee meets once a month and attendance register is maintained.	▪ Evident as per norms of Rule 62 C (4) of the JFR, 1950
▪ Agenda of the meeting and MOM is circulated before the meeting and track &discussed the action plan and compliances of the last meeting.	▪ System working as per norms
▪ The MOM of Safety committee dated May 2024 was verified.	▪ System working as per norms.
▪ Attendance sheet of the meeting was evidenced.	▪ System working as per norms.

(E) Safety Inspection & Observation:

Observation	Recommendation
▪ Safety inspection of plant and machinery are in place. The sectional committee with a team carries out Safety Inspection / observation of the plants on a regular basis and records the findings with photographs in the system. The report is sent to the respective department with a copy to concerned HOD and Plant head for compliance. The safety inspections records are maintained by safety department, most of the observations were attended	▪ Area -wise safety inspection check-list based on specific hazard is evident. Good practice. Recommended time frame compliances.
▪ A few safety inspection/observation reports of recent past were verified and found that ratio of unsafe conditions and act are as per norms.	▪ Good practices and should be continued.
▪ System of Safety Line Walk is in place.	▪ Good practices and should be continued.

(F) Safety Audit:

Observation	Recommendation
▪ **External Safety Audit:** The previous external safety audit conducted by a nation safety council team (competent agency) as per norms of IS 14489.	▪ Compliance of Previous external safety audit check and found most of the recommendation has been completed. ▪ Good practice evident
▪ **Internal Safety Audit:** Internal audits are being carried out by a team with safety personnel. Points are observed and compliance ensure in time frame and points discussed in concerned meetings. Audit plan is evident. Committee has power to stop any job or activities high risk or abnormal situations NC open (crossed the time closing time) – Nil	▪ Good practice evident

(G) Safety manual/safety Standard:

Observation	Recommendation
Safety Manual: ▪ Safety manual /Standard is evident for MPL included occupational health and safety MOC, incident investigation analysis and reporting, HIRA, handling of hazardous substance, Emergency plan with role and responsibility, PPE, PTW, safety audit and inspection, Training, contract management, Traffic control and safety policy with safety Vision, Safety Principles and safety code of conducts.	. ▪ Good practice evident but need more focus on training
▪ Role of top management and executives are well defined in Tata Power safety Management System (TPSMS).	▪ Good practice evident
▪ Revision of Manual/safety standard is evident	▪ Good practice evident

(H) Accident Reporting, Investigation & Analysis:

Observation	Recommendation
▪ A procedure has been established for reporting accidents and dangerous occurrences to the Inspector of Factories in Form No. 17 A and for a supplementary notice for which the injured person returns to work in Form No. 17 B.	▪ This is in compliance with Rule 96 of JFR, 1950.
▪ An Accident Register is maintained in prescribed format of Form 23.	▪ Accident investigation procedure is being followed and records are maintained.
▪ In FY 2023 – 2024, 0(Zero) LTI cases were evidenced (F. Rate and S. Rate). as per Investigation plan document, investigation is based on CAPA to avoid any repetitions of incidence	▪ All accidents are being investigated in a proper manner. Emphasis should be given on fact finding, any system deviation etc. and not fault finding and systematic analysis Recommended based on IS 3786:1983 'Method of computation of frequency and severity rates for industrial injuries and classification of industrial accidents'
▪ Near-miss incidents are reported and records are maintained.	▪ Near miss reporting is a very effective tool in accident prevention and employees should be encouraged to continue report of near miss cases. ▪ All plant incidents including near miss cases should be shared with the employees for learning and implementation.

(I) Employee selection and placement:

Observation	Recommendation
▪ Employees are appointed as trainees through campus interview from reputed institutions. ▪ Management Trainees have to compulsorily undergo 7 day Safety Training. A test is conducted at the end of the7 day session and if safety examination is not cleared one cannot move to the next stage of training programme.	▪ Good practices ▪ Good practices, focus training on policies and Emergency response plan, Process safety risk management.

(J) Safety Education & Training:

Observation	Recommendation
▪ System of training exists. The infrastructure for safety training comprises of a training hall audio – visual aids and video film on safety. Designated personal are generally conducts the training session.	▪ The drive for safety training including awareness on process safety is good should be continued. ▪ A training policy should be developed to ensure that all employees including senior management personnel are exposed to effective training during a year.
▪ Training calendar for 2024-25 contains 13 topics focus on awareness on process safety/risk assessment. Training man-hours for FY 2023-24 was evidenced and found satisfactory.	▪ A few training topics e.g. Behavioral based training, safety training on Emergency response plan and policies should be included as per requirements.
▪ Training record revealed that the training plan vs actual is similar.	▪ Training plan Vs. Actual need to be ensured.
▪ Training need identification (TNI) was evidenced.	▪ Good practice and should be continued.
▪ Training module for different topics has been standardized.	▪ Good practice and should be continued
▪ There is a system of feedback on trainings conducted.	▪ System is evident.
▪ The target set for Safety training for the year 2024-25 is 2 man days/employee/year.	▪ Good practice and should be continued.
▪ Formal safety induction training to contract workers before their deployment is imparted by concerned people.	▪ System found working well, Tata Power Skill Development Centre is an established for contract worker skill development.
▪ Toolbox talks as means of training is used systematically.	▪ Toolbox talk is an effective tool for prevention of incidents. The subjects covered should be related to job being performed in that shift/day by the team. Before starting the shift/day's activity, at least 10 minutes Toolbox talk conducted by the respective Engineer/Supervisor will help the team to execute the job in a safe manner. Records of Toolbox talk should be maintained.

(K) Motivational & Promotional Measures for OH&S:

Observation	Recommendation
▪ Various programs are conducted on safety round the area to keep employees motivated and alert. National Safety Week, National Fire Day and World Environment Day are in family celebrated a big way and members also participate. Events like : a) Awarding the Best Safety Performers. b) Safety Slogan and Safety Poster competition. c) Fire drill, Fire equipment display and use. d) Safety PPEs exhibition e) PPE use and training etc. are organized. Winners are rewarded. Their posters and slogans are exhibited. There is a scheme for Theme Based weekly / monthly awareness campaign round the year. The Tata Power Safety Management System has well maintained system like- a) SMS - Safety leadership Approach. b) Technical – Process safety. c) EPM – Safety Management. d) Safety Excellence journey. e) Safety observation cycle. f) Safety Tracker	▪ A good system to promote safety improvement drive in the plant and motivating employees towards safety. ▪ EHS promotional activities is in order should be continued

(L) Identification and Assessment of Hazard:

Observation	Recommendation
▪ HIRA is in place.	▪ HIRA need to be revised by incorporating the relevant hazards, conditions etc and training needed for more clarity.
▪ HIRA prepared for all activities has been reviewed and updated time to time	▪ All the activities under HIRA should be reviewed and updated time to time w. r. to Risk, severity & occurrence etc. and records should be maintained.
▪ Process safety risk management for controlling all process hazards, Process safety risk management system is not evident.	▪ To understand process hazard; risk involved and establishes system to manage risk, Implementing Process safety risk management system is best system to control high and low risk process hazards.

(M) Safety Document (Safety management Document, SOP, Work Permit, Safety Standard etc):

Observation	Recommendation
▪ Safety management Document for process and maintenance activities is evidenced.	▪ Well defined system observed to be mentioned
▪ SOPs/WIs was displayed at shop floor in but invisible due to dust.	▪ For Good practice need displaying of pictorial SOP at shop floor. SOPs should be reviewed and updated time to time.
▪ Area wise and activities list of SOP is evidenced. Environment and ill health related hazards are not considered in the SOPs.	▪ A good system to promote safety improvement drive in the plant for safety management system.
▪ Well defined and systemic work permit system is evident	▪ Good practice
▪ It initiated by SAP notification, PTW preparation, Approval, Application of LOTO, Tool Box Talk, JSA, Revalidation, systematic way of site Restoring are evident.	▪ Well working system, appreciated
▪ In work permit system, responsibility of issuer, Acceptor & Permit holder is well defined and system working is evident.	▪ Appreciated
▪ LOTO system is being followed while working in energized system	▪ same to be followed for mechanical energized system.

(N) Safety Budget:

Observation	Recommendation
▪ Company budgets for safety have been provided annually by the plant funds. The budget is provided for the expenditures on procurement of PPE, implementation, recertification, modification of safety devices, testing and certification of pressure vessels, lifting machines lifting tackles, tree plantation, signage, first aid training, fire equipment's, third party audits etc. It was told that there is no restriction for safety expenditure.	▪ There is a precise and documented sufficient safety budget without any limit allocating funds for safety improvement within the company.

(O) Occupational Health Centre (OHC):

Observation	Recommendation
▪ The plant has its own well maintained (as per norms) occupational health centre and attached for health services. 01 Doctors are deputed in each shift (A, B & C shift) and one person in general shift.	▪ As per Rule 62 OH (1) of JFR, 1950, any factory carrying on 'hazardous process' shall be provided and maintained in good order an Occupational Health Centre (OHC). One full time Factory Medical Officer and trained dressers, male and female.
▪ 01 Ambulance with dedicated ambulance driver is deployed in A, B & C shift at the first aid centre and they are first-aid trained. The ambulance is provided with stretcher, first aid box and medical oxygen cylinder and other required equipment's.	▪ This is in compliance with Rule 62 PH (1) of JFR, 1950. The medical staff and ambulance drivers should undergo training on medical response to emergencies total no First -aider trained is 43 and 37 first aid boxes kept at various places.
▪ First aid and accident cases is being maintained in a register.	▪ All activities are documented and checked found ok.
▪ First aid boxes are with compliances of Jharkhand factory rule 1950 64 (c).	▪ First aid boxes to be distinctively marked with a red cross on a white ground name & No of first aider to be displayed as per rule 64 -E J F R 1950.
▪ The activities of First Aid centre are documented and health checkup documents found updated.	▪ As per JFR, 1950, Rule 62 NH (1) (b), the workers employed in a 'hazardous process' shall be medically Examined by FMO once in a period of 6 months, in respect of occupational health hazard to which they are exposed.

▪ There is a tie-up with some multispecialty hospitals of DVC, Dhanbad and Asansol for any major incidents/accidents.	▪ Compliances of ERP
▪ It was informed that Pre - employment medical examination and annual health check up is done for each employee. The annual health checkups was last held in march' 2024.	▪ Well maintained system.
▪ Disposal of any liquid chemical waste document was available.	▪ All waste handled by the authorized party who are authorized by PCB. Necessary care may be taken to comply with the Rule 4 of the chemical Waste (Management & Handling) while handling and disposal of chemical waste.
▪ There are 37 no of first aid boxes including some spare first aid box in the entire plant. All sections of the plant are provided with one first aid box with required materials.	▪ Compliance observed of Rule 64 (E) of JFR, 1950, but the names of persons trained in first-aid treatment shall be pasted at a conspicuous place in the factory and near each first-aid box

(P) Emergency Preparedness:

Observation	Recommendation
▪ Plant has an 'Emergency Preparedness and Response' (EPR) plan, approved by concerned agencies. The roles and responsibilities of Site Main Controller, Site Incident Controller, notified team, alert alarm system, list of emergency assembly points, list of fire extinguishers and their lay outs, list and location of first aid box, list of MSDS etc. are evident in the EPR.	▪ 'On site Emergency Plan' document is approved by the Chief Inspector of Factories, Jharkhand and the control copies to be made available as per distribution list. All the essential elements as mentioned in the observation column is incorporated in the Onsite Emergency Plan and include Risk related to Demography of area and List of equipments, checklists etc.
▪ Awareness level of Emergency contact numbers and Assembly point of working group was not satisfactory during plant visit.	▪ Awareness training on Emergency plan for shop floor employees need to be organized for enhancing their alertness and basic knowledge level to make the plan more effective.
▪ Mock Drill plan for FY 2023-24 was verified.	▪ More emergency situations should be considered for mock drill.
▪ All emergency point need to free from obstructions and to be reviewed as per calculation of norms.	▪ Need review

(Q) Compliances with Statutory Requirements (License, Consents, Certification etc.)

Observation	Recommendation
• **Factory License** #.	• System is in order
• **Lifting tools & Tackles**: Register of lifting tools & tackles are not evident, work order placed to the competent agency.	• System is in order.
• **PAN** AAGCB4215M 20/08/2015	• System is in order
• **FIRE NOC and fire load calculation & their compliances.**	• System is in order
• **CTO/CTE** under section 25/26 dated	• System is in order
• **Register of Accident (Form-23)** is evident as per Bihar/Jharkhand Factories Rules, 1950.	• As per Rules 104, Jharkhand Factories Rules, 1950 in a register of accidents shall be maintained in Form No-23.
• **Building/Structural Stability Test**: Building stability not evident work order placed to the competent agency.	• System is in order.
• Quarterly Fire drill evident in mock drill plan.	• Fire drills shall be held once in every three months as per Rules 62, Sub Rules 23(C) of Bihar/Jharkhand Factories Rules,1950.

(R) Documents of system of Management of change / process / plant modification / change of procedure:

Observation	Recommendation
1. Coal Mill Maintenance Platform is not available.	▪ Recommended to erect permanent platform in those areas of Coal Mill which are located at height and need periodic maintenance and risk assessment to be carried out for newly constructed platform and activities.
2. Fire Sealing & Painting for Electrical Cables is not adequate.	▪ Fire retardant coatings & fire stops have not been provided in cable galleries & cable vaults which are not complying the standards of IS 12459 (CODE OF PRACTICE FOR FIRE SAFETY IN CABLE RUNS) which may put the plant safety at risk. MPL has been advised to comply with IS 12459-5 standards and cable to be tied with properly.

(S) Mechanical Integrity and specific job like working at height and confined space:

Observation	Recommendation
HEIGHT WORK ▪ All worker Contract and MPL employees engaged in height job are well trained in use of safety harness and life. Contract employees are trained from TPSDI.	▪ System is in place for controlling, monitoring the safety standard for work at height.
▪ Height pass and standard quality of harness, life line and fall arrestor has been used while working at height with ensuring competent supervision.	▪ System is well working and is Appreciated.
▪ safety standard for erection and use of Scaffolding jobs is well established and after checking of scaffolding by competent person are being used, red tag and green tag system is also in system.	▪ System is well working and is Appreciated
▪ Sky Climber is required for internal inspection& maintenance of boilers and Inflatable Jack facilitates coil inspection coverage of larger area in less time Therefore, their proper functioning is to be maintained at any moment at site but provision is missing.	▪ a) Some equipment like Sky climber need rectification as any operational malfunction may lead to serious injury. MPL team has been advised to properly maintain/replace equipment which are having high safety impact while doing maintenance jobs at site. b) The process of Boiler coil inspection by manual method is not advisable. Inflatable jacks & other safe pulling devices need to be used.
▪ Confined space location identified and list prepared ,92 locations inBTG,28 in CHP and 52 locations etc are identified.	▪ System is well working and is Appreciated.
▪ Safety standard for confined space working including SOP and work permit system is evident and system found working.	▪ While working in confined space Recommended confined space work permit system clearance from competent person as per Rule 36 of Factory Act 1948.
▪ Testing of lifting tools, tackles, equipments and Pressure vessels testing as per Factory act 1948 sec 28,29&31is evident.	▪ Test record found as per norms.
▪ Internal Inspection of plant for moving machineries is evident.	▪ Required inspections as per Factory act 1948 sec21(2) by competent person.
▪ Preventive Maintenance of Electrical and Mechanical equipment is evident well maintained plan and procedure is available in each section is evident.	▪ Fulfillment of requirements' of Process safety management.

PHYSICAL HAZARD a) Housekeeping - In general overall housekeeping is good. Scope of improvement exits in all around the plant. Loose material like nut bolts and dust observed at some locations. Corroded and abundant structure and building to be safely removed with proper plan.	▪ It should be maintained, loose material to be removed from platforms gratings. Anti corrosion paint may be applied to reduce the corrosion risk and proper repairing of building is required some location like CHP.
b) Machine and general area guarding is observed as per norms.	▪ Well maintained system,
c) Material handling-Material handling /transporting of material is being carried out by through conveyer, Rail wagon, track hopper, dumper, stacked reclaimed etc	▪ Good control on material handling system is shown.
Electrical safe guarding - Electrical Safety requirnments- 1. Testing and Examination of Electrical Machines & Equipment – MPL power plant has two generators of 525 MW capacities which generate power at 21 KV and six single phase transformers of capacity 217 MVA each for two generators to step-up the voltage to 400 KV in star connection finally. The single line diagram of electrical power system from HT to LT is available on record.	▪ System is working safetly, Regular Oil testing is recommended and provision for firefighting arrangement is evident as per IS-3034:1993 and CEA 2023 Regulation No 46(2) (IX).
2. The 525 MW generators have been provided with protections like differential, control over current, stator overload, slow reverse power, under voltage, negative phase sequence etc. The protocols of 525 MW generators and main transformers are on records.	▪ System working well
3. Electrical Hand Tools – Inspection & Record Keeping List of electrical hand tools is available which being used by Maithon and contractors, the third party inspections and regular inspection of the hand tools are being carried out and records are maintained by Maithon and electrical contractors.	▪ System working well all testing and inspection record is evident.
4. Earthing system- It is observed that proper earthing system has been installed on HT/LT panels, transformers, motors etc. The loop earthings of fans and fittings in various areas have done. The earthing layout drawings of earthing systems and earth resistance tests are available on record.	▪ Recommended to follow the system.

5. **Electrical Zone classification**- flammable areas are established in the plants like Hydrogen plant, coal dust, diesel storages tanks etc however, the electrical zones classification was not done on the basis of fire hazardous areas for electrical installations in the plant.	▪ Follow the guideline of IS 5571 and 5572
6. **Emergency Lightning System**- emergency lighting systems are available in some location like power house, control room, technical building, OHC etc. through diesel generators of 2x2000 KVA.	▪ Review the system as per guideline of IS code 3043:2018 and follow the compliances.
7. **Compliances of CEA regulation 2010and Indian Electricity Act2022**- It is observed that records of inspection by CEA are found on record which is evident. The insulation mats are provided in front of electrical panels in MCC rooms and other required locations. Electrical Inspector is designated in line with CEA 2023 Regulation No (5A) fulfillment required statutory norms is evident.	▪ Appreciated and recommended follow the norms
8. **Use of PPE in Electrical job**-It was observed that PPEs are being used to good extent while working on electrical installations.	▪ Appreciated and recommended follow the norms.
9. Lightening protection system and static electrical prevention and discharge system- The lightning protections by spike type lightning arrestors have been provided in most of structures and building is evident.	▪ Need survey and provide as per requirements also follow provisions of IS code 7689 for proper bonding of gas line flanges in plant to avoid any generation of static charge
10. **Temporary electrical connection**-Loose wiring and connection not noticed and wire was found with proper manner with provision of tripping devices and provision of proper cable rating- well working system is evident.	▪ Follow IR rule and NEC 230.208 and NEc230.10 &IS 732
11. **Electrical safety training-training** imparted as per plan by trained and qualified personnel record available.	▪ To be continued.
12. **Switch yard safety and norms follow in working in Electrical room** - The provision for lightening and earthing was observed. The system of thermography was noticed to record high temperature for protection. Safety and statutory norms was being followed -Records are evident.	▪ Follow Indian electricity rule 1956 IS:5216 and IS:10118.
13. **Chimney -**275 m height of single chimney is observed with provision of lightening arrestors	▪ provision as per norms, no recommendation.

at two locations with proper earthing and aviation light at 8 locations on different heights. compliances of statutory norms is evident.	
14. CHP-provision Pull cord and other safety devices were found but water accumulation and other high risk situation observed.	▪ Recommended detail review of structural and building stability and protection from water logging. detail check points to be developed for maintenance job of counter weight, receiving and discharge chute, Belt joint (Vulcanized or mechanical), Idlers & pulley maintenance and changing job, deck plate, Belt safety switches (ZSS, belt sway switch, pull cord), Belt sway, spillage cleaning job etc.

(T) Fire Prevention, Protection & Mitigation:

1. Organizational Set-up and Overview for Fire Fighting:	
Observation	**Recommendation**
a) Fire NOC, Audit and fire load calculation document exists.	a) Needed compliances of all points of Fire audit and fire load calculation.
b) Fire services activities are under the MPL responsibility and for mutual aid MPL is attached with Jharkhand fire service station Dhanbad.	b) System is in order
c) HOD (Safety & Fire) is overall in charge of Fire Department. He is assisted by Lead Associate (Fire) MR. Rajkumar Rai.	c) System in Order
d) The functioning of Fire Department has been outsourced to a third party M/s Vahari Engineering from Jamshedpur.	d) System in Order
e) One Sr. Supervisor is the Site In-charge and four supervisors are working under him in A, B, C and in General shift, Three safety Officers, 9 DCPO and 36 Firemen are working for fire services. They are well experienced and having qualification as per norms.	e) System in Order
f) A fire Load calculation of the plant was conducted by competent agencies.	f) System in Order.
g) 'Fire Orders' containing 'Instructions for Prevention & Control of Fire' is available.	g) Fire Orders' need to be incorporated and any changes taking place in the plant/equipment need to be updated.

2 .FIRE DETECTION AND ALARM SYSTEM -System Working as per Norms of J.F.R 62	
For fire detection system following points has been observed. A) **1170 Smoke** Detectors fixed at all the Control Rooms, Panel Rooms, Cable galleries, Conference halls with alarm panel at Central Control Room and Repeater panel is at Fire Control Room. B) Dampers are provided at ventilation duct. C) 78 Heat sensors are fixed in crusher house, laboratories, battery D) Detectors/Sensors are inspected and maintained by Siemens, the OEM. E) Linear Heat Sensors (LHS) provided in cable galleries to initiate alarm if temperature rises F) LHS provided in Coal Conveyor galleries is linked to sprinkler system and an infra -red heat sensor has been installed recently in coal conveyer near JH#6. G) Alarm system is also connected with hooter in several locations in loop. H) 498 Manual Call Points fixed at all vulnerable areas, rooms, halls with distinctive Red colors which are press button type.	**Compliance of Jharkhand factory rule 62 (1) (d) is evident** ▪ System is in order.
3. Mutual Aid:	
• Fire services are mutually aided with Jharkhand Govt fire services Dhanbad.	• Need to be included in On-Off site Emergency Response plan.
4. Portable Fire Extinguishers and Fire Buckets:	
Observation	**Recommendation**

a) Total 443 Fire Extinguishers of ABC/DCP, Foam and CO2 types of various sizes are placed at required locations all over the plant as per fire load calculation and accordance of IS 15683:2006 and fire extinguishers are assigned with ID No's	a) System is as per norms.
b) The fire extinguishers are tested on quarterly basis. The records are maintained properly. Visual Checking of fire extinguishers are done by services of MPL. This is in compliances with J.F.R 62 Clause 21 and is being hydro test as per IS 2190:2010.	b) System is as per norms.
c) Water and Foam is replaced every year.	c) System is as per norms.
d) 15 Trolley mounted Foam guns have been provided at Transformer deluge valves and DG sets room.	d) System is as per norms.
e) Portable Fire extinguishers were kept on the floor at different locations as per norms.	e) At some locations found kept on floor and at some location found missing.
f) Total 65 in number of sand buckets, are placed at the right locations as per plan and norms with clean dry sand.	
5. Fixed Fire Extinguishing System (Fire Hydrant System):	
a) As mentioned in sl. no. 2 (g) smoke and heat detectors are available at Admin block, paint shop kitchen and storage area, electrical panel rooms and other working areas.	a) It is suggested to maintained documents of regular checking and maintenance as per Jharkhand Factories Rules 62, clause 9(an).
b) The fire detection system is being checked on half yearly basis by concern department.	b) Records available.
6. Fire Incidence Reporting and Recording System:	
a) Fixed Fire Fighting has facilities include 288 fire hydrants, 66 Monitors and 88 deluge valves.	a) To be continued.
b) Inspection is done on monthly basis.	b) To be continued.
c) Every fire Hydrant, Monitors, Deluge valves, Fire hoses has its Own ID Nos (mentioned in Layout).	c) To be continued.
d) Water pressure at the highest hydrant point (72 meters) is maintained between 3.5 to 3.8 and at the farthest point at 11 kg/cm2.	d) To be continued.
e) Hose reel with nozzles located beside each hydrant & are easily accessible without any hindrance.	e) NDT of pipe line is Recommended, all emergency point must be free from any obstructions and at some locations either equipment found missing in boxes.
f) In Admin building stair valve of fire hydrant system observed on landing platform.	f) Need access the risk.

7. Fire Fighting Training and Drill and signages:	
a) Fire fighting training is included in the yearly training calendar of 2023. b) Fire drills are conducted systematically. The mock drill plan for the year 2023-24 shows fire related mock drills are planned.	a) Firefighting training is to be conducted in a scheduled and systematic manner covering more employees from different areas. Frequency of training is to be enhanced. All employees including contractual employees need to be trained in institutes of repute to build up their competency level. b) The purpose of a fire drill is extinguishing fires as well as to familiarize and reinforce proper evacuation routes and practices. As per Rule 62 (23) (c) of JFR 1950, Fire fighting drills shall be held at least once in every 3 months and records in respect of such periodical drills shall be maintained.
8. Fire Fighting Equipments & Facilities:	
a) Three Fire tenders are provided to Fire department of MPL by MPL management Two at old station and one at Near CHP, Out of these three, two are multipurpose type and one has only water tanker of 3000 liter, One new Tender, smaller in size and capable of negotiating narrow bridges and lanes has been provided. b) Fire Tenders are checked daily with the help of a checklist and record evident. c) 28 lack liter water tank is provided for fire fighting purpose. d) Fire pump house and fire fighters has the following facilities- ▪ Main electric Pump – 2, cap 172 M3/Hr ▪ Diesel pump – 2, cap 168 M3/Hr ▪ Jockey pump – 2, cap 10.8 M3/Hr ▪ Booster – 2, cap 108 M3/Hr ▪ 6 Fire suits ▪ 33 SCABA sets (including 15 with Chlorine and DM plant) ▪ One refilling set. One set of hydraulic tools for breaking open locks, c) A consolidated list of existing "emergency exits" is available.	a) Good, Facilities found as per norms b) Good, Facilities found as per norms c) Good, Facilities found as per norms d) Good, Facilities found as per norms e) Good, Facilities found as per norms ▪ Emergency exit should not be blocked.

9. Passive & Active fire protection System: system is as per Statutory Norms	
a) Fire seal provided to all cables passing from one floor to another or through walls.	a) Good, system is in order.
b) Cables are coated with fire retardant paint for one meter length from the fire seals and at regular intervals.	b) Good, system is in order.
c) Emergency exits are fire resistant type with the required fire ratings.	c) Good, system is in order
d) Most Transformers were found separated with Fire walls.	d) Good, system is in order
e) HVWS provided to 400 KV switch yard, GT system, TG building (MOT, DOT, MDBFP, TDBFP etc.) and MVWS provided at LDO/HFO tank farm, CHP, Cable gallery.	e) Good, system is in order
f) Foam pouring system provided to LDO/HFO tank on top.	f) Good, system is in order
10. Built in safety in civil design and construction	
a) Buildings are constructed with non-flammable material Doors are wide and so are the stairways making escape from the building or for rescue operations.	a) Good, system is in order.
b) Emergency exits are provided in each building and Control rooms They are of fire Resistant type with four hour ratings. Emergency exits lead to wide landings and then to staircases. Ways to Emergency exits are clearly marked.	b) Good, system is in order.
c) Water hydrant and risers are installed in the buildings and available at 72 meter level of boilers also Hydrant lines are kept pressurized and at 72 mtr. level 3.8 Kg pressure is maintained.	c) Good, system is in order.
d) Control Rooms, Cable galleries, MCC and switchgear rooms have Smoke detectors.	d) Good, system is in order
e) Manual call points are at multiple locations with repeater panel at Fire Control Room	e) Good, system is in order

11. Fire safety in handling Flammable and Explosive Material	
a) Caution/Danger signs are placed conspicuously.	a) Good, system is in order.
b) Earthing facility for tankers of LDO / HFO / Diesel is in place	b) Good, system is in order.
c) High velocity water sprinklers are provided in Transformers and MVWS in LDO /HFO Tanks and MOT in GT building.	c) Good, system is in order.
d) LPG cylinder bank at the canteen is located outside with adequate ventilation and protection from sunlight.	d) Good, system is in order.
e) Cylinders are fitted to manifolds. There is a gas detector inside the bank which is at height.	e) Good, system is in order.
f) Hydrogen generation building has Fire extinguishers in each rooms Fire hydrants are placed on all sides of the building. Round the surveillance through CCTV is carried out.	f) Good, system is in order.
g) Oil tank areas have fire hydrants, monitors and foam flooding system. MVWS with deluge valves fixed as fire prevention measures.	g) Good, system is in order.

(U) Chemical Hazard:

Observation	Recommendation
1.TRANSPORTATION OF HAZARDOUS SUBSTANCES- List of Hazardous Chemical imported is being maintained by Chemistry department. Record is available for verification	• System is in order and compliance of J.F.R 62DH
2.Handling Of Hazardous Substances Following hazardous substances like Sulphuric Acid loading / unloading, Chlorine toner unloading, toner changing & dosing, Acid dosing, cleaning of neutralization tank, tank cleaning operation, dechocking of chlorine line, clarifier unit sludge pit cleaning, chemical solution tank cleaning, Hydrogen Plant operation including storage of hydrogen cylinder, are handling done with SOPs.	• System is in order
Risk control measures like trained manpower, work done only by authorized personnel, MSDS, Safety Training & retraining, communication exercise, proper supervision, use of suitable PPEs has been carried out during handling of hazardous chemicals.	• System is in order

Bund wall for Bulk Caustic soda storage tank in tank in DM Plant, tank identification number, emergency measure during accidental release, information to employees are found in place and on site emergency mockdrill carried as per plan and requirement.	• System is working well
Identification of pipe line with direction of flow is observed	• Appreciated Compliance of J.F R 62SH
Factory has identified a responsible person to deal with handling of chemical.	• Emergency situation while transporting of hazardous chemical though tanker is missing
3.Storage of Hazardous chemicals Company is storing Chlorine tonners, caustic and Sulphuric acid at DM plant for water treatment. HAZOP and Pumps are housed inside the dyke area however pump on off is being done from outside. Hazardous chemical classification as per flammability and on other standard study of such chemicals are evident. and is per guideline of JFR 62DH. The eye washer and safety shower is installed at dyke area with proper clean water pressure.	• SOP and MSDS to be displayed at site.
4.Spill Control Measures- The flooring of the Lubricant Yard is made impermeable and sloped to collect any spillage. The dyke walls made strong and in good conditions prevent direct flow to open drain.	• System is in order
5.MATERIAL SAFETY DATA SHEET (MSDS) MSDS is available for all chemicals and labeling is also observed - compliance with J.F.R 62CH.	• System is in order
6.GAS CYLINDERS SAFETY Marking of cylinders, identification with color code, proper handling of Gas cylinder, provision of Discharging static charge at hydrogen plant has been observed. Compliance with gas cylinder Rule 2016.	• Need rectification of ESD
7.LABELING AND COLOUR CODING Pipe line for handling of chemicals and other liquid and gasses is observed as per guide line of IS 2379:1990, ANSI / ASME 13.1: 2015 IS 4379:1981/BS EN1089-3	• Good, to be continue
8.HAZARDOUS WASTE MANAGEMENT Hazardous waste container are found with labeling and collected and kept at designated places.	• System is in order

Compliances of Hazardous waste Management Rules-2016 is evident and has been hand over to an authorized agency M/S Haryana petro Oils.	
U. Industrial hygiene (Illumination, Ventilation, & Noise etc):	
1. Illumination survey is carried out in the plant periodically. The last survey report was conducted on dated January 2021 during night hours and the illumination level at various location of the plant was within normal limit. 2. In general adequate ventilation is available in the plant and workshops. However, no ventilation study to assess the adequacy of ventilation was evidenced for enclosed areas. 3. Noise level at operating places are as per norms. Noise level monitoring is being done periodically in different hours (morning, afternoon and night) and records are maintained.	1. Good practice. The requirement of illumination levels in work places and passages /roads should be indicated as per the provisions in the State Factory Rules but found poor at some places. 2. As per Section 13 of the Factories Act' 1948, proper ventilation survey been carried out. For Ventilation study, IS 3103:1975 Code of Practice for Industrial Ventilation may also be referred. It is necessary to conduct Ventilation survey of enclosed areas. 3. Good practice. As per the Factories Act' 1948, the permissible level of noise for exposure of 8 hours in a day is 90 dB (A).

V. Safety Culture	
1. Prevalence of a good safety culture is evident from several factors.	1. Good system.
2. Almost all vehicle adhere to speed of 30 KMPH inside plant.	2. Good system
3. Cars are parked in the reverse in the parking zone.	3. Good system
4. All employees strictly follow the No smoking zones.	4. Good system
5. All executives put on green reflective jackets.	5. Good system
6. Work men of different contractors have their distinctive reflective jackets.	6. Good system
7. Use of general PPEs is observed.	7. Good system
8. General perception of safety amongst all level of workmen is good.	8. Good system
9. Their approach to safety inspections and audits was very positive.	9. Good system

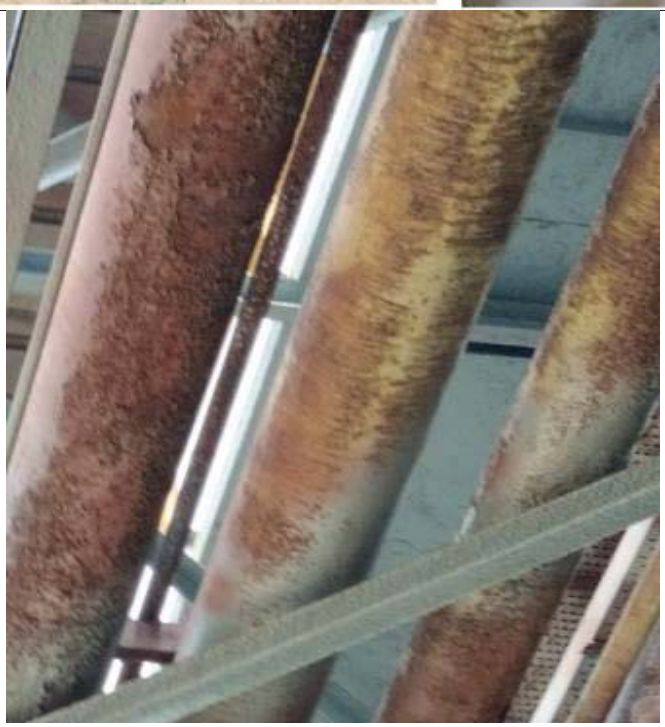
10. The Tata power Safety management System (TPSMS) is followed by all employees.	10. Good system
11. There are 13 elements in TPSMS which ensures continuous improvement of safety culture.	11. Good system
12. KRA of each employee aligned with TPSMS.	12. Good system
13. Each HOD has to submit a personnel safety action plan in KRA Elements of TSMS are: a) Leadership & Accountability b) Hazard Identification& Risk management system c) Compliance Assurance Design, Construction& Operational Control d) People, Competency& Behaviours Communication, Consultation & Empowerment e) Incident Reporting, Investigation & learning f) Asset Management g) Management of Change h) Working with Contractors Response & Crisis Management i) Document Control & Record management j) Measuring Performance, Audit &Review	13. Good system
14. All four wheelers were observed to be parked in reverse to facilitate immediate move out in Emergency	14. Good system

PART – 4
FIELD VISIT OBSERVATIONS & EVIDENCE

Sl. No.	OBSERVATIONS	OBJECTIVE EVIDENCE
1	Proper illumination not evident at several location inside plant premises needs to review.	
2	Fire Hydrant and emergency points are not accessible, and not available at some points need review for internal inspection plan.	

3	There is a gap in between hand railing and ladder, walkway trip hazard and corroded mesh which may cause slip, trip and fall hazard, needs to review.	  
4	Electrical board front cover open at several, power cable is contact with metal surface. Insulated mat and not metal mounting to be recommended.	 
5	Stacker lifting trolley load test record not found & Fire hydrant pipe line ultrasonic thickness test and hydro test not found.	

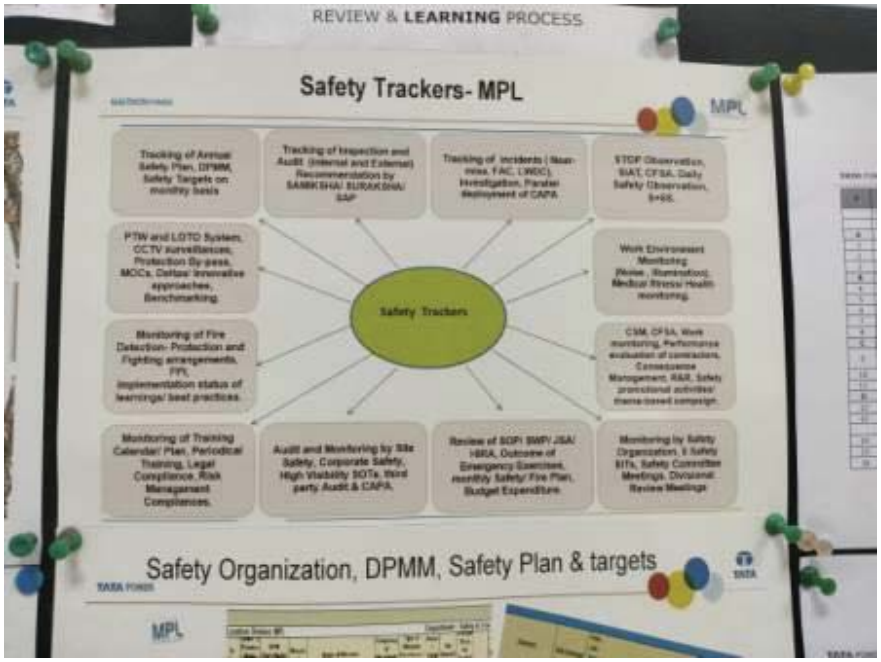
5	Emergency exit uneven, slippery and partial obstructed at few location, which is not suitable emergency situation needs to review.	
6	Valve operation is ergonomically unsafe and not approachable at few location.	
7	Hand railing availability and foot step size to be reviewed at different location inside plant premises.	

8	Posing of Trip and stumbling hazard noted during field audit at few location needs to review. All exposed MS TMT bar to be covered to protect from weather exposer to avoid excessive corrosion.	 
9	Pipeline looks rusty, first metal layer is eroded at few location inside plant premises painting and color coding of pipes and NDT of pipe lines required.	

10	Emergency safety shower is not working and pressure is uneven	
11	Temporary plastic cover for electric board to protect electric board from rain water is not fire proof material needs to review.	
12	Water clogging near electrical panel without insulated mat may cause electrical shock hazard needs to review for protection from these potential hazard.	 

PART – 5
GOOD PRACTICES / OBSERVATIONS

Part _ 5: Good Practices / Observation

1	Safety Tracker displayed at plant premises	
2	Thermo Hygrometer displayed at various location inside plant premises.	

3	Do's & Dont's displayed inside plant premises as per job description.	
4	Pictorial SOP in regional language displayed inside plant premises evident.	

5	Basic PPE required to work inside plant premises is displayed at several location inside plant premises.	
6	Plant is having well equipped occupational health centre with 24X7 ambulance facility.	

PART – 6
RECOMMENDATIONS

RECOMMENDATION:

- Fumes extraction system and oxygen concentration level indicator must be reviewed.
- Obstruction observed at some emergency points and exit gate must be cleared, fire hydrant point must be strengthened, review required of all emergency equipments and points, and MSDS to be displayed in all local languages.
- External audit by competent agency of dangerous machine and process safety to be carried out.
- Training Plan to be review for hazardous job, Risk assessments and on policies for skilled, unskilled workmen and for senior executives.
- Waste generation and disposal process need to be reviewed.
- Available hazard area classification is not appropriate recommended to be done by the third party for the betterment.
- The preventive and planned maintenance systems are in place and records are maintained which was evident during audit, but coal mill maintenance platform where maintenance job is carried out more than 10 mtr height while using temporary platform is very risky needs to review for permanent platform.
- Recommended with consultation of competent agencies for Electrical area classification for flammable Gases and Vapours", "IS 5572 : 2009 - Classification of Hazardous Areas (Other Than Mines) Having Flammable Gases and Vapours for Electrical Installation (Third Revision)", and "IS 5571 : 2009 - Guide for Selection And Installation of Electrical Equipment in Hazardous Areas (Other Than Mines)". "IEC 60079: Explosive atmospheres – Part 10-1: Classification of areas – Explosive gas atmospheres" and "IEC 60079: Part 0: Equipment General Requirements" have been used as reference.
- Some fire extinguisher were kept on floor must be hanged properly.
- Industrial Hygiene monitoring Records to be reviewed, Illumination and noise level must be checked again as poor illumination found some places.
- Waste and scrap disposal system must be reviewed and duration of disposal must be shortened, to avoid accumulation of scrap and sludge.
- Process safety Management (PSI PHA and other requirements) system to be developed including J. F. R 1950 Rule 95-shedule xiii part 1&2.
- HIRA to be reviewed.
- Recommended traffic management Audit to avoid and risk of traffic inside plant.
- Plant is having HIRA for various activity having gaps in few activities recommended to be review all HIRA by third party for the improvement.
- Recommended to erect permanent platform in those areas of Coal Mill which are located at height and need periodic maintenance and risk assessment to be carried out for newly constructed platform and activities.

- Fire retardant coatings & fire stops have not been provided in cable galleries & cable vaults which are not complying the standards of IS 12459 (CODE OF PRACTICE FOR FIRE SAFETY IN CABLE RUNS) which may put the plant safety at risk. MPL has been advised to comply with IS 12459-5 standards and cable to be tied with properly
- Storm water, spill management and scrap mapping sytem to be reviewed.
- All drains and opening must be covered.

Conclusion:

The audit findings indicate that, MAITHON POWER LIMITED, DHANBAD, JHARKHAND Plant has endeavored to provide safe working condition in the plant. The involvement of top management in implementation of safety system within the organization is visible. The organization's policy accepts Safety & Occupational Health as integral part of production. The unit is capable to manage any emergency, and this is known to the key persons involved.

However, during the audit a few shortcomings were noted as will be evident from the audit report and accordingly recommendations made in this report are suggestive in nature. Compliance to these recommendations within a stipulated time period will help in further strengthening the safety management system to meet the desired objective. A compliance report and corresponding modification may be maintained to achieve a highest level of traditional Safety Culture.

Progressive Industrial Consultants would like to thank the Management of MAITHON POWER LIMITED, DHANBAD, JHARKHAND, Plant for their help & courtesy extended during Safety Audit of the said plant.

PART – 7
ANNEXURE

Sl No	Documents name
1	Factory License
2	CTO
3	PESO License
4	EHS Policy
5	Organizational Chart
6	Contract Management SOP
7	Work Permit SOP
8	Ergonomics Project & Procedure
9	Emergency Preparedness Response Plan
10	ERP Approval
11	List of First Aiders
12	Occupational Health Checkup Report
13	Prohibited Chemicals & Substances SOP
14	Accident Preventive Procedure
15	Spillage Mopping
16	Safe Electrical Programme
17	LOTO Procedure
18	Noise & Illumination Survey Report
19	Industrial Waste Management
20	STP & ETP Report
21	Machine Guarding
22	Industrial Hygiene Programme
23	List of Chemicals
24	Fire Load Calculation
25	List of Fire Extinguishers
26	Fire Alarm & Smoke Detectors, Hooters
27	Sprinklers
28	Process Flow Chart
29	Air Emission Management
30	Aspect & Impact Analysis
31	Measures taken for Prevention of Dust / Fumes Generated in the process


Thank You

ANNEXURE P/31C

OFFICE OF INSPECTOROF FACTORIES, DHANBAD CIRCLE 03, DHANBAD
(iofdhanbad3@gmail.com)
Letter no: 06

From,
Inspector of Factories
Dhanbad Circle 03, Dhanbad

To,
The Occupier / Factory Manager
M/s Mathon Power Limited
At: Dambhui, Nirsa (Dhanbad)

Camp Ranchi / 16.01.2021

Subject: Schedule for work at M/s Maithon Power Limited, Dombhui, Barbendia (Nirsa), Dhanbad submitted by M/s K.K. Engineering

Reference: Letter of M/s K.K Engineering Ref: 1 work order no 6000051961 date 22.12.2020

Sir,

With reference to the above Schedule for work submitted by M/s K.K. Engineering, this is to advise that the prepared report after carrying required test & analysis should be submitted for the further necessary action.

Ensure safe work place for carrying the required test at site.

Sincerely

Inspector of Factories
Dhanbad Circle 03, Dhanbad

Memo: 06 Dhanbad / 16.01.2021

Copy forwarded to M/s K.K. Engineering, 2C, Block E, Jaishree Green City, Argora Ranchi 834 002 for necessary action.

Inspector of Factories
Dhanbad Circle 03, Dhanbad

K. K. ENGINEERING

K K ENGINEERING

Ground Floor, Shivam Plaza, Beside Yuvraj Palace,
Kadru Diversion Road, Doranda, Ranchi-834002

kkengineering.ranchi@gmail.com +91 86510 99999

AN ISO 9001:2015 CERTIFIED COMPANY

Ref: KKE/22-23/MPL/09/01

Dated: 13-09-2022

To
The C.E.O.
Maithon Power Limited
Dhanbad

Sub: Regarding inspection of structures.

Ref : Letter of Inspector of Factories, Dhanbad, Circle-3, vide memo no. 06, dated 16.01.2021.

Dear Sir,

With reference to the letter of Inspector of Factories, Dhanbad, Circle-3, vide memo no. 06, dated 16.01.2021, we have conducted thorough inspection of buildings/structures of Maithon Power Limited. Many defects were found during inspection. Some buildings/structures needed minor modification/rectification, but some needed major. We are extending the validity certificate up to 21st March 2024. MPL is expected to do all the marked correction to their buildings/structures at the earliest, after which re inspection will be done and certificate of validity will be extended. During inspection it was found that rectification/modification in RCC buildings/structures were up to the mark, but buildings/structures as mentioned below needs to be restored.

Following is the list of the structures that needs rectification: -

a. BCN #3A/3B: Main gallery structure and supporting members including tie bracing and columns.
b. JNT 1, 2, 3, 4, 4A, 5, 6, 7, 8, Crusher House - Columns, bracings, Plan bracings, supporting members, runners, Intermediate truss, Monorail door support, Slab supporting beam, Length breakers & debris chute revamping.
c. Crusher House Dust Extraction System chimney and duct revamping.

We request you to look into the matter and ensure compliance of the above on priority.

Thanking you,

KUNAL KAUSHAL
(Competent Person under Factories Act)
K. K. Engineering
Ranchi.

K. K. ENGINEERING RANCHI JHARKHAND

Govt. Approved "Competent Person"
Under Section Rule-3A of the
Factories Act-1948, Rules 1950 and
Certificate No.: JH/CIF/7/Com. 1025/2020
Memo No.: 7/Com. 1025/2020-679, dtd-16.08.2022
by Chief Inspector of Factories (Jharkhand)

पावर सिस्टम ऑपरेशन कॉरपोरेशन लिमिटेड
(भारत सरकार का उद्यम)
POWER SYSTEM OPERATION CORPORATION LIMITED
(A Govt. of India Enterprise)
CIN : U40105DL2009GOI188682

पूर्वी क्षेत्रीय भार प्रेषण केन्द्र, 14, गोल्फ क्लब रोड, टालिगंज, कोलकाता – 700 033
EASTERN REGIONAL LOAD DESPATCH CENTRE, 14, Golf Club Road, Tollygunge, Kolkata - 700 033
Tel / दुरभाष : 033 2423 5867 / 5875 फेक्स : 033 2423 5809 / 5704 / 5029, E-mail / ई–मेल : erldc@posoco.in

Ref. No.: ERLDC/SL/2017-18/**6212** Date: 14.02.2018

To,

All the RTU Replacement Committee Members,

As per the e-mailing address

Sub: Replacement/up-gradation of Old RTU/SAS in Eastern Region – reg.

Dear Sir(s),

As you are aware that Report on Replacement of old RTUs in Eastern Region for Real Data transfer of RTU / SAS to Main and Back-up control center dually over IEC104 protocol (report available at http://erpc.gov.in/?page_id=91 under miscellaneous report section) has been approved by ERPC in 36th TCC/ERPC meeting held in Bhubaneswar on 13th & 14th September 2017.

It is further to mention that the report has suggested replacement/Up-gradation of these old RTUs / SAS due to the following reasons:-

- Non-availability of spare parts that might lead to long outage of real time SCADA data
- Having limitation of reporting dually over IEC 104 protocol
- Maintenance of the RTUs by the respective owners.

It has been requested to go through the report and take appropriate action for Replacement/Up-gradation of the RTU/SAS as there were instances of frequent failures of the Old RTUs. Also, last mile fiber connectivity may also be made available (wherever not available) as real time data reporting over IEC 104 protocol is not possible.

The action for replacement/up-gradation of old RTU/SAS as stated above may be initiated at the earliest.

Yours faithfully,

14/2/18

(Executive Director)
ERLDC

Copy To:

1. MS, ERPC, 14 Golf Club Road, Tollygunge, Kolkata-700 033.

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

Independent Auditor's Report on Statement of details of decapitalisation of Property, Plant & Equipment for financial years ended on March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024, in support to the requirements of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019

To
The Board of Directors
Maithon Power Limited
Corporate Center
34, Sant Tukaram Road,
Carnac Bunder, Mumbai- 400009

1. This Report is issued in accordance with the terms of our service scope letter dated November 18, 2024 and Master Engagement Agreement dated October 13, 2022, as amended with Maithon Power Limited (hereinafter the "Company")

2. At the request of the management, we have examined the accompanying Statement of details of decapitalisation of Property, Plant & Equipment (PPE) during financial years ended on March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024 (hereinafter referred to as the "Statement"), which we have initialled for identification purposes only.

3. The Company intends to submit the accompanying Statement for consideration of and evaluation by the Central Electricity Regulatory Commission in connection with true up petitions filed by the Company as required by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the control period 2019-2020 to 2023-24.

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

5. The Management is responsible for ensuring that the Company complies with the requirements of the CERC Regulation and for providing all relevant information to the CERC.

Auditor's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a limited assurance based on our examination whether details of decapitalization of PPE for the financial years ended March 31, 2020 to March 31, 2024 are in agreement with books of account and records which were examined by us as considered necessary for the purpose of our audit underlying the audited financial statements for the year ended March 31, 2020 to March 31, 2024.

   The above paragraph constitutes the "Reporting Criteria".

7. The financial statement of the Company referred to in paragraph 6 above, were audited by us, on which we had issued unmodified audit opinions vide our reports dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023 and April 16, 2024 respectively. Our audits of these financial statements were conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test check basis, evidence supporting the amounts and disclosures in the financial statements. Our audits were not planned and performed in connection with any transactions to identify matters that may be of potential interest to third parties.

8. We conducted our examination of the Statement in accordance with the requirements of the Guidance Note on Reports or Certificates for Special Purposes issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

10. Our scope of work did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of the amounts reported in the Statement. We have not performed an audit, the objective of which would be the expression of an opinion on the financial results, specified elements, accounts or items thereof, for the Company taken as a whole. Accordingly, we do not express such audit opinion.

11. A limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 6 above. The procedures performed vary in nature and timing from and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

12. We have performed the following procedures in relation to the Statement:

    a. Traced the total aggregate amounts of year wise decapitalization of PPE as set out in the Statement for the financial years ended March 31, 2020 to March 31, 2024 from the respective audited financial statements.

    b. Obtained the listing of asset wise decapitalization of PPE for each year as prepared and compiled by management based on information available in the SAP (ERP used by the Company for its accounting purpose) and traced the name of asset, original value of assets capitalized and year to put to use to the fixed asset register maintained by the company underlying the respective audited annual financial statements on test check basis.

    c. We have solely relied on management representation for appropriateness of classification of decapitalized PPE into decapitalization - part of capital cost and decapitalization – not part of capital cost as set out in the statement and have not performed any procedure on it as regards such appropriateness of classification.

    d. Performed necessary enquires with the management and obtained necessary representations. The Company has provided all relevant information for the respective financial years as stated above. We have relied on the same and have not performed any independent procedures.

       The above-mentioned procedures include examining evidence supporting the particulars in this Statement. Further, our scope of work did not involve us performing audit test for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.

Conclusion

13. Based on procedures performed by us, and on observations as set out in paragraph 12 above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes, if any thereon, are in agreement with books of account and records underlying the audited financial statements of the Company for the years ended March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024.

S.R. BATLIBOI & CO. LLP
Chartered Accountants

Restriction on Use

14. This report has been issued at the request of the Company, solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar.Sarkar
Digitally signed by Bhaswar.Sarkar
DN: cn=Bhaswar.Sarkar, email=Bhaswar.Sarkar@srb.in
Date: 2024.12.12 20:13:08 +05'30'

per Bhaswar Sarkar
Partner
UDIN: 24055596BKFOCN9228
Membership Number: 055596
Place of Signature: Kolkata
Date: December 12, 2024

MAITHON POWER LIMITED

Statement of details of decapitalisation of Property, Plant & Equipment for financial year ended on March 31, 2020

Amount in Rs Lakh

S. No	Name of the Asset	Original Value of the Asset Capitalised	Year Put to use
Decapitalisation - Part of Capital Cost			
1	UPS	0.04	2002
2	UPS	4.24	2002
3	UPS with Battery	1.45	2008
4	UPS	4.20	2008
5	UPS	1.27	2008
6	UPS	0.30	2008
7	Laptop- HP 6515b AMD-Ranjan Mishra	0.52	2008
8	UPS	0.08	2008
9	UPS	2.62	2009
10	UPS	1.50	2009
11	UPS	2.62	2009
12	UPS	1.87	2009
13	UPS	2.24	2009
14	HP Laptop (Model 6535S)	0.34	2009
15	Computers	0.87	2009
16	HP Laptop (Model 6535S)	0.80	2010
17	2KV UPS	1.88	2010
18	Dell Vostro V3450 Laptop	0.39	2012
19	Dell Vostro V3450 Direct base	0.78	2012
20	Fax machine Cannon make	0.17	2012
21	Client end radio device	0.38	2013
22	Base station radio device	0.60	2013
23	Base station radio device	0.42	2013
24	Hp 240 with win-8 pro Laptop	0.40	2014
25	Hp 240 with win-8 pro Laptop	0.40	2014
26	Laptop Dell Latitude 3340-Deeptimayee Sahoo	0.51	2014
27	Laptop Dell Latitude 3340-Rahul Roychoudhury	0.51	2014
28	Laptop Dell Latitude 3340-Kajal Singh	0.51	2014
29	Laptop Dell Latitude 3340-Ashok P Gupta	0.51	2014
30	Laptop Dell Latitude 3340-Pradyut Bajpayee	0.51	2014
31	Laptop Dell Latitude 3340-Amit Kumar Chatterjaee	0.51	2014
32	Laptop Dell Latitude 3340-Hari Shankar Singh	0.51	2014
33	Laptop Dell Latitude 3340-Shekhar Mishra	0.51	2014
34	Laptop Dell Latitude 3340-Jhantu Debnath	0.51	2014
35	Laptop Dell Latitude 3340-Ujjawal Dutta	0.51	2014
36	Laptop Dell Latitude 3340-Harish Singh	0.49	2014
37	Laptop Dell Latitude 3340-Mohan Singh	0.49	2014
38	Laptop Dell Latitude 3340-Swarup Kanti Maji	0.49	2014
39	Laptop Dell Latitude 3340 - Satish Kumar Soni	0.49	2014
40	Laptop Dell Latitude 3340 - Sandip Mondal	0.49	2014
41	Laptop Dell Latitude 3340 - Subhendu Sarkar	0.49	2014
42	Laptop Dell Latitude 3340 - Kaka Pattnayak	0.49	2014
43	Laptop Dell Latitude 3340 - Biswajit Bera	0.49	2014
44	Laptop Dell Latitude 3340 -Jacarias Kandulna	0.49	2014
45	Laptop Dell Latitude 3340 - Devendra Kumar Chauhan	0.49	2014
46	Laptop Dell Latitude 3340 - ANIL KUMAR PRADHAN	0.49	2014
47	Laptop Dell Latitude 3340 - S.N.PATEL	0.49	2014
48	Laptop Dell Latitude 3340 - SATINDRA NARAYAN GHOSH	0.49	2014
49	Laptop Dell Latitude 3340 -Partho Bhattacharjee	0.49	2014
50	Laptop DELL 3450-Rajiv Ranjan	0.50	2015
51	Laptop DELL 3450-Mukesh Singh Chouhan	0.50	2015
52	Laptop DELL 3450-HARISH KASWYAP	0.50	2015
53	Laptop DELL 3450-RASHMI P LAKRA	0.50	2015
54	Laptop DELL 3450-BHUPENDRA KUMAR	0.50	2015
55	Laptop DELL 3450-Kartik Kumar Mahato	0.50	2015
56	Laptop DELL 3450-Shambo Bhattacharya	0.50	2015
57	Laptop DELL 3450-G SATHPATHY	0.50	2015
58	Laptop DELL 3450-Shanti Gopal Modok	0.50	2015
59	Laptop DELL 3450-Arup Mandal	0.50	2015
	Total Decapitalisation: part of capital cost (A)	**47.39**	
Decapitalisation - Not Part of Capital Cost			
1	HP LAPTOP 440 G5 (GAURAV AGARWAL)5CD9303ZHK	0.59	2019
2	DELL LATTITUDE 3490(VIKRAM RATHORE)	0.55	2019
3	DELL LATTITUDE 3490(DEEPAK SARAN)	0.55	2019
4	ACER Laptop (DIVYANSH MURARKA) & bag	0.46	2017
5	DELL LATTITUDE E7270 Laptop- PURUSHOTTAM THAKUR	0.78	2017
6	DELL LATTITUDE 5480(SHREYOSI SAMANTA) LAPTOP	0.56	2017
7	HP 240 G3-Deepak Patra- Laptop	0.46	2016
8	HP 240 G3-Deb Narayan Sarkhel - Laptop	0.46	2016
9	Laptop-Toshiba S40BX0412-Amit Gorai	0.33	2016
10	Maruti Celerio VXI - Pradip Roy - MH46AP-0533	4.19	2017
11	Innova VX 7S Grey Mica Meta - P Thakur- OD02G-2701	12.15	2017
	Total Decapitalisation: not part of capital cost (B)	**21.09**	
	Total Decapitalisation of PPE as per audited financial statements (A+B)	**68.48**	

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.
2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH Digitally signed by KAJAL KUMAR SINGH Date: 2024.12.12 17:35:48 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

MAITHON POWER LIMITED

Statement of details of decapitalisation of Property, Plant & Equipment for financial year ended on March 31, 2021

Amount in Rs Lakh

S. No	Name of the Asset	Original Value of the Asset Capitalised	Year Put to use
Decapitalisation - Part of Capital Cost			
1	HP 450 laptop	1.15	2013
2	HP 4440 laptop	0.97	2013
3	Wooden Furniture-Pradip Roy	0.79	2013
4	Hp 240 with win-8 pro Laptop	1.19	2014
5	Laptop DELL Latitude E7240-K.C CEO	0.85	2014
6	Laptop Dell Latitude 3340-K B Singh	0.51	2014
7	Laptop Dell Latitude 3340-Sunil Kr Singh	0.51	2014
8	Laptop Dell Latitude 3340-Abhijit Pandey	0.51	2014
9	Laptop Dell Latitude 3340-Mirza Sarfraj Baig	0.51	2014
10	Laptop Dell Latitude 3340-Saiket Ganguly	0.51	2014
11	Laptop Dell Latitude 3340-Shyamal Mondal	0.51	2014
12	Laptop Dell Latitude 3340-Santosh RC (ACS)	0.51	2014
13	Laptop Dell Latitude 3340-Deepak Jaiswal	0.51	2014
14	Laptop Dell Latitude 3340-Maritunjay Ray	0.51	2014
15	Laptop Dell Latitude 3340-Ashok Kumar Shah	0.51	2014
16	Laptop Dell Latitude 3340 - Tuna sahoo	0.49	2014
17	Laptop Dell Latitude 3340 -Priti payel	0.49	2014
18	Laptop Dell Latitude 3340-Vinoth Kumar Ganapathy	0.49	2014
19	Laptop Dell Latitude 3340	0.49	2014
20	Laptop Dell Latitude 3340 - SANDEEP NANDI	0.49	2014
21	Laptop Dell Latitude 3340 - VISHAL AGARWAL	0.49	2014
22	Laptop Dell Latitude 3340 - AJAY KUMAR	0.49	2014
23	Laptop Dell Latitude 3340 - RAJ KUMAR RAI	0.49	2014
24	Laptop Dell Latitude 3340 - TUHIN DEY	0.49	2014
25	Laptop Dell Latitude 3340 - RAHUL PANDEY	0.50	2014
26	Laptop DELL 3450-Kumar Harsh	0.50	2015
27	Laptop DELL 3450-Shubhranshu Shekhar Sahu	0.50	2015
28	Laptop DELL 3450- Pradip Roy	0.50	2015
29	Laptop DELL 3450-Uttam Ojha	0.50	2015
	Total Decapitalisation: part of capital cost (A)	**17.01**	

Decapitalisation - Not Part of Capital Cost			
1	HP laptop-Anant Satsangi	0.46	31-01-2016
2	HP LAPTOP-IT G4 RAVI PRAKASH SHARMA	0.46	28-07-2016
3	HP LAPTOP-IT G4-P K BANDHU	0.48	01-09-2016
4	HP LAPTOP 240 G4-RAJEEV KUMAR	0.48	24-09-2016
5	DELL 3340 SHASHIKANT KUNWAR Laptop	0.22	29-03-2017
6	DELL LATTITUDE E5450 Laptop SOURANGSHU NIYOGI	0.21	30-06-2017
7	ACER LAPTOP (NEERAJ RAJ)	0.46	01-12-2017
8	ACER TRAVEL MATE P23-(SAGAR KUMAR BISWAL)	0.45	01-01-2018
9	ACER TRAVEL MATE P238(BIBEK KR PRADHAN)	0.45	01-09-2018
10	DELL LATTITUDE 3470 (J P CHOUDHARY) LAPTOP	0.32	12-10-2018
11	HP LAPTOP 440 G5 (DEB SARKHEL) 5CD9303ZJ3	0.59	02-09-2019
12	HP LAPTOP 440 G5 (RAJ KISHORE MANDAL)	0.59	10-09-2019
13	HP LAPTOP 430 G5 (ANOOP PATEL)	0.63	10-09-2019
14	Maruty Swift Dezire VXI - C B Singh - JH10AZ-2997	4.80	30-06-2017
	Total Decapitalisation: not part of capital cost (B)	**10.61**	

	Total Decapitalisation of PPE as per audited financial statements (A+B)	**27.62**	

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.
2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 17:36:12 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

MAITHON POWER LIMITED

Statement of details of decapitalisation of Property, Plant & Equipment for financial year ended on March 31, 2022

Amount in Rs Lakh

S. No	Name of the Asset	Original Value of the Asset Capitalised	Year Put to use
Decapitalisation - Part of Capital Cost			
1	Bed	0.68	2008
2	TV	0.21	2008
3	refrigerator	0.18	2008
4	Washing machine	0.10	2008
5	TV	0.27	2008
6	refrigerator	0.17	2008
7	refrigerator	0.40	2008
8	TV	0.55	2008
9	Microwave	0.06	2008
10	Computer Tables	0.26	2008
11	Photo Copy table	0.06	2009
12	TV	0.07	2009
13	Table	0.12	2009
14	Table	0.14	2009
15	Table	0.09	2009
16	air conditioner- voltas	2.59	2009
17	Sofa Set	0.24	2009
18	TV	0.07	2009
19	Washing machine	0.35	2009
20	TV	3.45	2009
21	TV	0.21	2009
22	Washing machine	0.07	2010
23	TV	0.21	2010
24	Godrej Make Sofa Petal 3 seater Model	0.24	2010
25	Geyser	0.70	2010
26	Serving Table Granite Top(3'x24'x26')	0.27	2010
27	Almirah Godrej Make storewel Plain with	2.00	2010
28	Single Bed	1.48	2010
29	Godrej Make Sofa Petal 3 seater Model	0.24	2010
30	Colour TV,21 Flat Screen, 21FC2AB LG	0.28	2010
31	LG Make Refrigeretor Model 258VT5	0.17	2010
32	Geyser	0.45	2010
33	Sofa Set (3+1+1) with Cushion	1.94	2010
34	L.G Make Fully Automatice washing	0.33	2010
35	LG Washing Machine ; Model:-8068LDP	0.19	2010
36	LG TV 21	0.51	2010
37	Sofa Set With Cushion	0.97	2010
38	LG 32 LCD (32 LD310)	2.88	2010
39	2 Tonnes Vertis Split AC(3 Star)	0.84	2010
40	Magnetic White Board	0.79	2011
41	Chair	1.39	2011
42	Table 3'x6''2'x6' (MC-21)	0.16	2011
43	Cooler Make : Bajaj or equi. Kenstar	0.57	2011
44	Sofa 3 Seater	0.79	2011
45	Installation & placing sofas 3 seater	0.03	2011
46	GI Ducting for above Hoods	0.81	2011
47	Gas Pipe Line - ERW - C Class	0.16	2011
48	Gas Bank Manifold System	0.54	2011
49	Exhaust Hood for Single Burner Range	0.35	2011
50	Exhaust Hood for Deep Fat Fryer	0.13	2011
51	Exhaust Hood for Chapatti Plate	0.21	2011
52	Exhaust Hood for 5 Burner Gas Range	0.70	2011
53	Centrifugal Blower for Hot Air Suction	0.89	2011
54	5 Burner Gas Range	0.98	2011
55	2 Sink Unit	0.28	2011
56	Work Table	1.59	2011
57	Single Burner Gas Range	0.32	2011
58	Electric Combi Oven-Imported	2.70	2012
59	Double Container Deep Fat Frier	0.41	2012
60	4 Door Vertical Deep Freezer	3.62	2012
61	Work Table	2.13	2012
62	Sink for Hand wash	0.16	2012
63	Single Sink Unit	0.16	2012
64	Potato Peeler	0.43	2012
65	Pot Rack	0.62	2012
66	Lunch Plate Storage Rack - 3 Shelve	0.14	2012
67	2 Door Refrigerator	1.72	2012
68	Hand Dryer - Electrically Operated	0.13	2012
69	GI Ducting for above Hoods	0.15	2012
70	GN Pan 1/2 x 100 mm H with SS Lid	0.94	2012

MAITHON POWER LIMITED

S. No	Name of the Asset	Original Value of the Asset Capitalised	Year Put to use
71	Flexible pipe 4 ft L	0.02	2012
72	Electric Geyser - Haire	0.14	2012
73	Dough Kneaer - Standard	0.88	2012
74	Cold Bain Marie with underneath	2.06	2012
75	Chapatti Plate cum Puffer- LPG Operated	0.39	2012
76	BottleCooler/VisiCooler-Front Glass Door	0.36	2012
77	5 Shelve Storage Rack	1.71	2012
78	Wet Grinder / Masala Grinder	0.42	2012
79	Water Cooler - SS	0.58	2012
80	Veg Trolley	0.16	2012
81	Soiled Dish Receiving Table	0.23	2012
82	Sandwich Griller - Single Unit Standard	0.19	2012
83	Salamander	0.25	2012
84	Pulverizer	0.40	2012
85	Potato Onion Bin	0.22	2012
86	Pickup Counter with Tray Slide & 2 Tier	0.72	2012
87	Needle Control Valve	0.02	2012
88	Idly Steamer - Electrically operated	0.37	2012
89	Ice Cream Freezer	0.30	2012
90	Hot Bain Marie with 6 Nos. Container	1.13	2012
91	1 Nos. Bracket & 2 Nos. Chain	0.04	2012
92	TV-Sony Bravia Flat screen	4.51	2013
93	Table Tennis Board	0.46	2013
94	Laptop Dell Latitude 3340-Srikant Dash	0.51	2014
95	Laptop Dell Latitude 3340 - PANKAJ KUMAR	0.49	2014
96	Laptop Dell Latitude 3340 - Debarati Mandal	0.49	2014
97	Laptop Dell Latitude 3340-Vikash Kumar	0.49	2014
98	Laptop DELL 3450-Vishal Kumar Panchal	0.50	2015
99	Laptop DELL 3450-Ranjan Kr. Das	0.50	2015
100	Laptop DELL 3450-Priyasish Roy	0.50	2015
	Total Decapitalisation: part of capital cost (A)	**67.07**	

Decapitalisation - Not Part of Capital Cost			
1	HP LAPTOP 440 G5 (PRIYAJIT SAHOO)	0.59	2019
2	DELL LATTITUDE 3490(RAHUL PANDEY)	0.55	2019
3	ACER TRAVEL MATE P2 (BIPLOB CHATTERJEE)	0.45	2018
4	ACER TRAVEL MATE P23-(SHASHIKNAT SALDUR)	0.45	2018
5	ACER LAPTOP (GAURAV KUMAR)	0.46	2017
6	ACER LAPTOP MATE P23 (SUSHIL CHOUBEY)	0.46	2017
7	ACER LAPTOP MATE P23 Mr Sudip Kumar Dash	0.46	2017
8	ACER Laptop (KUNTAL MITRA) & bag	0.46	2017
9	DELL LATTITUDE 3340 LAPTOP BIPLOB HAZRA	0.11	2017
10	DELL LATTITUDE E7270 Laptop- Ramesh Jha	0.81	2017
11	HP LAPTOP-IT G4 RAHMAN SIDDIQUR	0.48	2016
12	HP LAPTOP-IT G4-SRIBALLAV SINGH	0.48	2016
13	HP LAPTOP 240 G4-BIPLOV CHATTERJEE	0.48	2016
14	HP LAPTOP 240 G4-RAMENDRA BANIK	0.48	2016
15	HP LAPTOP 240 G4-RAKESH TALUKDAR	0.48	2016
16	LAPTOP-NILESH KUMAR	0.48	2017
17	LAPTOP-UMESH GAUTAM	0.49	2017
18	LAPTOP-NEERAJ PRASAD	0.49	2017
19	HP 240 G5 LAPTOP(ASHUTOSH RAI)	0.44	2017
20	HP 240 G5 LAPTOP (ABHIJIT CHOUDHARY)	0.44	2017
	Total Decapitalisation: not part of capital cost (B)	**9.54**	

	Total Decapitalisation of PPE as per audited financial statements (A+B)	**76.61**	

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.
2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 17:36:30 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

MAITHON POWER LIMITED

Statement of details of decapitalisation of Property, Plant & Equipment for financial year ended on March 31, 2023

Amount in Rs Lakh

S. No	Name of the Asset	Original Value of the Asset Capitalised	Year Put to use
Decapitalisation - Part of Capital Cost			
1	Zenith Computer ,Model: Intel G 31	1.49	2010
2	Zenith Computer ,Model: Intel G 31	5.70	2010
3	Zenith Computer ,Model: Intel G 31	2.98	2010
4	TG Auxiliaries	1.03	2011
5	Turbine	36.96	2011
6	Electro Static Precipitator (ESP)	186.97	2011
7	DC Battery-Plate Type	85.81	2011
8	Relay Panel	6.83	2011
9	Coal Mill	91.76	2011
10	Super heaters and reheaters	246.50	2011
11	ZENITH corporate PC H61	3.16	2012
12	LV Switchgear	36.03	2012
13	DC Battery-Plate Type	91.31	2012
14	Compressed Air System	1.03	2012
15	Compressed Air System	4.74	2012
16	TG Auxiliaries	2.58	2012
17	ID,PA and FD Fan	0.69	2012
18	ID,PA and FD Fan	46.56	2012
19	Cooling Tower 2	64.91	2012
20	ESP Area	19.25	2012
21	Capital Spares-AHP	0.92	2012
22	ANALYSER TRIGAS(HY PURITY MTR)H2 CO2&AIR	5.07	2014
23	PH 700 benchmeter	0.85	2014
24	conductivity bench top meter Kit	0.98	2014
25	Multi gas Detector-Explosive meter	0.78	2014
26	Laptop Dell Latitude 3340 - Ayan Kumar Ghosh	0.49	2014
27	Laptop Dell Latitude 3340 - ABHISHEK KUMAR	0.49	2014
28	Laptop Dell Latitude 3340 - SAROJ KUMAR JHA	0.49	2014
29	SPECTROPHOTOMETER VISIBLE	3.53	2015
30	Laptop DELL 3450-DEEPAK KR. JAISWAL-Opn	0.50	2015
31	Laptop DELL 3450-AJAY KUMAR R&R	0.50	2015
32	Laptop DELL 3440-Mr Rakesh J Singh	0.46	2015
	Total Decapitalisation: part of capital cost (A)	**951.36**	

Decapitalisation - Not Part of Capital Cost			
1	ACER TRAVEL MATE P23-ANIRBAN PAL	0.45	2018
2	ACER TRAVEL MATE P23-(AJIT NAYAK)	0.45	2018
3	ACER TRAVEL MATE P23-(PRINCE KUMAR SINGH)	0.45	2018
4	ACER TRAVEL MATE P23-(PANKAJ KR.SINGH)	0.45	2018
5	LAPTOP ACER TRAVEL MATE P23-(RAVI SHANKAR RAJAK)	0.45	2018
6	ACER TRAVEL MATE P23-(RAJESH KUMAR YADAV)	0.45	2018
7	ACER TRAVEL MATE P2 (SUNIL KURMI)	0.45	2018
8	ACER TRAVEL MATE P2 (AJAY KR.BAISYA)	0.45	2018
9	ACER TRAVEL MATE P23-K C BEHERA	0.45	2018
10	ACER TRAVEL MATE P23 (AJEET SINGH)	0.45	2018
11	ACER LAPTOP MATE P23(YARRAM REDDY)	0.45	2018
12	ACER TRAVEL MATE P23 (ASHOK TRIPATHI) LAPTOP	0.46	2017
13	ACER TRAVEL MATE P23 (SUNIL KUMAR SINGH) LAPTOP	0.46	2017
14	ACER TRAVEL MATE P23 (MARUTI DUTTA) LAPTOP	0.46	2017
15	ACER TRAVEL MATE P23 (SUMAN GHOSAL) LAPTOP	0.46	2017
16	ACER TRAVEL MATE P23 (ASHOK SAHA) LAPTOP	0.46	2017
17	ACER TRAVEL MATE P2 (MUKESH KUMAR NAIK)	0.45	2018
18	LAPTOP HP 440 G5 (SAMIR PANDAB)	0.59	2020
19	DELL LATTITUDE 3490(VISHAL INGALE)	0.55	2019
20	DELL LATTITUDE 3490(KANAWAR KUSHWAHA)	0.55	2019
21	ACER TRAVEL MATE P238(R B SINGH)	0.45	2018
22	ACER TRAVEL MATE P238 (SAIKAT GANGULY)	0.45	2018
23	ACER TRAVEL MATE P238 (MANISH KUMAR)	0.45	2018
24	ACER TRAVEL MATE P238(SRINIVASA RAO YERRA)	0.45	2018
25	ACER TRAVEL MATE P238(AMBRISH KUMAR)	0.45	2018
26	ACER TRAVEL MATE P238(SHAMBHU KUMAR)	0.45	2018
27	ACER TRAVEL MATE P238 POONAM SHIRKE	0.45	2018
28	ACER TRAVEL MATE P23-(AVIJIT KUMAR UOADHAYA)	0.45	2018
29	ACER TRAVEL MATE P2 (BABAN CHACKO)	0.45	2018
30	ACER TRAVEL MATE P2 (GIRIJA PRASAD THATOI)	0.45	2018

MAITHON POWER LIMITED

S. No	Name of the Asset	Original Value of the Asset Capitalised	Year Put to use
31	DELL LATTITUDE 5480(ANISH KHAN) Laptop	0.56	2017
32	DELL LATTITUDE 5480(KUNDAN RAJ) Laptop	0.56	2017
33	DELL LATTITUDE 5480(MAYANK GARG) Laptop	0.56	2017
34	DELL LATTITUDE 5480(RAMESH OJHA) Laptop	0.56	2017
35	HP 240 G5 LAPTOP (RANDHIR KUMAR)	0.44	2017
36	HP 240 G5 LAPTOP (ARIF JAMAL)	0.44	2017
37	HP 240 G5 LAPTOP (SARWOTAM PRASAD)	0.44	2017
38	HP 240 G5 LAPTOP (BISWARUP DUTTA)	0.44	2017
39	HP 240 G5 LAPTOP(PANKAJ MONDAL)	0.44	2017
40	LAPTOP-JAY MALLICK	0.49	2017
41	LAPTOP-SUGATA CHAKRABORTY	0.49	2017
42	HP laptop-IT G4-IRFAN AHMED	0.48	2017
43	HP laptop-IT G4-P UMAKANTH	0.48	2017
44	PRINTER HP LASERJET PRO MFP M226DW	0.32	2017
45	HP LAPTOP 240 G4-HIMADRI BHATTA	0.48	2016
46	HP 240 G3-V.S Mishra-Laptop	0.46	2016
47	ACER LAPTOP (M S REHMAN)	0.46	2017
48	ACER LAPTOP (AMITABH TIRKEY)	0.46	2017
49	ACER LAPTOP (VIKASH ROY)	0.46	2017
50	ACER LAPTOP MATE P23 (MADAN PANDA)	0.46	2017
51	ACER LAPTOP MATE P23 (SRILAL ACHARYA)	0.46	2017
52	ACER LAPTOP MATE P23 (RAJESH SINGH)	0.46	2017
53	ACER LAPTOP (SHASHIKANT KUNWAR)	0.46	2017
54	ACER LAPTOP (NILESH AMBER)	0.46	2017
55	DELL LATTITUDE 5480(SOUMYAJIT JASH) Laptop	0.56	2017
56	DELL LATTITUDE 5480(SUSANTA PATRA) Laptop	0.56	2017
57	DELL LATTITUDE 5480(ARUNVA DAS) Laptop	0.56	2017
58	DELL LATTITUDE 5480 (NITYA MONDAL) LAPTOP	0.55	2017
59	DELL LATTITUDE 5480(ANOOP SINGHAL) LAPTOP	0.56	2017
60	DELL LATTITUDE 5480(SANCHAL ENDUPURI) LAPTOP	0.56	2017
61	ACER Laptop (DINESH GANGWAL) & bag	0.46	2017
62	ACER Laptop (KAUSHIK GANGULY) & bag	0.46	2017
63	Hyundai CRETA E+ VTVT 1.6 S R Sardul MH01CH-6778	12.25	2017
64	Honda City SV CVT -Ajay Konnur-MH01CP-0048	12.75	2017
	Total Decapitalisation: not part of capital cost (B)	**54.54**	

	Total Decapitalisation of PPE as per audited financial statements (A+B)	**1,005.90**	

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.
2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 17:36:44 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

MAITHON POWER LIMITED

Statement of details of decapitalisation of Property, Plant & Equipment for financial year ended on March 31, 2024

Amount in Rs Lakh

S. No	Name of the Asset	Original Value of the Asset Capitalised	Year Put to use
Decapitalisation - Part of Capital Cost			
1	Ventilation Fan	0.03	2008
2	DIGITAL CAMERA-CAPITAL PHOTO SERVICE PVT LTD	0.61	2009
3	Polycom Soundsation audio conf system	0.55	2009
4	Ver blind-Installation of Verticals blinds at Proe	0.15	2009
5	Paper Shredding Machine	0.20	2009
6	Self Retractable Fall Arrestor.	0.58	2009
7	GPS	0.24	2009
8	Air conditioner	0.13	2009
9	Kent Grand RO Mineral Water Plant	0.15	2009
10	Grounding Pit/Trip	0.84	2009
11	Shoe Shinning Machine	0.16	2009
12	Digital Camera (Canon-Powershot) A1000IS	0.40	2009
13	High Brite torch.	0.54	2009
14	Sony Music System Model GT 484 USB	0.08	2009
15	Kent Grand RO Mineral Water Plant	0.15	2009
16	Digital Camera-Canon	0.10	2009
17	TV	0.07	2009
18	Kent Grand RO Mineral Water Plant	0.58	2009
19	refrigerator	0.13	2010
20	Microwave	0.09	2010
21	Wet Grinder	0.07	2010
22	Nikon Digital Camera (Model S230)	0.09	2010
23	Water Level Controller	0.07	2010
24	Kent Grand+ - RO+UV+MINERALS- 15 Litres/	0.73	2010
25	LCD size 32(full HD) Model No. 32LF20FR	0.32	2010
26	Jointing Kit	0.21	2010
27	HP Laserjet Printer Model: P1505	0.37	2010
28	ZUARI MADE BED	2.56	2010
29	Machine WATCHMAN Auto Pump Controller	0.14	2010
30	Zenith Computer ,Model: Intel G 31	0.25	2010
31	M.S Factory Gate(Collapsible) gate Size	0.09	2010
32	Motorola Make VHF Portable	1.39	2010
33	Search Light	0.45	2010
34	High Brite Tourch	1.01	2010
35	Zenith Computer ,Model: Intel G 31	1.24	2010
36	Motorola Make VHF Portable	1.39	2011
37	Mobile Dresser with Almirah code -168	0.12	2011
38	Geyser for site office	0.05	2011
39	Chair Manager	5.21	2011
40	TG.Building	2.60	2011
41	CWPH MCC ROOM	8.88	2011
42	Vibrating Grizzly Feeder	4.58	2011
43	Conveyor System	302.10	2011
44	Conveyor System	148.72	2011
45	Boiler Drum	2.48	2011
46	ESP Area	1.68	2011
47	Switch Yard-400KVA	9.54	2011
48	Switch Yard-400KVA	9.64	2011
49	Coal Mill	9.85	2011
50	Coal Mill	6.22	2011
51	Coal Mill	4.20	2011
52	Coal Mill	29.43	2011
53	Coal Mill	73.44	2011
54	Variable Frequency Drive (VFD)	6.48	2011
55	Steam Water Analysis System (SWAS)	14.46	2011
56	Steam Water Analysis System (SWAS)	37.81	2011
57	Turbine Supervisory System (TSS)	49.94	2011
58	Uninterupted Power Supply (UPS)	2.05	2011
59	DG Set	13.79	2011
60	LV Switchgear	12.58	2011
61	Misc. Pumps Horizontal	4.93	2011
62	Misc. Pumps Horizontal	21.00	2011
63	Control Valves	8.38	2011
64	Instrumentation	9.93	2011
65	Cooling Tower 1	51.08	2011
66	Computer	0.73	2011
67	Fixed Out Door Camera with Lens	66.06	2011
68	VHF Portable	1.40	2011
69	Chair Visitors / Staff/ Conf	0.86	2011
70	Security Iron Barricade	0.93	2011

MAITHON POWER LIMITED

S. No	Name of the Asset	Original Value of the Asset Capitalised	Year Put to use
71	CENTRAL STORE	2.34	2011
72	400KV SWITCHYARD	0.20	2011
73	Zenith Corporate PC h61	0.40	2012
74	CANON make Laser Plain Paper Fax Machine	0.17	2012
75	Storewel Plain Almirah	0.95	2012
76	Ring Granulator	33.67	2012
77	Electricals and C&I	6.93	2012
78	Storewel Plain Almirah	0.16	2012
79	Super heaters and reheaters	260.03	2012
80	Super heaters and reheaters	17.27	2012
81	Electrical	15.44	2012
82	PLC System	7.60	2012
83	PLC System	3.52	2012
84	PLC System	38.92	2012
85	FIRE SECURITY SYSTEM	2.26	2012
86	Capital Spares-CHP	5.88	2012
87	Electro Static Precipitator (ESP)	25.42	2012
88	Electro Static Precipitator (ESP)	68.38	2012
89	Turbine	29.19	2012
90	Turbine	29.19	2012
91	Boiler Feed Pumps & TDBFP RECIRCULATION VALVE WITH	0.25	2012
92	Distributed Control System(DCS)	68.91	2012
93	Uninterupted Power Supply (UPS)	34.20	2012
94	Relay Panel	9.61	2012
95	DG Set	14.99	2012
96	Compressed Air System	4.26	2012
97	DC Battery-Plate Type	91.31	2012
98	LV Switchgear	3.87	2012
99	Cooling Tower 2	46.10	2012
100	AC 1.5 Tonnes , 5 Star	30.20	2013
101	Chairs-Supreme	2.46	2013
102	Dinning Table-Godrej Make	0.54	2013
103	SCANNER - Kodak I 1405	2.02	2013
104	Motorola GP 328 Walky Talky	3.16	2014
105	Hp 240 with win-8 pro Laptop	0.40	2014
106	LAN Printer (Model - Aficio SPC240SF)	0.45	2014
107	Printer-CANON IR Adv-4025	2.05	2014
108	Envireomental IT system	3.80	2014
109	Laptop Dell Latitude 3340-Himadri Bhattacharjee	0.51	2014
110	Laptop Dell Latitude 3340-Jaya Bajpai	0.51	2014
111	Laptop Dell Latitude 3340-Soumen Halder	0.49	2014
112	MILLIPORE FILTER ASSEMBLY	8.57	2014
113	DADF for Cannon ID-4025	0.37	2015
114	Canon IR 4225 Printer with DADF	1.61	2015
115	Printer Canon IR 4225 with DADF	1.61	2015
116	Printer Canon IR 4225 with DADF	1.61	2015
117	BOMB CALORIMETER	13.50	2015
118	Weigh Bridge cabin for 5&6	4.59	2015
119	2 Ton Voltas SAC 245 DY	0.50	2015
120	2 Ton Voltas SAC 245 DY	0.50	2015
121	4Ton Venture Slimline Split AC	0.82	2015
122	4Ton Venture Slimline Split AC	0.82	2015
123	4Ton Venture Slimline Split AC	0.82	2015
124	4Ton Venture Slimline Split AC	0.82	2015
125	Mini Bar Fridge 47 Ltr-Field Hostel	0.06	2015
126	Four Door Vertical Freezer-Field Hostel	1.37	2015
	Total Decapitalisation: part of capital cost (A)	**1,842.90**	

Decapitalisation - Not Part of Capital Cost			
1	HP LAPTOP 440 G5 (SHUBENDU SARKAR)	0.59	2019
2	HP LAPTOP 440 G5 (SUMAN MUKHERJEE)	0.59	2019
3	HP LAPTOP 440 G5 (BIBHUKANT NAYAK)	0.59	2019
4	HP LAPTOP 440 G5 (BISWAJIT BERA)	0.59	2019
5	HP LAPTOP 440 G5 (MANAS SAHOO)	0.59	2019
6	HP LAPTOP 440 G5 (SHUBHRANSHU SAHU)5CD9303ZH5	0.59	2019
7	HP LAPTOP 440 G5 (DIVYANSHU TRIVEDI) 5CD9303ZHG	0.59	2019
8	HP LAPTOP 430 G5 (KAJAL SINGH) SR NO.5CD930877X	0.63	2019
9	HP LAPTOP 440 G5 (NEERAJ RAJ) SR NO 5CD9303ZJ2	0.59	2019
10	HP LAPTOP 440 G5 (SHANTI MODAK) SR 5CD9303ZHP	0.59	2019
11	DELL LATTITUDE 3490(PARTHO BHATTACHARYYA) LAPTOP	0.59	2019
12	DELL LATTITUDE 3490(ANKIT ANAND) LAPTOP	0.59	2019
13	DELL LATTITUDE 3490(MD NAWAZ) LAPTOP	0.59	2019
14	DELL LATTITUDE 3490(AMAN KUMAR) LAPTOP	0.59	2019
15	DELL LATTITUDE 3490(RAJIV RANJAN) LAPTOP	0.59	2019

MAITHON POWER LIMITED

S. No	Name of the Asset	Original Value of the Asset Capitalised	Year Put to use
16	DELL LATTITUDE 3490(PARTHA BANERJEE) LAPTOP	0.59	2019
17	DELL LATTITUDE 3490(RAHUL DEV BANERJEE) LAPTOP	0.59	2019
18	DELL LATTITUDE 3490(ABHIJIT PANDEY)	0.55	2019
19	DELL LATTITUDE 3490(JATYA BATBAYAL)	0.55	2019
20	DELL LATTITUDE 3490(AMIT PATIL)	0.55	2019
21	LAPTOP DELL LATTITUDE 3490(RAVI KUMAR)	0.55	2019
22	HP LAPTOP 440 G5 (HARISH SINGH)	0.59	2019
23	HP LAPTOP 440 G5 (UJJWAL DUTTA)	0.59	2019
24	HP LAPTOP 440 G5 (HARISHANKAR SINGH)	0.59	2019
25	HP LAPTOP 440 G5 (PRADYUT BAJPAYEE)	0.59	2019
26	HP LAPTOP 440 G5 (AMIT CHATTERJEE)	0.59	2019
27	HP LAPTOP 440 G5 (GAURAV BAWASE)	0.59	2019
28	HP LAPTOP 430 G5 (S H PANDEY)	0.63	2019
29	HP LAPTOP 440 G5 (KARTIK MAHATO)	0.59	2019
30	HP LAPTOP 440 G5 (HIRESH KASHYAP)	0.59	2019
31	HHP LAPTOP 440 G5 Sandeep Mahto LT003245	0.59	2019
32	HP LAPTOP 440 G5 (RASHMI LAKRA)	0.59	2019
33	HP LAPTOP 440 G5 (ANIL PRADHAN)	0.59	2019
34	PRINTER,,LASER JET, PRO MFP M226DN/DW,	0.32	2019
35	PRINTER,,LASER JET, PRO MFP M226DN/DW,	0.32	2019
36	HP 440 G7	0.61	2020
37	HP 440 G7 LAPTOP HP 440 G7 (ARNAB BOSE)	0.61	2020
38	HP PRINTER LASER JET PRO MFP M226DN/DW	0.31	2022
39	LT007119-ACER TMP214-53-MARSHAL NELSON BRIGANZA	0.70	2022
40	DELL LATTITUDE 3490(SOUMYADIP BARAL)	0.55	2019
41	Cannon Printer MA-5	0.74	2016
42	HP laptop-Rakesh Bhadoria	0.46	2016
43	HP 240 G3-IT- Laptop	0.46	2016
44	DELL LATTITUDE 3490(UDAY SINGH)	0.55	2019
45	DELL LATTITUDE 3490(MITHUN MAZUMDAR)	0.55	2019
46	LAPTOP DELL LATTITUDE 3490(RAVI SHANKAR JETI)	0.55	2019
47	ACER TRAVEL MATE P238 (SANTANU GHOSH)	0.45	2018
48	ACER TRAVEL MATE P238(TUNA SAHOO)	0.45	2018
49	ACER TRAVEL MATE P23 (BIBHUTI ROUTRAY)	0.45	2018
50	ACER TRAVEL MATE P23-(RAMANAD SHUKLA)	0.45	2018
51	ACER TRAVEL MATE P2 (A K NAYAK)	0.45	2018
52	ACER TRAVEL MATE P2 (SAPNA RANI)	0.45	2018
53	ACER TRAVEL MATE P23-(SANJEEV SINHA)	0.45	2018
54	ACER TRAVEL MATE P23 (BATAVYAL ATISH D)	0.45	2018
55	ACER LAPTOP MATE P23 (SUSHEEL SINGH)	0.46	2017
56	ACER TRAVEL MATE P23 (RAKESH PANDEY) LAPTOP	0.46	2017
57	ACER Laptop (ARUN SINGH) & bag	0.46	2017
58	TOSHIBA S40BX0412 (RajKishore Mandal)	0.21	2017
59	CANON IR-ADV 4225	1.80	2017
60	HP LASERJET 1108	0.11	2017
61	HP 240 G5 LAPTOP (RUPESH SINGH)	0.44	2017
62	HP PRO 202N PRINTER	0.12	2016
63	HP LAPTOP-IT G4-SUBHASH TIWARI	0.48	2016
64	HP LAPTOP-IT G4-AJAY KONNUR	0.48	2016
65	CHAIR OFFICES, EXECUTIVE	2.00	2018
66	4 Door Vertical Refrigerator with D.T.C.	1.97	2015
67	Potato Peeler5 Kg. per Filling	0.85	2015
68	AUTOMATIC TAN TRITRATOR	6.00	2015
	Total Decapitalisation: not part of capital cost (B)	**45.56**	

	Total Decapitalisation of PPE as per audited financial statements (A+B)	**1,888.46**	

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.
2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 17:37:08 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

Independent Auditor's Report on Statement of annual and quarterly opening and closing balances of package wise undischarged liabilities for financial years ended 2019-20 to 2023-24, in support to the requirements of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019

To
The Board of Directors
Maithon Power Limited
Corporate Center
34, Sant Tukaram Road,
Carnac Bunder, Mumbai- 400009

1. This Report is issued in accordance with the terms of our service scope letter dated November 18, 2024 and Master Engagement Agreement dated October 13, 2022, as amended with Maithon Power Limited (hereinafter the "Company").

2. At the request of the management, we have examined the accompanying Statement of annual and quarterly balances of package wise undischarged liabilities for financial years ended 2019-20 to 2023-24 (hereinafter referred to as the "Statement"), which we have initialled for identification purposes only.

3. The Company intends to submit the accompanying Statement for consideration of and evaluation by the Central Electricity Regulatory Commission in connection with true up petitions filed by the Company as required by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the control period 2019-2020 to 2023-24.

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

5. The Management is responsible for ensuring that the Company complies with the requirements of the CERC Regulation and for providing all relevant information to the CERC.

Auditor's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a limited assurance based on our examination whether details in the Statement for yearly balances are in agreement with books of account and records which were examined by us as considered necessary for the purpose of our audit underlying the audited financial statements for each of the years ended March 31, 2020 to March 31, 2024 and for the quarterly balances, books of account and records underlying the Board approved unaudited interim condensed statements for the quarters ended April 1, 2019 to March 31, 2024.

   The above paragraph constitutes the "Reporting Criteria".

7. The financial statements of the Company referred to in paragraph 6 above, were audited by us, on which we had issued an unmodified audit opinions vide our reports dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023 and April 16, 2024 respectively. Our audit of these financial statements was conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test check basis, evidence supporting the amounts and disclosures in the financial statements. Our audits were not planned and performed in connection with any transactions to identify matters that may be of potential interest to third parties.

8. We conducted our examination of the Statement in accordance with the requirements of the Guidance Note on Reports or Certificates for Special Purposes issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

10. Our scope of work did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of the amounts reported in the Statement. We have not performed an audit, the objective of which would be the expression of an opinion on the financial results, specified elements, accounts or items thereof, for the Company taken as a whole. Accordingly, we do not express such audit opinion.

11. A limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 6 above. The procedures performed vary in nature and timing from and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

12. We have performed the following procedures in relation to the Statement:

    a. Obtained the audited financial statements of the Company for each of the years ended March 31, 2020, March 31, 2021, March 31, 2022 , March 31, 2023 and March 31, 2024 audited by us on which we had issued unmodified audit opinions vide their report dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023, April 16, 2024 respectively and the Board approved unaudited interim condensed statements for each of the quarters ended after April 1, 2019 to March 31, 2024.

    b. Traced the annual aggregate opening and closing balance of undischarged liabilities as set out in the Statement to respective audited financial statements.

    c. Traced the quarterly aggregate opening and closing balance of undischarged liabilities as set out in the Statement to unaudited interim condensed statements of respective quarters.

    d. Obtained the listing of period wise and package wise details of balances of undischarged liabilities segregated into undischarged liabilities for capitalized assets and capital work in progress as prepared and compiled by management based on information available in the SAP (ERP used by the Company for its accounting purpose) and traced the breakup of balances between various packages to the books of account and other records underlying audited annual financial statements and unaudited interim condensed statements.

    e. Examined items of package wise balances from the listing provided to us by the management on sample basis from the underlying information available in the ERP as stated in paragraph 12(d) above and noted that the name of the package for each of the selected sample. We have however not performed any procedures to ensure the completeness and accuracy of the details containing segregation of payable balances and the identification/classification of the package as prepared by the management.

    f. Management has represented to us that balances of undischarged liability for capitalized assets and balances of undischarged liability for capital work in progress have been appropriately segregated between the various packages as set out in statement. We have solely relied on such representation and have not performed any procedures as regards such appropriateness of classification.

    g. Performed necessary enquires with the management and obtained necessary representations. The Company has provided all relevant information for the respective period as stated above. We have relied on the same and have not performed any independent procedures.

    The above-mentioned procedures include examining evidence supporting the particulars in this Statement. Further, our scope of work did not involve us performing audit test for the purposes of

expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.

Conclusion

13. Based on procedures performed by us, and on observations as set out in paragraph 12 above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes thereon, are in agreement with books of accounts and records underlying audited financial statements of the Company for the years ended March 31, 2020 to March 31, 2024 and unaudited interim condensed statements for the quarters ended after April 1, 2019 to March 31, 2024.

Restriction on Use

14. This report has been issued at the request of the Company, solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar.Sarkar
Digitally signed by Bhaswar.Sarkar
DN: cn=Bhaswar.Sarkar, email=Bhaswar.Sarkar@srb.in
Date: 2024.12.12 20:15:50 +05'30'

per Bhaswar Sarkar
Partner
UDIN: 24055596BKFOCR4810
Membership Number: 055596
Place of Signature: Kolkata
Date: December 12, 2024

MPL
MAITHON POWER LIMITED

Statement of annual and quarterly opening and closing balances of package wise undischarged liabilities for financial years ended 2019-20 to 2023-24

Amount in Lakhs

Package	Opening as on April 1, 2019			Year ended 31st March								
				2020			2021			2022		
	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total
Railway Infrastructure assets	2,131.11	-	**2,131.11**	3,275.32	10.14	**3,285.47**	-	6,566.87	**6,566.87**	-	1,680.24	**1,680.24**
Flue Gas Desulfurisation	-	-	**-**	259.00	-	**259.00**	1,231.85	-	**1,231.85**	1,231.26	-	**1,231.26**
Others	285.99	-	**285.99**	310.30	97.26	**407.56**	671.97	138.37	**810.34**	846.20	320.85	**1,167.05**
Capital Spares	6.00	-	**6.00**	9.47	11.79	**21.26**	0.04	37.31	**37.35**	0.61	429.93	**430.54**
Total	**2,423.10**	**-**	**2,423.10**	**3,854.10**	**119.19**	**3,973.29**	**1,903.85**	**6,742.55**	**8,646.40**	**2,078.07**	**2,431.03**	**4,509.10**

Package	Year ended 31st March					
	2023			2024		
	CWIP	Capitalised	Total	CWIP	Capitalised	Total
Railway Infrastructure assets	-	1,122.59	**1,122.59**	-	1,115.18	**1,115.18**
Flue Gas Desulfurisation	10,042.04	-	**10,042.04**	5,392.54	-	**5,392.54**
Others	37.23	273.69	**310.92**	207.65	861.06	**1,068.71**
Capital Spares	0.61	596.86	**597.47**	2.99	299.59	**302.58**
Total	**10,079.88**	**1,993.14**	**12,073.02**	**5,603.18**	**2,275.82**	**7,879.01**

Package	Opening as on April 1, 2019			Year ended 31st March 2020											
				Quarter ended June'19			Quarter ended September'19			Quarter ended December'19			Quarter ended March'20		
	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total
Railway Infrastructure assets	2,131.11	-	**2,131.11**	2,934.90	-	2,934.90	3,288.93	-	3,288.93	3,081.49	-	3,081.49	3,275.32	10.14	3,285.47
Flue Gas Desulfurisation	-	-	**-**	-	-	-	-	-	-	-	-	-	259.00	-	259.00
Others	285.99	-	**285.99**	134.91	-	134.91	59.04	33.89	92.93	25.08	7.73	32.81	310.30	97.26	407.56
Capital Spares	6.00	-	**6.00**	6.42	-	6.42	6.42	-	6.42	3.30	91.96	95.26	9.47	11.79	21.26
Total	**2,423.10**	**-**	**2,423.10**	**3,076.23**	**-**	**3,076.23**	**3,354.40**	**33.89**	**3,388.29**	**3,109.87**	**99.69**	**3,209.56**	**3,854.10**	**119.19**	**3,973.29**

Package	Year ended 31st March 2021											
	Quarter ended June'20			Quarter ended September'20			Quarter ended December'20			Quarter ended March'21		
	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total
Railway Infrastructure assets	2,128.10	0.35	**2,128.45**	2,458.88	-	**2,458.88**	2,367.96	-	**2,367.96**	-	6,566.87	**6,566.87**
Flue Gas Desulfurisation	687.88	-	**687.88**	186.59	-	**186.59**	45.92	-	**45.92**	1,231.85	-	**1,231.85**
Others	67.04	81.97	**149.00**	98.85	5.62	**104.47**	80.29	27.38	**107.67**	671.97	138.37	**810.34**
Capital Spares	25.29	-	**25.29**	65.68	-	**65.68**	32.19	-	**32.19**	0.04	37.31	**37.35**
Total	**2,908.30**	**82.32**	**2,990.62**	**2,810.00**	**5.62**	**2,815.62**	**2,526.37**	**27.38**	**2,553.75**	**1,903.85**	**6,742.55**	**8,646.40**

Package	Year ended 31st March 2022											
	Quarter ended June'21			Quarter ended September'21			Quarter ended December'21			Quarter ended March'22		
	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total
Railway Infrastructure assets	-	4,126.54	**4,126.54**	-	2,599.54	**2,599.54**	-	2,371.03	**2,371.03**	-	1,680.24	**1,680.24**
Flue Gas Desulfurisation	834.46	-	**834.46**	1,002.90	-	**1,002.90**	1,876.47	-	**1,876.47**	1,231.26	-	**1,231.26**
Others	127.58	12.14	**139.72**	759.25	170.91	**930.16**	998.23	145.00	**1,143.23**	846.20	320.85	**1,167.05**
Capital Spares	15.01	-	**15.01**	3.90	14.92	**18.82**	409.93	72.03	**481.96**	0.61	429.93	**430.54**
Total	**977.05**	**4,138.68**	**5,115.73**	**1,766.05**	**2,785.36**	**4,551.41**	**3,284.63**	**2,588.06**	**5,872.69**	**2,078.07**	**2,431.03**	**4,509.10**

Package	Year ended 31st March 2023											
	Quarter ended June'22			Quarter ended September'22			Quarter ended December'22			Quarter ended March'23		
	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total
Railway Infrastructure assets	-	1,122.61	**1,122.61**	-	1,122.52	**1,122.52**	0.00	1,123.19	**1,123.19**	-	1,122.59	**1,122.59**
Flue Gas Desulfurisation	2,349.22	-	**2,349.22**	2,859.41	0.25	**2,859.67**	3,540.51	-	**3,540.51**	10,042.04	-	**10,042.04**
Others	764.34	16.68	**781.02**	705.10	293.09	**998.19**	484.21	62.67	**546.88**	37.23	273.69	**310.92**
Capital Spares	1.25	28.07	**29.33**	30.17	48.53	**78.71**	45.55	50.22	**95.77**	0.61	596.86	**597.47**
Total	**3,114.82**	**1,167.36**	**4,282.18**	**3,594.69**	**1,464.39**	**5,059.08**	**4,070.27**	**1,236.08**	**5,306.36**	**10,079.88**	**1,993.14**	**12,073.02**

Package	Year ended 31st March 2024											
	Quarter ended June'23			Quarter ended September'23			Quarter ended December'23			Quarter ended March'24		
	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total
Railway Infrastructure assets	-	1,122.56	**1,122.56**	-	1,122.92	**1,122.92**	-	1,115.15	**1,115.15**	-	1,115.18	**1,115.18**
Flue Gas Desulfurisation	4,630.06	-	**4,630.06**	5,195.45	-	**5,195.45**	4,825.04	-	**4,825.04**	5,392.54	-	**5,392.54**
Others	729.93	139.02	**868.96**	223.29	50.72	**274.01**	602.72	74.26	**676.98**	207.65	861.06	**1,068.71**
Capital Spares	-	394.21	**394.21**	201.10	12.37	**213.47**	231.32	19.87	**251.20**	2.99	299.59	**302.58**
Total	**5,359.99**	**1,655.79**	**7,015.78**	**5,619.83**	**1,186.01**	**6,805.84**	**5,659.08**	**1,209.28**	**6,868.36**	**5,603.18**	**2,275.82**	**7,879.01**

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.
2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH
Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 17:49:47 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

KASG & Co.
Chartered Accountants

Independent Practitioner's Report on Statement of Undischarged Liabilities scheme wise/package wise of M/s Maithon Power Limited for the year ended FY 2019-20 to 2023-24

To
The Board of Directors
Maithon Power Limited
Corporate Centre
34, Sant Tukaram Road,
Carnac Bunder, Mumbai - 400009

1. We are issuing the report on Statement of Undischarged Liabilities scheme wise/package wise based on your request vide email dated 24th January, 2025.

2. At the request of the management, we have examined and are issuing report on figures reported in accompanying Statement of Undischarged Liabilities scheme wise/package wise (hereinafter referred to as the "Statement") during the year ended FY 2019-20 to 2023-24 which have been initialed for identification purposes only.

3. The Company intends to submit the accompanying Statement for consideration of and evaluation by the Central Electricity Regulatory Commission in connection with true up petitions filed by the Company as required by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the year 2019-2020 to 2023-24 containing Scheme wise/ Package wise Undischarged Liabilities.

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the Management of the M/s Maithon Power Limited and the preparation and maintenance of all accounting and other relevant supporting records & documents. This responsibility includes design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

KASG & CO. FRN: 002228C CHARTERED ACCOUNTANTS

5. The Management is also responsible for ensuring that the Company complies with the requirements of the CERC Regulations and for providing all relevant information to the CERC.

Practitioner's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a reasonable assurance based on our examination whether details in the Statement for yearly balances are in agreement with audited financial statements, books of account and records for the year then ended which were produced before us for the purpose of report.

7. The financial statements of the Company referred to in paragraph 6 above, were audited by the respective Statutory Auditors of the Company.

8. We have conducted our examination of the Statement in accordance with the Guidance Note on Reports or Reports for Special Purposes issued by the Institute of Chartered Accountants of India. The guidance note requires that we comply with the ethical requirements of the code of ethics issued by the Institute of Chartered Accountants of India.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC-1), Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information and Other Assurance and Related Services Engagements.

Conclusion

10. Based on the examination as above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes thereon, are not in agreement with books of accounts and records underlying audited financial statements of the Company for the FY 2019-20 to 2023-24.



Restriction on Use

11. The report is addressed to and provided to the Company solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come without our prior consent in writing.

For KASG & Co.
Chartered Accountants
FRN: 002228C

KESHAW KUMAR HARODIA
Digitally signed by KESHAW KUMAR HARODIA
Date: 2025.01.27 18:53:42 +05'30'



CA K. K. Harodia
Partner
M. No. 034751

Date: 27-01-2025
Place: Dhanbad

UDIN: 25034751BMLZPI6301

MAITHON POWER LIMITED

Statement of Undischarged Liabilities scheme wise/package wise of the company for financial year ended 2019-20, 2020-21, 2021-22, 2022-23 and 2023-24

₹ Lakhs

Sl. No.	Package	31-Mar-20			31-Mar-21			31-Mar-22		
		CWIP	Capitalised	Total	CWIP	Capitalised	Total	CWIP	Capitalised	Total
A	**Railway Infrastructure assets (A)**	3,275.32	10.14	**3,285.47**	-	6,566.87	**6,566.87**	-	1,680.24	**1,680.24**
B	**Flue Gas Desulfurisation (B)**	259.00	-	**259.00**	1,231.85	-	**1,231.85**	1,231.26	-	**1,231.26**
C	**Capital Spares (C)**	9.47	11.79	**21.26**	0.04	37.31	**37.35**	0.61	429.93	**430.54**
D	**Others**									
1	Ash Weighbridge (100 MT)	-	-	-	-	-	-	-	-	-
2	Ash Wharf	-	-	-	-	-	-	-	-	-
3	Augmentation of Ash Handling Plant	100.23	10.53	110.76	-	18.17	18.17	-	13.76	13.76
4	Augmentation of Fire detection System	0.01	-	0.01	-	-	-	-	8.47	8.47
5	Automatic Generation Control	49.05	-	49.05	-	4.23	4.23	-	-	-
6	Boundary wall underpass	-	-	-	-	-	-	-	-	-
7	Ceramic Lining of Coal Mill	-	-	-	-	-	-	-	-	-
8	Coal pit run-off mechanized drainage system	-	-	-	-	-	-	-	-	-
9	DG Set	-	-	-	-	-	-	-	-	-
10	Distributed Control System(DCS)	-	-	-	-	-	-	-	-	-
11	DM Plant & Raw water PLC Upgradation	-	-	-	-	-	-	-	-	-
12	Dust Suppr System	4.42	-	4.42	-	3.80	3.80	-	3.78	3.78
13	Economiser platform	-	-	-	-	95.13	95.13	-	71.91	71.91
14	Employee vechical purchase	-	-	-	-	-	-	-	-	-
15	End of Life (Decentralised AC System)	-	-	-	-	-	-	-	-	-
16	ID Fan VFD Drive	-	-	-	-	-	-	-	-	-
17	eSecurity	97.77	20.71	118.47	10.33	2.12	12.45	-	41.56	41.56
18	ESP Internals	-	-	-	-	-	-	-	28.86	28.86
19	ESP Wear Resist Pipes	-	-	-	-	-	-	-	-	-
20	Fabric Expansion Bellows	-	-	-	-	-	-	-	-	-
21	Field Hostel	-	-	-	-	-	-	-	-	-
22	Fire door for MCC Room	-	-	-	-	-	-	-	-	-
23	Fire Hydrant System	-	-	-	-	-	-	-	-	-
24	Fire Tender	-	-	-	-	-	-	-	-	-
25	Flow Meter Instalation	-	-	-	-	-	-	-	-	-
26	General Civil Work	0.27	20.42	20.70	9.27	-	9.27	5.23	-	5.23
27	Infrastructure - Admin	3.47	6.61	10.08	0.49	5.54	6.03	9.92	2.64	12.56
28	Infrastructure - IT	1.58	-	1.58	-	-	-	-	-	-
29	Interconnection of Chutes from BCN 4A/B-	-	-	-	-	-	-	-	-	-
30	Laboratory Instruments	-	-	-	-	-	-	-	0.13	0.13
31	Cost of Land & Site	-	-	-	-	-	-	-	-	-
32	Main Turbine & TDBFP TSS	-	-	-	-	-	-	-	-	-
33	MAX DCS Version upgradation (XP) UNIT1	-	-	-	-	-	-	-	-	-
34	Max DCS Version Upgradation (XP) Unit2	-	-	-	-	-	-	-	-	-
35	Mini Fire Tender	-	-	-	-	-	-	-	-	-
36	MVWS System	-	-	-	-	-	-	-	-	-
37	Network Equipment	-	-	-	-	-	-	-	-	-
38	Peripheral Road	-	2.49	2.49	-	-	-	-	-	-
39	RCC structure	-	-	-	-	-	-	-	-	-
40	Refurbishment of Economiser coil	-	-	-	-	-	-	-	-	-
41	Reheater upgradation	-	-	-	-	-	-	-	1.84	1.84
42	Reliability (Structural strengthening-BTG,CHP)	-	-	-	-	-	-	-	-	-
43	Replacement of battery	-	-	-	-	-	-	12.96	61.18	74.15
44	Safety (Platform in Coal Mill Area)	24.71	-	24.71	-	2.86	2.86	35.12	19.71	54.83
45	SCADA Upgradation	-	-	-	-	-	-	-	-	-
46	Soak Pit	-	-	-	-	-	-	-	-	-
47	Solar Panel	-	-	-	-	-	-	-	-	-
48	Spare GT	0.54	-	0.54	-	-	-	-	-	-
49	Extension of Stores	27.37	36.50	63.86	1.21	6.53	7.73	-	-	-
50	SWAS Silica Analyzer Upgradation	-	-	-	-	-	-	-	-	-
51	Testing Instruments	0.89	-	0.89	-	-	-	-	-	-
52	Track Hopper End Wall	-	-	-	-	-	-	-	-	-
53	Track Hopper Ventilation System	-	-	-	-	-	-	-	-	-
54	Unified PI System	-	-	-	-	-	-	-	-	-
55	Up-gradation of AHP PLC	-	-	-	-	-	-	28.14	-	28.14
56	Up-gradation of CHP PLC	-	-	-	-	-	-	7.24	67.02	74.26
57	Up-gradation of Fire PLC	-	-	-	-	-	-	-	-	-
58	Upgradation of protection System	-	-	-	-	-	-	-	-	-
59	Water Supply Township	-	-	-	-	-	-	-	-	-
60	Yard Sprinkling	-	-	-	-	-	-	-	-	-
	Total (D)	**310.30**	**97.26**	**407.56**	**21.29**	**138.37**	**159.66**	**98.62**	**320.85**	**419.47**
	Total (E=A+B+C+D)	**3,854.10**	**119.19**	**3,973.29**	**1,253.17**	**6,742.55**	**7,995.72**	**1,330.49**	**2,431.03**	**3,761.51**
	Others* (F)	-	-	-	**650.68**	-	**650.68**	**747.58**	-	**747.58**
	Total as per Financial Statement (E+F)	**3,854.10**	**119.19**	**3,973.29**	**1,903.85**	**6,742.55**	**8,646.40**	**2,078.07**	**2,431.03**	**4,509.10**

₹ Lakhs

Sl. No.	Package	31-Mar-23			31-Mar-24		
		CWIP	Capitalised	Total	CWIP	Capitalised	Total
A	**Railway Infrastructure assets (A)**	-	1,122.59	**1,122.59**	-	1,115.18	**1,115.18**
B	**Flue Gas Desulfurisation (B)**	10,042.04	-	**10,042.04**	5,392.54	-	**5,392.54**
C	**Capital Spares (C)**	0.61	596.86	**597.47**	2.99	299.59	**302.58**
D	**Others**						
1	Ash Weighbridge (100 MT)	-	-	-	-	-	-
2	Ash Wharf	-	7.20	7.20	-	85.31	85.31
3	Augmentation of Ash Handling Plant	13.78	59.23	73.01	16.38	6.38	22.75
4	Augmentation of Fire detection System	-	-	-	-	-	-
5	Automatic Generation Control	-	-	-	-	26.79	26.79
6	Boundary wall underpass	-	-	-	-	-	-
7	Ceramic Lining of Coal Mill	-	-	-	-	60.75	60.75
8	Coal pit run-off mechanized drainage system	-	-	-	-	-	-
9	DG Set	-	-	-	-	-	-
10	Distributed Control System(DCS)	-	-	-	-	9.30	9.30
11	DM Plant & Raw water PLC Upgradation	-	-	-	-	-	-
12	Dust Suppr System	-	-	-	-	-	-
13	Economiser platform	21.09	23.45	44.54	-	23.13	23.13
14	Employee vechical purchase	-	-	-	-	-	-
15	End of Life (Decentralised AC System)	-	-	-	-	-	-
16	ID Fan VFD Drive	-	-	-	98.79	-	98.79
17	eSecurity	-	7.57	7.57	-	11.61	11.61
18	ESP Internals	-	0.29	0.29	-	65.19	65.19
19	ESP Wear Resist Pipes	-	-	-	-	0.01	0.01
20	Fabric Expansion Bellows	-	-	-	-	-	-
21	Field Hostel	-	-	-	-	-	-
22	Fire door for MCC Room	-	-	-	-	5.76	5.76
23	Fire Hydrant System	-	-	-	-	67.65	67.65
24	Fire Tender	-	-	-	-	63.09	63.09
25	Flow Meter Instalation	-	-	-	-	-	-
26	General Civil Work	-	-	-	-	-	-
27	Infrastructure - Admin	2.32	-	2.32	-	2.56	2.56
28	Infrastructure - IT	-	-	-	77.77	-	77.77
29	Interconnection of Chutes from BCN 4A/B-	-	-	-	-	-	-
30	Laboratory Instruments	-	-	-	-	8.09	8.09
31	Cost of Land & Site	-	-	-	-	-	-
32	Main Turbine & TDBFP TSS	-	2.48	2.48	-	67.95	67.95
33	MAX DCS Version upgradation (XP) UNIT1	-	-	-	-	-	-
34	Max DCS Version Upgradation (XP) Unit2	-	-	-	-	-3.96	-3.96
35	Mini Fire Tender	-	24.95	24.95	-	-	-
36	MVWS System	-	-	-	-	7.98	7.98
37	Network Equipment	-	-	-	-	-	-
38	Peripheral Road	-	6.44	6.44	-	13.73	13.73
39	RCC structure	-	-	-	14.60	-	14.60
40	Refurbishment of Economiser coil	-	-	-	-	-	-
41	Reheater upgradation	-	140.91	140.91	-	174.39	174.39
42	Reliability (Structural strengthening-BTG,CHP)	-	-	-	-	105.94	105.94
43	Replacement of battery	-	-	-	-	33.59	33.59
44	Safety (Platform in Coal Mill Area)	-	-	-	-	-	-
45	SCADA Upgradation	-	-	-	-	-	-
46	Soak Pit	-	-	-	-	-	-
47	Solar Panel	-	-	-	-	-	-
48	Spare GT	-	-	-	-	-	-
49	Extension of Stores	0.04	1.17	1.21	-	-	-
50	SWAS Silica Analyzer Upgradation	-	-	-	-	-	-
51	Testing Instruments	-	-	-	-	-	-
52	Track Hopper End Wall	-	-	-	-	-	-
53	Track Hopper Ventilation System	-	-	-	-	18.97	18.97
54	Unified PI System	-	-	-	-	-	-
55	Up-gradation of AHP PLC	-	-	-	0.12	-	0.12
56	Up-gradation of CHP PLC	-	-	-	-	-	-
57	Up-gradation of Fire PLC	-	-	-	-	0.77	0.77
58	Upgradation of protection System	-	-	-	-	-	-
59	Water Supply Township	-	-	-	-	6.09	6.09
60	Yard Sprinkling	-	-	-	-	-	-
	Total (D)	**37.23**	**273.69**	**310.92**	**207.65**	**861.06**	**1,068.71**
	Total (E=A+B+C+D)	**10,079.88**	**1,993.14**	**12,073.02**	**5,603.18**	**2,275.82**	**7,879.01**
	Others* (F)	-	-	-	-	-	-
	Total as per Financial Statement (E+F)	**10,079.88**	**1,993.14**	**12,073.02**	**5,603.18**	**2,275.82**	**7,879.01**

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.
2. Others include amounts pertaining to Opex as follows:

₹ Lakhs

Particulars	Q4 FY20-21	Q2 FY21-22	Q3 FY21-22	Q4 FY21-22	Q1FY22-23	Q2FY22-23
BOCW Cess	650.68	650.68	650.68	650.68	650.68	650.68
Related to O&M	-	-	-	96.90	-	-
Others	650.68	650.68	650.68	747.58	650.68	650.68

3. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH
Digitally signed by KAJAL KUMAR SINGH
Date: 2025.01.27 18:29:14 +05'30'

Authorised Signatory
Place: Dhanbad
Date: 27.01.2025

ANJALI AKHILESHWAR PANDEY
Digitally signed by ANJALI AKHILESHWAR PANDEY
Date: 2025.01.27 18:44:58 +05'30'

Director

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

Independent Auditor's Report on Statement of annual and quarterly opening and closing balances of package wise capital work in progress for financial years ended 2019-20 to 2023-24, in support to the requirements of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019

To
The Board of Directors
Maithon Power Limited
Corporate Center
34, Sant Tukaram Road,
Carnac Bunder, Mumbai- 400009

1. This Report is issued in accordance with the terms of our service scope letter dated November 18, 2024 and Master Engagement Agreement dated October 13, 2022, as amended with Maithon Power Limited (hereinafter the "Company")

2. At the request of the management, we have examined the accompanying Statement of annual and quarterly opening and closing balances of package wise capital work in progress for financial years ended 2019-20 to 2023-24 (hereinafter referred to as the "Statement"), which we have initialled for identification purposes only.

3. The Company intends to submit the accompanying Statement for consideration of and evaluation by the Central Electricity Regulatory Commission in connection with true up petitions filed by the Company as required by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the control period 2019-2020 to 2023-24.

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

5. The Management is responsible for ensuring that the Company complies with the requirements of the CERC Regulations and for providing all relevant information to the CERC.

Auditor's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a limited assurance based on our examination whether details in the Statement for yearly balances are in agreement with books of account and records which were examined by us as considered necessary for the purpose of our audit underlying the audited financial statements for each of the years ended March 31, 2020 to March 31, 2024 and for the quarterly balances, books of account and records underlying the Board approved unaudited interim condensed statements for the quarters ended after April 1, 2019 to March 31, 2024.

   The above paragraph constitutes the "Reporting Criteria".

7. The financial statements of the Company referred to in paragraph 6 above, were audited by us, on which we had issued an unmodified audit opinions vide our reports dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023 and April 16, 2024 respectively. Our audit of these financial statements was conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test check basis, evidence supporting the amounts and disclosures in the financial statements. Our audits were not planned and performed in connection with any transactions to identify matters that may be of potential interest to third parties.

8. We conducted our examination of the Statement in accordance with the requirements of the Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

10. Our scope of work did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of the amounts reported in the Statement. We have not performed an audit, the objective of which would be the expression of an opinion on the financial results, specified elements, accounts or items thereof, for the Company taken as a whole. Accordingly, we do not express such audit opinion.

11. A limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 6 above. The procedures performed vary in nature and timing from and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

12. We have performed the following procedures in relation to the Statement:

    a. Obtained the audited financial statements of the Company for each of the years ended March 31, 2020, March 31, 2021, March 31, 2022 , March 31, 2023 and March 31, 2024 audited by us on which we had issued unmodified audit opinions vide their report dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023, April 16, 2024 respectively and the Board approved unaudited interim condensed statements for each of the quarters ended after April 1, 2019 to March 31, 2024.

    b. Traced the annual aggregate opening and closing balance of capital work in progress as set out in the Statement to respective audited financial statements.

    c. Traced the quarterly aggregate opening and closing balance of capital work in progress as set out in the Statement to unaudited interim condensed statements of respective quarters.

    d. Obtained the listing of period wise and package wise details of balances of capital work in progress as prepared and compiled by management based on information available in the SAP (ERP used by the Company for its accounting purpose) and traced the breakup of balances between various packages and sub packages to the books of account and other records underlying audited annual financial statements and unaudited interim condensed statements.

    e. Examined items of package wise balances from the listing provided to us by the management on sample basis from the underlying information available in the ERP as stated in paragraph 12(d) above and noted the name of the package and sub package for each of the selected sample. We have however not performed any procedures to ensure the completeness and accuracy of the details containing segregation of balances and the identification/classification of the package as prepared by the management.

    f. Performed necessary enquires with the management and obtained necessary representations. The Company has provided all relevant information for the respective period as stated above. We have relied on the same and have not performed any independent procedures.

    The above-mentioned procedures include examining evidence supporting the particulars in this Statement. Further, our scope of work did not involve us performing audit test for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.



S.R. BATLIBOI & CO. LLP
Chartered Accountants

Conclusion

13. Based on procedures performed by us, and on observations as set out in paragraph 12 above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes thereon, are in agreement with books of account and records underlying audited financial statements of the Company for the years ended March 31, 2020 to March 31, 2024 and unaudited interim condensed statements for the quarters ended after April 1, 2019 to March 31, 2024.

Restriction on Use

14. This report has been issued at the request of the Company, solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar.Sarkar
Digitally signed by Bhaswar.Sarkar
DN: cn=Bhaswar.Sarkar, email=Bhaswar.Sarkar@srb.in
Date: 2024.12.12 20:12:17 +05'30'

_____
per Bhaswar Sarkar
Partner
UDIN: 24055596BKFOCQ7157
Membership Number: 055596
Place of Signature: Kolkata
Date: December 12, 2024

MAITHON POWER LIMITED

Statement of annual and quarterly opening and closing balances of package wise capital work in progress for financial years ended 2019-24 to 2023-24

Amount in Lakhs

Package	Sub package	Year ended 31st March					
		2020		2021	2022	2023	2024
		Opening	Closing	Closing	Closing	Closing	Closing
Railway Infrastructure assets	Railway Capex (Other than IDC)	29835.69	41,071.53	-	-	-	-
	Interest during construction (IDC)	4123.28	5,029.70	-	-	-	-
	Total (A)	33,958.97	46,101.23	-	-	-	-
(FGD)	FGD Capex (B)	-	261.35	7,570.33	18,881.15	39,427.04	56,874.30
Capital Spares	Capital Spares Capex (C)	93.49	57.75	1,717.13	1,598.83	57.74	49.14
Others	Other (D)	1975.98	1,218.88	306.34	205.98	43.54	703.92
	Total (A+ B + C + D)	**36,028.44**	**47,639.20**	**9,593.80**	**20,685.95**	**39,528.32**	**57,627.36**

Amount in Lakhs

Package	Sub package	Year ended 31st March 2020				
		Quarter ended June'19		Quarter ended September'19	Quarter ended December'19	Quarter ended March'20
		Opening	Closing	Closing	Closing	Closing
Railway Infrastructure assets	Railway Capex (Other than IDC)	29835.69	31,932.98	35,178.80	39,518.38	41,071.53
	Interest during construction (IDC)	4123.28	4,123.27	4,510.15	4,690.62	5,029.70
	Total (A)	33,958.97	36,056.25	39,688.94	44,209.00	46,101.23
(FGD)	FGD Capex (B)	-	-	-	2.02	261.35
Capital Spares	Capital Spares Capex (C)	93.49	195.35	126.65	93.49	57.75
Others	Other (D)	1975.98	2,299.56	1,151.58	1,267.76	1,218.88
	Total (A+ B + C + D)	**36,028.44**	**38,551.16**	**40,967.17**	**45,572.27**	**47,639.20**

Amount in Lakhs

Package	Sub-Package	Year ended 31st March 2021			
		Quarter ended June'20	Quarter ended September'20	Quarter ended December'20	Quarter ended March'21
		Closing	Closing	Closing	Closing
Railway Infrastructure assets	Railway Capex (Other than IDC)	42,623.55	44,075.84	45,755.94	-
	Interest during construction (IDC)	5,587.78	7,681.22	8,330.21	-
	Total (A)	48,211.33	51,757.06	54,086.15	-
(FGD)	FGD Capex (B)	726.72	1,164.04	2,236.62	7,570.33
Capital Spares	Capital Spares Capex (C)	61.77	142.33	612.09	1,717.13
Others	Other (D)	1,053.43	643.63	1,901.33	306.34
	Total (A+ B + C + D)	**50,053.25**	**53,707.06**	**58,836.20**	**9,593.80**

Amount in Lakhs

Package	Sub-Package	Year ended 31st March 2022			
		Quarter ended June'21	Quarter ended September'21	Quarter ended December'21	Quarter ended March'22
		Closing	Closing	Closing	Closing
Railway Infrastructure assets	Railway Capex (Other than IDC)	-	-	-	-
	Interest during construction (IDC)	-	-	-	-
	Total (A)	-	-	-	-
(FGD)	FGD Capex (B)	7,775.44	10,070.87	13,470.93	18,881.15
Capital Spares	Capital Spares Capex (C)	1,766.76	1,790.60	2,507.09	1,598.83
Others	Other (D)	266.34	245.59	796.44	205.98
	Total (A+ B + C + D)	**9,808.55**	**12,107.05**	**16,774.46**	**20,685.95**

Amount in Lakhs

Package	Sub-Package	Year ended 31st March 2023			
		Quarter ended June'22	Quarter ended September'22	Quarter ended December'22	Quarter ended March'23
		Closing	Closing	Closing	Closing
Railway Infrastructure assets	Railway Capex (Other than IDC)	-	-	-	-
	Interest during construction (IDC)	-	-	-	-
	Total (A)	-	-	-	-
Flue Gas Desulfurisation (FGD)	FGD Capex (B)	22,132.00	25,079.44	28,330.29	39,427.04
Capital Spares	Capital Spares Capex (C)	1,624.08	1,650.64	1,814.25	57.74
Others	Other (D)	251.52	438.32	1,113.53	43.54
	Total (A+ B + C + D)	**24,007.60**	**27,168.40**	**31,258.06**	**39,528.32**

Amount in Lakhs

Package	Sub-Package	Year ended 31st March 2024			
		Quarter ended June'23	Quarter ended September'23	Quarter ended December'23	Quarter ended March'24
		Closing	Closing	Closing	Closing
Railway Infrastructure assets	Railway Capex (Other than IDC)	-	-	-	-
	Interest during construction (IDC)	-	-	-	-
	Total (A)	-	-	-	-
Flue Gas Desulfurisation	FGD Capex (B)	42,679.58	48,517.00	53,057.76	56,874.30
Capital Spares	Capital Spares Capex (C)	182.39	349.63	414.77	49.14
Others	Other (D)	871.32	1,076.65	1,758.35	703.92
	Total (A+ B + C + D)	**43,733.28**	**49,943.29**	**55,230.89**	**57,627.36**

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.
2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 18:09:49 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

Independent Auditor's Report on Statement of annual and quarterly opening and closing balances of package wise capital advances for financial years ended 2019-20 to 2023-24, in support to the requirements of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019

To
The Board of Directors
Maithon Power Limited
Corporate Center
34, Sant Tukaram Road,
Carnac Bunder, Mumbai- 400009

1. This Report is issued in accordance with the terms of our service scope letter dated November 18, 2024 and Master Engagement Agreement dated October 13, 2022, as amended with Maithon Power Limited (hereinafter the "Company")

2. At the request of the management, we have examined the accompanying Statement of annual and quarterly opening and closing balances of package wise capital advances of the Company for financial years ended 2019-20 to 2023-24 (hereinafter referred to as the "Statement"), which we have initialled for identification purposes only.

3. The Company intends to submit the accompanying Statement for consideration of and evaluation by the Central Electricity Regulatory Commission in connection with true up petitions filed by the Company as required by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the control period 2019-2020 to 2023-24.

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

5. The Management is responsible for ensuring that the Company complies with the requirements of the CERC Regulation and for providing all relevant information to the CERC.

Auditor's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a limited assurance based on our examination whether details in the Statement for yearly balances are in agreement with books of account and records which were examined by us as considered necessary for the purpose of our audit underlying the audited financial statements for each of the years ended March 31, 2020 to March 31, 2024 and for the quarterly balances, books of account and records underlying the Board approved unaudited interim condensed statements for the quarters ended after April 1, 2019 to March 31, 2024.

   The above paragraph constitutes the "Reporting Criteria".

7. The financial statements of the Company referred to in paragraph 6 above, were audited by us, on which we had issued an unmodified audit opinions vide our reports dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023 and April 16, 2024 respectively. Our audits of these financial statements were conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test check basis, evidence supporting the amounts and disclosures in the financial statements. Our audits were not planned and performed in connection with any transactions to identify matters that may be of potential interest to third parties.

8. We conducted our examination of the Statement in accordance with the requirements of the Guidance Note on Reports or Certificates for Special Purposes issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

10. Our scope of work did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of the amounts reported in the Statement. We have not performed an audit, the objective of which would be the expression of an opinion on the financial results, specified elements, accounts or items thereof, for the Company taken as a whole. Accordingly, we do not express such audit opinion.

11. A limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 6 above. The procedures performed vary in nature and timing from and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

12. We have performed the following procedures in relation to the Statement:

    a. Obtained the audited financial statements of the Company for each of the years ended March 31, 2020, March 31, 2021, March 31, 2022 , March 31, 2023 and March 31, 2024 audited by us on which we had issued unmodified audit opinions vide their report dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023, April 16, 2024 respectively and the Board approved unaudited interim condensed statements for each of the quarters ended after April 1, 2019 to March 31, 2024.

    b. Traced the annual aggregate opening and closing balance of capital advances as set out in the Statement to respective audited financial statements.

    c. Traced the quarterly aggregate opening and closing balance of capital advances as set out in the Statement to books of account and record underlying unaudited interim condensed statements of respective quarters.

    d. Obtained the listing of period wise and package wise details of balances of capital advances as prepared and compiled by management based on information available in the SAP (ERP used by the Company for its accounting purpose) and traced the amounts of various packages to the books of account and other records underlying audited annual financial statements and unaudited interim condensed statements.

    e. Examined items of package wise capital advances from the listing provided to us by the management on a sample basis from the underlying information available in the ERP as stated in paragraph 12(d) above and noted the name of the package for each of the selected sample. We have however not performed any procedures to ensure the completeness and accuracy of the details containing segregation of balances and the identification/classification of the package as prepared by the management.

    f. Performed necessary enquires with the management and obtained necessary representations. The Company has provided all relevant information for the respective periods as stated above. We have relied on the same and have not performed any independent procedures.

       The above-mentioned procedures include examining evidence supporting the particulars in this Statement. Further, our scope of work did not involve us performing audit test for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.



S.R. BATLIBOI & CO. LLP
Chartered Accountants

Conclusion

13. Based on procedures performed by us, and on observations as set out in paragraph 12 above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes thereon, are in agreement with books of account and records underlying audited financial statements of the Company for the years ended March 31, 2020 to March 31, 2024 and unaudited interim condensed statements for the quarters ended after April 1, 2019 to March 31, 2024.

Restriction on Use

14. This report has been issued at the request of the Company, solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar.Sarkar
Digitally signed by Bhaswar.Sarkar
DN: cn=Bhaswar.Sarkar, email=Bhaswar.Sarkar@srb.in
Date: 2024.12.12 20:11:49 +05'30'

per Bhaswar Sarkar
Partner
UDIN: 24055596BKFOCP6992
Membership Number: 055596
Place of Signature: Kolkata
Date: December 12, 2024

MAITHON POWER LIMITED

Statement of annual and quarterly opening and closing balances of package wise capital advances for financial years ended 2019-20 to 2023-24

Amount in Lakhs

Package	Year ended 31st March					
	2020		2021	2022	2023	2024
	Opening	Closing	Closing	Closing	Closing	Closing
Railway Infrastructure assets	1,863.87	1,003.22	435.00	-	-	-
Flue Gas Desulfurisation	-	1,168.40	4,890.90	3,701.75	2,037.81	294.24
Others	-	-	41.91	-	-	183.09
Total	**1,863.87**	**2,171.62**	**5,367.81**	**3,701.75**	**2,037.81**	**477.33**

Amount in Lakhs

Package	Year ended 31st March 2020				
	Quarter ended June'19		Quarter ended September'19	Quarter ended December'19	Quarter Ended March'20
	Opening	Closing	Closing	Closing	Closing
Railway Infrastructure assets	1,863.87	1,859.27	1,660.81	1,302.71	1,003.22
Flue Gas Desulfurisation	-	-	-	-	1,168.40
Others	-	-	-	-	-
Total	**1,863.87**	**1,859.27**	**1,660.81**	**1,302.71**	**2,171.62**

Amount in Lakhs

Package	Year ended 31st March 2021				
	Quarter ended June'20		Quarter ended September'20	Quarter ended December'20	Quarter ended March'21
	Opening	Closing	Closing	Closing	Closing
Railway Infrastructure assets	1,003.22	895.43	796.70	661.43	435.00
Flue Gas Desulfurisation	1,168.40	2,244.11	2,232.60	2,641.05	4,890.90
Others	-	115.50	119.60	47.35	41.91
Total	**2,171.62**	**3,255.04**	**3,148.90**	**3,349.83**	**5,367.81**

Amount in Lakhs

Package	Year ended 31st March 2022				
	Quarter ended June'21		Quarter ended September'21	Quarter ended December'21	Quarter ended March'22
	Opening	Closing	Closing	Closing	Closing
Railway Infrastructure assets	435.00	333.94	206.57	-	-
Flue Gas Desulfurisation	4,890.90	4,596.81	4,401.53	4,038.81	3,701.75
Others	41.91	42.00	37.91	-	-
Total	**5,367.81**	**4,972.75**	**4,646.01**	**4,038.81**	**3,701.75**

Amount in Lakhs

Package	Year ended 31st March 2023				
	Quarter ended June'22		Quarter ended September'22	Quarter ended December'22	Quarter ended March'23
	Opening	Closing	Closing	Closing	Closing
Railway Infrastructure assets	-	-	-	-	-
Flue Gas Desulfurisation	3,701.75	3,298.21	3,015.94	2,700.79	2,037.81
Others	-	-	-	-	-
Total	**3,701.75**	**3,298.21**	**3,015.94**	**2,700.79**	**2,037.81**

Amount in Lakhs

Package	Year ended 31st March 2024				
	Quarter ended June'23		Quarter ended September'23	Quarter ended December'23	Quarter ended March'24
	Opening	Closing	Closing	Closing	Closing
Railway Infrastructure assets	-	-	-	-	-
Flue Gas Desulfurisation	2,037.81	1,513.33	917.91	445.20	294.24
Others	-	3.64	11.54	170.39	183.09
Total	**2,037.81**	**1,516.97**	**929.45**	**615.59**	**477.33**

Notes:

1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.

2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 17:14:13 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

ANNEXURE P/35B

Computation of Normative IDC (In Rs. Lakh) for Capital Expenditure Schemes Excluding Railways

Details as per Auditor Certificates

Opening Capex (CWIP) as on 01.04.2019 1975.98

Opening UDL as on 01.04.2019 285.99

	FY 20				FY 21				FY 22				FY 23				FY 24			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CWIP Addition	330.56	346.74	241.18	475.45	142.72	-331.12	1,387.98	329.25	214.35	541.43	804.68	1,254.32	204.40	760.04	1,223.14	824.84	879.89	521.14	1,180.14	2,728.48
Capitalization	6.98	1,494.72	125.00	524.33	308.17	78.69	130.28	1,924.24	254.34	562.19	253.82	1,844.78	158.87	573.24	547.93	1,894.83	52.10	315.81	498.44	3,782.91
Closing UDL towards Capex (CWIP)	134.91	59.04	25.08	310.30	67.04	98.85	80.29	21.29	127.58	108.57	347.55	98.62	113.66	54.42	484.21	37.23	729.93	223.29	602.72	207.65
Closing Capex (CWIP)	2299.56	1151.58	1267.76	1218.88	1053.43	643.63	1901.33	306.34	266.34	245.59	796.44	205.98	251.52	438.32	1113.53	43.54	871.32	1076.65	1758.35	703.92

Other CAPEX Schemes (Figures in Rs. Lakh)																				
	FY20				**FY21**				**FY22**				**FY23**				**FY24**			
	Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Opening Cash Capex	1,689.99	2,164.65	1,092.53	1,242.68	908.58	986.39	544.78	1,821.03	285.05	138.76	137.01	448.89	107.37	137.86	383.90	629.32	6.31	141.39	853.36	1,155.64
Opening Capex	1,975.98	2,299.56	1,151.58	1,267.76	1,218.88	1,053.43	643.63	1,901.33	306.34	266.34	245.59	796.44	205.98	251.52	438.32	1,113.53	43.54	871.32	1,076.65	1,758.35
Addition	330.56	346.74	241.18	475.45	142.72	-331.12	1387.98	329.25	214.35	541.43	804.68	1254.32	204.40	760.04	1223.14	824.84	879.89	521.14	1180.14	2728.48
Capitalisation	7.0	1,494.7	125.0	524.3	308.2	78.7	130.3	1,924.2	254.3	562.2	253.8	1,844.8	158.9	573.2	547.9	1,894.8	52.1	315.8	498.4	3,782.9
Closing Capex	2299.56	1151.58	1267.76	1218.88	1053.43	643.63	1901.33	306.34	266.34	245.59	796.44	205.98	251.52	438.32	1113.53	43.54	871.32	1076.65	1758.35	703.92
Less Closing UDL	134.91	59.04	25.08	310.30	67.04	98.85	80.29	21.29	127.58	108.57	347.55	98.62	113.66	54.42	484.21	37.23	729.93	223.29	602.72	207.65
Closing Cash Capex	2,164.65	1,092.53	1,242.68	908.58	986.39	544.78	1,821.03	285.05	138.76	137.01	448.89	107.37	137.86	383.90	629.32	6.31	141.39	853.36	1,155.64	496.27
Average Cash Capex	1,927.32	1,628.59	1,167.61	1,075.63	947.48	765.59	1,182.91	1,053.04	211.91	137.89	292.95	278.13	122.61	260.88	506.61	317.81	73.85	497.37	1,004.50	825.95
Debt (70%)	1,349.12	1,140.02	817.32	752.94	663.24	535.91	828.03	737.13	148.34	96.52	205.07	194.69	85.83	182.62	354.63	222.47	51.69	348.16	703.15	578.17
Wt Avg Rate of Int	8.32%	8.32%	8.32%	8.32%	8.05%	8.05%	8.05%	8.05%	7.72%	7.72%	7.72%	7.72%	8.12%	8.12%	8.12%	8.12%	8.93%	8.93%	8.93%	8.93%
Normative IDC (in lakhs)	**28.06**	**23.71**	**17.00**	**15.66**	**13.35**	**10.78**	**16.66**	**14.83**	**2.86**	**1.86**	**3.96**	**3.76**	**1.74**	**3.71**	**7.20**	**4.52**	**1.15**	**7.77**	**15.69**	**12.90**
				84.43				**55.62**				**12.44**				**16.2**				**37.51**
																				206.20

KASG & Co.

Chartered Accountants

Independent Practitioner's Report on Statement of Railway Capex incurred, Capitalization, Advances and Undischarged Liability during the period FY 2008-09 to 2020-21 of M/s Maithon Power Limited

To
The Board of Directors
Maithon Power Limited
Corporate Centre
34, Sant Tukaram Road,
Carnac Bunder, Mumbai - 400009

1. We are issuing the report on Statement of Railway Capex incurred, Capitalization, Advances and Undischarged Liability based on your request vide email dated 24th January, 2025.

2. At the request of the management, we have examined and are issuing report on figures reported in accompanying Statement of Railway Capex incurred, Capitalization, Advances and Undischarged Liability (hereinafter referred to as the "Statement") during the period FY 2008-09 to 2020-21 which have been initialed for identification purposes only.

3. The Company intends to submit the accompanying Statement for consideration of and evaluation by the Central Electricity Regulatory Commission in connection with true up petitions filed by the Company as required by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the period 2008-2009 to 2020-21 containing quarterly opening and closing balances of Railway Capex incurred, Capitalization, Advances and Undischarged Liability during the period FY 2008-09 to 2020-21.

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the Management of the M/s Maithon Power Limited and the preparation and maintenance of all accounting and other relevant supporting records & documents. This responsibility includes design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

KASG & CO. FRN: 002228C CHARTERED ACCOUNTANTS

5. The Management is also responsible for ensuring that the Company complies with the requirements of the CERC Regulations and for providing all relevant information to the CERC.

Practitioner's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a reasonable assurance based on our examination whether details in the Statement for quarterly balances are in agreement with audited financial statements, reviewed financial results, books of account and records underlying the Board approved unaudited interim condensed statements for the quarters then ended which were produced before us for the purpose of report.

7. The financial statements of the Company referred to in paragraph 6 above, were audited and reviewed by the respective Statutory Auditors of the Company.

8. We have conducted our examination of the Statement in accordance with the Guidance Note on Reports or Reports for Special Purposes issued by the Institute of Chartered Accountants of India. The guidance note requires that we comply with the ethical requirements of the code of ethics issued by the Institute of Chartered Accountants of India.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC-1), Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information and Other Assurance and Related Services Engagements.

Conclusion

10. Based on the examination as above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes thereon, are not in agreement with books of accounts and records underlying audited financial statements and reviewed quarterly results of the Company for the FY 2008-09 to 2020-21.

KASG & CO. FRN: 002228C CHARTERED ACCOUNTANTS

Restriction on Use

11. The report is addressed to and provided to the Company solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come without our prior consent in writing.

For KASG & Co.
Chartered Accountants
FRN: 002228C

KESHAW KUMAR HARODIA

Digitally signed by KESHAW KUMAR HARODIA
Date: 2025.01.27 18:54:47 +05'30'



CA K. K. Harodia
Partner
M. No. 034751

Date: 27-01-2025
Place: Dhanbad

UDIN: 25034751BMLZPJ8241

MAITHON POWER LIMITED

Statement of Railway Capex incurred, Capitalization, Advances and Undischarged Liability during the period FY 2008-09 to FY2020-21

₹Lakhs

Financial Year	Quarter	Opening CWIP	Additional Capex during the period (without IDC & LC costs)	Cost of funding through LC during period	Net Additional Capex	Less: Capitalization (without IDC) during the period	Closing CWIP	Add: Closing Advance	Less: Closing Undischarged Liability in CWIP	Closing Cash Capex	Capitalization (without IDC) during the period	Capitalization (IDC only) during the period	Total Capitalization
		(A)	(B)	(C)	(D=B+C)	E	(F=A+D-E)	G	H	(I=F+G-H)	E	J	(K=E+J)
2008-09	Q3	-	-	-	-	-	-	1,070.00	-	1,070.00	-	-	-
	Q4	-	1,817.44	-	1,817.44	-	1,817.44	4,070.00	1,817.44	4,070.00	-	-	-
2008-10	Q1	1,817.44	1,312.99	-	1,312.99	-	3,130.43	1,224.92	-	4,355.35	-	-	-
	Q2	3,130.43	475.97	-	475.97	-	3,606.40	709.36	-	4,315.76	-	-	-
	Q3	3,606.40	126.82	-	126.82	-	3,733.22	698.89	25.78	4,406.33	-	-	-
	Q4	3,733.22	332.00	-	332.00	-	4,065.22	671.84	152.58	4,584.48	-	-	-
2010-11	Q1	4,065.22	34.88	-	34.88	-	4,100.10	671.84	152.19	4,619.75	-	-	-
	Q2	4,100.10	578.52	-	578.52	-	4,678.63	4,150.44	502.69	8,326.38	-	-	-
	Q3	4,678.63	69.34	-	69.34	-	4,747.97	5,009.64	58.79	9,698.81	-	-	-
	Q4	4,747.97	770.15	-	770.15	-	5,518.11	4,881.76	283.37	10,116.51	-	-	-
2011-12	Q1	5,518.11	1,676.26	-	1,676.26	-	7,194.38	5,735.09	471.28	12,458.19	-	-	-
	Q2	7,194.38	112.70	-	112.70	-	7,307.08	5,735.09	133.12	12,909.05	-	-	-
	Q3	7,307.08	420.50	-	420.50	-	7,727.58	5,665.96	156.17	13,237.37	-	-	-
	Q4	7,727.58	935.06	-	935.06	-	8,662.64	5,056.94	804.84	12,914.75	-	-	-
2012-13	Q1	8,662.64	355.68	-	355.68	-	9,018.32	5,004.03	522.33	13,500.02	-	-	-
	Q2	9,018.32	-3.09	-	-3.09	-	9,015.23	5,004.03	162.40	13,856.86	-	-	-
	Q3	9,015.23	222.81	-	222.81	-	9,238.04	4,970.97	336.33	13,872.68	-	-	-
	Q4	9,238.04	0.18	-	0.18	-	9,238.22	4,970.97	175.62	14,033.57	-	-	-
2013-14	Q1	9,238.22	16.85	-	16.85	-	9,255.07	4,970.97	265.14	13,960.91	-	-	-
	Q2	9,255.07	493.68	-	493.68	-	9,748.76	4,540.22	898.70	13,390.28	-	-	-
	Q3	9,748.76	624.10	-	624.10	-	10,372.86	3,947.37	351.99	13,968.24	-	-	-
	Q4	10,372.86	403.76	-	403.76	-	10,776.62	3,617.57	1,079.38	13,314.80	-	-	-
2014-15	Q1	10,776.62	872.32	-	872.32	-	11,648.93	3,517.17	564.32	14,601.79	-	-	-
	Q2	11,648.93	1,604.99	-	1,604.99	-	13,253.92	3,258.98	837.34	15,675.56	-	-	-
	Q3	13,253.92	373.52	-	373.52	-	13,627.45	3,210.16	978.78	15,858.83	-	-	-
	Q4	13,627.45	493.13	-	493.13	-	14,120.58	3,129.02	781.34	16,468.25	-	-	-
2015-16	Q1	14,120.58	736.47	-	736.47	-	14,857.05	3,120.31	545.04	17,432.31	-	-	-
	Q2	14,857.05	645.76	-	645.76	-	15,502.80	2,991.46	714.20	17,780.06	-	-	-
	Q3	15,502.80	224.69	-	224.69	-	15,727.49	2,925.39	867.50	17,785.39	-	-	-
	Q4	15,727.49	252.48	-	252.48	2,412.62	13,567.36	2,906.65	843.33	15,630.68	2,412.62	448.94	**2,861.55**
2016-17	Q1	13,567.36	174.87	-	174.87	-	13,742.23	2,897.31	696.26	15,943.28	-	-	-
	Q2	13,742.23	250.66	-	250.66	-	13,992.89	2,865.99	716.89	16,141.99	-	-	-
	Q3	13,992.89	249.91	-	249.91	-	14,242.79	2,895.13	691.74	16,446.18	-	-	-
	Q4	14,242.79	607.07	-	607.07	-	14,849.86	2,780.44	1,162.31	16,467.99	-	-	-
2017-18	Q1	14,849.86	1,097.21	-	1,097.21	-	15,947.07	2,733.36	820.26	17,860.17	-	-	-
	Q2	15,947.07	628.85	-	628.85	-	16,575.92	2,732.00	1,217.50	18,090.43	-	-	-
	Q3	16,575.92	1,421.55	46.47	1,468.01	-	18,043.94	2,677.75	1,661.74	19,059.94	-	-	-
	Q4	18,043.94	801.74	194.09	995.83	-	19,039.77	2,677.75	2,294.03	19,423.49	-	-	-
2018-19	Q1	19,039.77	1,542.63	328.73	1,871.37	-	20,911.14	2,777.75	5,522.10	18,166.78	-	-	-
	Q2	20,911.14	938.62	63.74	1,002.36	-	21,913.50	2,777.75	6,964.14	17,727.11	-	-	-
	Q3	21,913.50	2,373.41	184.90	2,558.31	-	24,471.81	2,877.75	8,822.89	18,526.66	-	-	-
	Q4	24,471.81	5,299.61	64.27	5,363.88	-	29,835.69	1,863.87	2,131.12	29,568.45	-	-	-
2019-20	Q1	29,835.69	2,043.62	53.67	2,097.29	-	31,932.98	1,859.27	2,934.90	30,857.35	-	-	-
	Q2	31,932.98	3,175.70	70.12	3,245.82	-	35,178.80	1,660.81	3,288.93	33,550.68	-	-	-
	Q3	35,178.80	4,272.31	67.27	4,339.58	-	39,518.38	1,302.71	3,081.49	37,739.60	-	-	-
	Q4	39,518.38	4,066.14	11.69	4,077.83	2,524.68	41,071.53	1,003.22	3,275.32	38,799.43	2,524.68	-	**2,524.68**
2020-21	Q1	41,071.53	1,878.88	-	1,878.88	326.86	42,623.55	895.43	2,128.10	41,390.88	326.86	-	**326.86**
	Q2	42,623.55	1,452.29	-	1,452.29	-	44,075.84	796.70	2,458.88	42,413.66	-	-	-
	Q3	44,075.84	1,680.10	-	1,680.10	-	45,755.94	661.43	2,367.96	44,049.41	-	-	-
	Q4	45,755.94	5,864.61	-	5,864.61	51,620.55	-	435.00	-	435.00	51,620.55	8,935.76	**60,556.32**
					56,884.71	**56,884.71**					**56,884.71**	**9,384.70**	**66,269.42**

Note: 1. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.

2. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH
Digitally signed by KAJAL KUMAR SINGH
Date: 2025.01.27 18:38:22 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 27.01.2025

ANJALI AKHILESHWAR PANDEY
Digitally signed by ANJALI AKHILESHWAR PANDEY
Date: 2025.01.27 18:44:14 +05'30'

Director

Computation of Railway IDC

Capitalization proposed in FY22 (Figures in Rs. Lakh)

	FY09		FY10				FY11				FY12				FY13			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Opening Cash Capex	-	1,070.00	4,070.00	4,355.35	4,315.76	4,406.33	4,584.48	4,619.75	8,326.38	9,698.81	10,116.51	12,458.19	12,909.05	13,237.37	12,914.75	13,500.02	13,856.86	13,872.68
Opening Capex	-	-	1,817.44	3,130.43	3,606.40	3,733.22	4,065.22	4,100.10	4,678.63	4,747.97	5,518.11	7,194.38	7,307.08	7,727.58	8,662.64	9,018.32	9,015.23	9,238.04
Addition	-	1,817.44	1,312.99	475.97	126.82	332.00	34.88	578.52	69.34	770.15	1,676.26	112.70	420.50	935.06	355.68	-3.09	222.81	0.18
Less LC Costs																		
Less Capitalisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Closing Capex	-	1,817.44	3,130.43	3,606.40	3,733.22	4,065.22	4,100.10	4,678.63	4,747.97	5,518.11	7,194.38	7,307.08	7,727.58	8,662.64	9,018.32	9,015.23	9,238.04	9,238.22
Add Closing Advance	1,070.00	4,070.00	1,224.92	709.36	698.89	671.84	671.84	4,150.44	5,009.64	4,881.76	5,735.09	5,735.09	5,665.96	5,056.94	5,004.03	5,004.03	4,970.97	4,970.97
Less Closing Undischarged Liability	-	1,817.44	-	-	25.78	152.58	152.19	502.69	58.79	283.37	471.28	133.12	156.17	804.84	522.33	162.40	336.33	175.62
Closing Cash Capex	1,070.00	4,070.00	4,355.35	4,315.76	4,406.33	4,584.48	4,619.75	8,326.38	9,698.81	10,116.51	12,458.19	12,909.05	13,237.37	12,914.75	13,500.02	13,856.86	13,872.68	14,033.57
Average Cash Capex	535.00	2,570.00	4,212.68	4,335.56	4,361.05	4,495.41	4,602.12	6,473.07	9,012.59	9,907.66	11,287.35	12,683.62	13,073.21	13,076.06	13,207.39	13,678.44	13,864.77	13,953.13
Debt (70%)	374.50	1,799.00	2,948.87	3,034.89	3,052.73	3,146.78	3,221.48	4,531.15	6,308.82	6,935.36	7,901.15	8,878.53	9,151.25	9,153.24	9,245.17	9,574.91	9,705.34	9,767.19
Wt Avg Rate of Int	11.25%	11.25%	11.25%	11.25%	11.25%	11.09%	10.75%	10.75%	10.75%	11.15%	12.00%	12.00%	12.00%	12.56%	13.75%	13.75%	13.75%	13.65%
IDC	**10.53**	**50.60**	**82.94**	**85.36**	**85.86**	**87.24**	**86.58**	**121.77**	**169.55**	**193.37**	**237.03**	**266.36**	**274.54**	**287.36**	**317.80**	**329.14**	**333.62**	**333.39**
Yearwise hardcost Capitalizated in Books (excluding IDC)																		

Year wise IDC Capitalised in Books of Accounts

	FY14				FY15				FY16				FY17				FY18			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Opening Cash Capex	14,033.57	13,960.91	13,390.28	13,968.24	13,314.80	14,601.79	15,675.56	15,858.83	16,468.25	17,432.31	17,780.06	17,785.39	18,043.30	18,355.90	18,554.60	18,858.80	18,880.61	20,272.78	20,503.04	21,426.09
Opening Capex	9,238.22	9,255.07	9,748.76	10,372.86	10,776.62	11,648.93	13,253.92	13,627.45	14,120.58	14,857.05	15,502.80	15,727.49	15,979.98	16,154.84	16,405.50	16,655.41	17,262.48	18,359.68	18,988.54	20,410.09
Addition	16.85	493.68	624.10	403.76	872.32	1,604.99	373.52	493.13	736.47	645.76	224.69	252.48	174.87	250.66	249.91	607.07	1,097.21	628.85	1,468.01	995.83
Less LC Costs																			46.47	194.09
Less Capitalisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Closing Capex	9,255.07	9,748.76	10,372.86	10,776.62	11,648.93	13,253.92	13,627.45	14,120.58	14,857.05	15,502.80	15,727.49	15,979.98	16,154.84	16,405.50	16,655.41	17,262.48	18,359.68	18,988.54	20,410.09	21,211.83
Add Closing Advance	4,970.97	4,540.22	3,947.37	3,617.57	3,517.17	3,258.98	3,210.16	3,129.02	3,120.31	2,991.46	2,925.39	2,906.65	2,897.31	2,865.99	2,895.13	2,780.44	2,733.36	2,732.00	2,677.75	2,677.75
Less Closing Undischarged Liability	265.14	898.70	351.99	1,079.38	564.32	837.34	978.78	781.34	545.04	714.20	867.50	843.33	696.26	716.89	691.74	1,162.31	820.26	1,217.50	1,661.74	2,294.03
Closing Cash Capex	13,960.91	13,390.28	13,968.24	13,314.80	14,601.79	15,675.56	15,858.83	16,468.25	17,432.31	17,780.06	17,785.39	18,043.30	18,355.90	18,554.60	18,858.80	18,880.61	20,272.78	20,503.04	21,426.09	21,595.54
Average Cash Capex	13,997.24	13,675.59	13,679.26	13,641.52	13,958.29	15,138.68	15,767.20	16,163.54	16,950.28	17,606.19	17,782.73	17,914.34	18,199.60	18,455.25	18,706.70	18,869.71	19,576.70	20,387.91	20,964.57	21,510.82
Debt (70%)	9,798.07	9,572.91	9,575.48	9,549.07	9,770.81	10,597.07	11,037.04	11,314.48	11,865.20	12,324.33	12,447.91	12,540.04	12,739.72	12,918.68	13,094.69	13,208.79	13,703.69	14,271.54	14,675.20	15,057.57
Wt Avg Rate of Int	13.45%	13.45%	13.45%	13.22%	10.96%	10.96%	10.96%	10.96%	10.46%	10.46%	10.46%	10.46%	9.92%	9.92%	9.92%	9.92%	8.99%	8.99%	8.99%	8.99%
IDC	**329.46**	**321.89**	**321.98**	**315.70**	**267.79**	**290.44**	**302.50**	**310.10**	**310.31**	**322.31**	**325.55**	**327.95**	**316.00**	**320.44**	**324.81**	**327.64**	**308.00**	**320.77**	**329.84**	**338.43**
				4,642				5,813												
Yearwise hardcost Capitalizated in Books (excluding IDC)												2,412.62								
Year wise IDC Capitalised in Books of Accounts												**448.94**								
												2,861.55								

	FY19				FY20				FY21				FY22			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Opening Cash Capex	21,595.54	20,010.11	19,506.69	20,121.35	31,098.86	32,334.10	34,957.31	39,078.97	42,651.79	45,570.11	46,592.89	48,228.64	49,667.91	52,007.18	53,406.81	53,428.75
Opening Capex	21,211.83	22,754.46	23,693.08	26,066.49	31,366.10	33,409.73	36,585.43	40,857.75	44,923.89	46,802.78	48,255.07	49,935.17	55,799.78	55,799.78	55,799.78	55,799.78
Addition	1,871.37	1,002.36	2,558.31	5,363.88	2,097.29	3,245.82	4,339.58	4,077.83	1,878.88	1,452.29	1,680.10	5,864.61	-	-	-	-
Less LC Costs	328.73	63.74	184.90	64.27	53.67	70.12	67.27	11.69				-				
Less Capitalisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Closing Capex	22,754.46	23,693.08	26,066.49	31,366.10	33,409.73	36,585.43	40,857.75	44,923.89	46,802.78	48,255.07	49,935.17	55,799.78	55,799.78	55,799.78	55,799.78	55,799.78
Add Closing Advance	2,777.75	2,777.75	2,877.75	1,863.87	1,859.27	1,660.81	1,302.71	1,003.22	895.43	796.70	661.43	435.00	333.94	206.57	-	-
Less Closing Undischarged Liability	5,522.10	6,964.14	8,822.89	2,131.12	2,934.90	3,288.93	3,081.49	3,275.32	2,128.10	2,458.88	2,367.96	6,566.87	4,126.54	2,599.54	2,371.03	1,680.24
Closing Cash Capex	20,010.11	19,506.69	20,121.35	31,098.86	32,334.10	34,957.31	39,078.97	42,651.79	45,570.11	46,592.89	48,228.64	49,667.91	52,007.18	53,406.81	53,428.75	54,119.54
Average Cash Capex	20,802.83	19,758.40	19,814.02	25,610.11	31,716.48	33,645.71	37,018.14	40,865.38	44,110.95	46,081.50	47,410.76	48,948.27	50,837.55	52,707.00	53,417.78	53,774.14
Debt (70%)	14,561.98	13,830.88	13,869.81	17,927.07	22,201.54	23,551.99	25,912.70	28,605.77	30,877.66	32,257.05	33,187.53	34,263.79	35,586.28	36,894.90	37,392.45	37,641.90
Wt Avg Rate of Int	8.79%	8.79%	8.79%	8.79%	8.32%	8.32%	8.32%	8.32%	8.05%	8.05%	8.05%	8.05%	7.72%	7.72%	7.72%	7.72%
IDC	**320.12**	**304.05**	**304.91**	**394.10**	**461.78**	**489.87**	**538.97**	**594.99**	**621.32**	**649.08**	**667.80**	**689.46**	**687.02**	**712.28**	**721.88**	**549.06**
				11,008				**2,086**				**2,627.65**				**2,670.24**
Yearwise hardcost Capitalizated in Books (excluding IDC)								**2524.68**	**326.86**			51,620.55				**56,884.71**
Year wise IDC Capitalised in Books of Accounts												8,935.76				**9,384.70**

Interest cost in Capex as per certificate	**1,084.94**
Net Hard Cost	**55,799.78**
Total IDC	**18,391.61**
IDC as per Books	**9,384.70**
Normative IDC claimed	**9,006.91**



S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

Independent Auditor's Report on Statement of Long-Term Loan Movement with Interest for financial years ended on March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024, in support to the requirements of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019

To
The Board of Directors
Maithon Power Limited
Corporate Center
34, Sant Tukaram Road,
Carnac Bunder, Mumbai- 400009

1. This Report is issued in accordance with the terms of our service scope letter dated November 18, 2024 and Master Engagement Agreement dated October 13, 2022, as amended with Maithon Power Limited (hereinafter the "Company")

2. At the request of the management, we have examined the accompanying Statement of Long-Term Loan Movement with Interest for financial years ended on March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024 (hereinafter referred to as the "Statement"), which we have initialled for identification purposes only.

3. The Company intends to submit the accompanying Statement for consideration of and evaluation by the Central Electricity Regulatory Commission in connection with true up petitions filed by the Company as required by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the control period 2019-2020 to 2023-24.

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

5. The Management is responsible for ensuring that the Company complies with the requirements of the CERC Regulation and for providing all relevant information to the CERC.

Auditor's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a limited assurance based on our examination whether particulars of movement in long term borrowings and interest on long term borrowings of the Company for the financial years ended March 31, 2020 to March 31, 2024 are in agreement with books of account and records which were examined by us as considered necessary for the purpose of our audit underlying the audited financial statements for each of the years ended March 31, 2020 to March 31, 2024.

   The above paragraph constitutes the "Reporting Criteria".

7. The financial statements of the Company referred to in paragraph 6 above, were audited by us, on which we had issued unmodified audit opinions vide our reports dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023 and April 16, 2024 respectively. Our audits of these financial statements were conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test check basis, evidence supporting the amounts and disclosures in the financial statements. Our audits were not planned and performed in connection with any transactions to identify matters that may be of potential interest to third parties.

8. We conducted our examination of the Statement in accordance with the requirements of the Guidance Note on Reports or Certificates for Special Purposes issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

10. Our scope of work did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of the amounts reported in the Statement. We have not performed an audit, the objective of which would be the expression of an opinion on the financial results, specified elements, accounts or items thereof, for the Company taken as a whole. Accordingly, we do not express such audit opinion.

11. A limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 6 above. The procedures performed vary in nature and timing from and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

12. We have performed the following procedures in relation to the Statement:

    a. Traced the opening and closing loan balances set out in the Statement for the financial years ended on March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024 from the books of account and records underlying audited financial statements of the Company for the respective years.

    b. We have verified the amount of loan repayments, loan drawn and interest during the respective years from the books of account and records underlying audited financial statements of the Company on test check basis.

    c. Performed necessary enquires with the management and obtained necessary representations. The Company has provided all relevant information for the respective financial years as stated above. We have relied on the same and have not performed any independent procedures.

    The above-mentioned procedures include examining evidence supporting the particulars in this Statement. Further, our scope of work did not involve us performing audit test for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.

Conclusion

13. Based on procedures performed by us, and on observations as set out in paragraph 12 above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes thereon, are in agreement with books of account and records underlying the audited financial statements for the years ended March 31, 2020 to March 31, 2024.



S.R. BATLIBOI & CO. LLP
Chartered Accountants

Restriction on Use

14. This report has been issued at the request of the Company, solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar.Sarkar
Digitally signed by Bhaswar.Sarkar
DN: cn=Bhaswar.Sarkar, email=Bhaswar.Sarkar@srb.in
Date: 2024.12.12 20:14:13 +05'30'

per Bhaswar Sarkar
Partner
UDIN: 24055596BKFOCL7706
Membership Number: 055596
Place of Signature: Kolkata
Date: December 12, 2024

MAITHON POWER LIMITED

Statement of Long Term Loan Movement with Interest of the Company for financial years ended on March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024

Amount in Lakhs

		Year ended 31st March				
	Particulars	**2020**	**2021**	**2022**	**2023**	**2024**
A	**Non Convertible Debentures issued on 30th November 2015**					
	Opening loan	**50,000.00**	**50,000.00**	**50,000.00**	**33,500.00**	**17,000.00**
	Drawn during the year	-	-	-	-	-
	Repayment during the year	-	-	16,500.00	16,500.00	17,000.00
	Closing loan	**50,000.00**	**50,000.00**	**33,500.00**	**17,000.00**	**-**
	Interest during the year	4,660.95	3,971.94	3,370.09	2,323.10	1,057.86
B	**Non Convertible Debentures issued on 9th February 2017**					
	Opening loan	**50,000.00**	**50,000.00**	**50,000.00**	**50,000.00**	**40,000.00**
	Drawn during the year	-	-	-	-	-
	Repayment during the year	-	-	-	10,000.00	10,000.00
	Closing loan	**50,000.00**	**50,000.00**	**50,000.00**	**40,000.00**	**30,000.00**
	Interest during the year	4,010.96	3,989.04	4,000.00	3,888.22	3,094.79
C	**State Bank of India**					
	Opening loan	**95,424.00**	**81,313.50**	**-**	**-**	**-**
	Drawn during the year	-	-	-	-	-
	Repayment during the year	14,110.50	81,313.50	-	-	-
	Closing loan	**81,313.50**	**-**	**-**	**-**	**-**
	Interest during the year	7,843.22	4,227.67	-	-	-
D	**Non Convertible Debentures issued on 24th December 2020**					
	Opening loan	**-**	**-**	**19,900.00**	**19,900.00**	**19,900.00**
	Drawn during the year	-	19,900.00	-	-	-
	Repayment during the year	-	-	-	-	3,980.00
	Closing loan	**-**	**19,900.00**	**19,900.00**	**19,900.00**	**15,920.00**
	Interest during the year	-	333.94	1,243.75	1,243.75	1,179.69
E	**Axis Bank**					
	Opening loan	**-**	**-**	**22,021.28**	**20,106.38**	**18,191.49**
	Drawn during the year	-	22,500.00	-	-	-
	Repayment during the year	-	478.72	1,914.89	1,914.89	1,914.89
	Closing loan	**-**	**22,021.28**	**20,106.38**	**18,191.49**	**16,276.60**
	Interest during the year	-	425.24	1,592.30	1,500.35	1,562.76
F	**Axis Bank (Railway Loan)**					
	Opening loan	**-**	**25,000.00**	**25,250.00**	**29,829.55**	**26,988.67**
	Drawn during the year	25,000.00	10,000.00	6,000.00	-	-
	Repayment during the year	-	9,750.00	1,420.45	2,840.88	2,840.88
	Closing loan	**25,000.00**	**25,250.00**	**29,829.55**	**26,988.67**	**24,147.79**
	Interest during the year	196.77	2,296.74	2,154.27	2,253.89	2,371.06
G	**Union Bank of India (Railway Loan)**					
	Opening loan	**-**	**-**	**9,750.00**	**13,125.00**	**11,875.00**
	Drawn during the year	-	9,750.00	4,000.00	-	-
	Repayment during the year	-	-	625.00	1,250.00	1,250.00
	Closing loan	**-**	**9,750.00**	**13,125.00**	**11,875.00**	**10,625.00**
	Interest during the year	-	178.30	898.00	992.20	1,039.47
H	**State Bank of India (Flue Gas Desulfurisation)**					
	Opening loan	**-**	**-**	**-**	**-**	**23,557.40**
	Drawn during the year	-	-	-	23,557.40	12,910.23
	Repayment during the year	-	-	-	-	-
	Closing loan	**-**	**-**	**-**	**23,557.40**	**36,467.63**
	Interest during the year	-	-	-	482.75	2,616.91

Notes:

1. The opening balance of long term borrowings pertaining to FY 2019-20 has been extracted from books of account and other accounting records underlying the audited financial statements for the year ended March 31, 2019.

2. The balances of long term borrowings and interest on such borrowings presented above does not include the impact of amortization of processing costs due to recognition of long term borrowings at amortised cost using effective interest rate (EIR) method.

3. The aforesaid details of borrowings has been extracted from the information available in SAP which is the ERP used by management for recording of transactions.

4. The above table does not include any penal interest for the year.

5. Interest during the year for State Bank of India related to Flue Gas Desulfurisation (in "H" above) is not eligible for inclusion while computing weighted average rate of interest on the actual loan portfolio as it is in capital work in progress stage.

6. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 17:01:56 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

ANNEXURE P/37B (COLLY.)

Cost of 5th Re-financing of Long Term Loan

5th Refinancing - Axis 225Cr

S.No.	Particulars of Expense	Name of Agency	Total Amount (Rs. Lakh)
1	Upfront Fees	Axis	111.51
			111.51

5th Refinancing - NCD-III 199Cr

S.No.	Particulars of Expense	Name of Agency	Total Amount (Rs. Lakh)
1	Upfront Fees	Kotak	306.80
2	RTA Fees	3i Infotech Limited	0.18
3	Trustee charges	SBICAP Trustee	1.25
4	Rating Agency Fees	CRISIL	9.44
			317.67
	Total		**429.18**

AXIS BANK

Tax Invoice

Details of Receiver(Billed To)	
Name	MAITHON POWER LIMITED
Customer Id	895020195
Address	CARNAC BANDAR FORTMUMBAI
GSTIN	20AACCM8705H1ZS
Address Of Delivery	
State	Jharkhand
State Code	20
Place Of Supply	Jharkhand
IRN	

Bank Name	
GSTIN	27AAACU2414K1ZF
Name	AXIS BANK, CENTRAL OFFICE (MH)
Address	AXIS HOUSE, BOMBAY DYEING MILL COMPOUND PANDURANG BUDHKAR MARG, WORLI
Serial No. Of Invoice	FIN0101218698400
Date Of Invoice	30/12/2020
Pan Number	AAACU2414K
Ref No.	S73580232
Account No.	920020007541370
Transaction Remarks	PF_GST_20AACCM8705H1ZS

HSN Description	HSN/ SAC Code	Qty	Unit	Rate Per Item	Total Value Of Supply	Taxable Value Of Supply	Whether Tax Payable On A Reverse Basis Or Not	CGST Rate (%)	CGST Value	SGST Rate (%)	SGST Value	IGST Rate (%)	IGST Value	UTGST Rate (%)	UTGST Value	Cess Rate (%)	Cess Value
Financial and related services	9971	1		OTH		9450000.00	N					18.00	1701000.00				
Total													1701000.00				
Total Invoice Value (Rs In Figures)																	11151000.00
Total Invoice Value (Rs In Words)																	Rupees One Crore Eleven Lakh and Fifty One Thousand Only

ORIGINAL FOR RECIPIENT

Digitally signed by GANESH PANCHAPAKESAN
Date: 2021.01.02 08:31:25 +05:30
Location: CN=Verasys CA 2014, OID.2.5.4.51="Office No. 21, 2nd Floor, Bhavna Building", STREET=V.S. Marg, S=Maharashtra, PostalCode=400025, OU=Certifying Authority, O=Verasys Technologies Pvt Ltd., C=IN

This document is digitally signed.

kotak®
Kotak Mahindra Bank

Credit and Debit Advice

To,
M/S. MAITHON POWER LIMITED
CORPORATE CENTER 34 SANT
TUKARAM ROAD CARNAC
BUNDER
MUMBAI - 400009
MAHARASHTRA
INDIA

Please note that your account with our Bank has been DEBITED on account of the following :

Date	Transaction Descrp	Tran Id	CCY	Amount
30-07-2022	0141_PROCESSING FEE_214424172_MAITHON POWER LIMITE		30-07-2022 13:31:10	26,000,000.00
30-07-2022	GST_0141_PROCESSING FEE_214424172_MAITHON POWER LI		30-07-2022 13:40:39	4,680,000.00
In words : no rows selected Three Crore Six Lakh Eighty Thousand Only				
Total			30-07-	**30,680,000.00**

This is Computer generated advice and therefore does not require signature

3i Infotech
LIMITLESS EXCELLENCE

TAX INVOICE

3i Infotech Limited Tower # 5, 3rd to 6th Floors International Infotech Park Vashi, Navi Mumbai - 400 703, Maharashtra. Tel. : (+91-22) 6792 8000 Fax. : (+91-22) 6792 8091 GSTIN No.: 27AAACI5205Q1ZC	**Invoice No.** INV-MH-22251162	**Invoice Date.** 02/07/2021	
	ACK No : 122111209122181	**ACK Date.**	5/7/2021
	Buyer Order No. MAIL CONFIRMATION		
	IRN No.: e54c118d2c0a3dbff0ebaca08c6421e27e68d20b3ff3d14982ba87805a0d676d		
	Other Reference(s) Project ID : 814934 Terms of Payment : Immediate Payment		
Country of origin of goods/services: INDIA	Country of final destination: INDIA		
Billing Address : Maithon Power Limited Village: Dambhui, P.O. Barbindia P.S. Nirsa, Dhanbad PIN 828205 Jharkhand **Kind Attn. :** Kajal Kumar Singh **Tel. :** 7033699446 **Fax. :** **GSTIN No. :** 20AACCM8705H1ZS	**Shipping Address :** Maithon Power Limited Village: Dambhui, P.O. Barbindia P.S. Nirsa, Dhanbad PIN 828205 Jharkhand **Kind Attn.:** Kajal Kumar Singh **Tel. :** 7033699446 **Fax. :** **GSTIN No.:** 20AACCM8705H1ZS		

Particulars	Volume	Rate	Amount in INR
Allotment Charges for Bond Issuance on 24-12-2020	1	15,000.00	15,000.00
		IGST @18 %	2,700.00
SAC Code : 998599			
Annual Maintainance Fees for FY 2021-22	1	20,000.00	20,000.00
		IGST @18 %	3,600.00
SAC Code : 998599			
Annual Maintainance Fees for FY 2020-21	1	6,666.00	6,666.00
		IGST @18 %	1,199.88
SAC Code : 998599			

Amount Chargeable (in Words) **Invoice Total** **49,165.88**

INR Forty-Nine Thousand One Hundred Sixty-Five And Paisa Eighty-Eight Only

Declaration: We declare that this Invoice shows the actual price of the goods described/services rendered and that all particulars are true and correct.

All remittance must be made by wire transfer

Bank Name	:	ICICI BANK LTD
Account Name	:	3i Infotech Limited
Account No	:	000405006383
IFSC Code	:	ICIC0000004
Bank Address	:	Nariman Point,, Mumbai.,
MICR Code	:	400229002

All Cheques to made payable to "3i Infotech Limited" and Crossed "A/C Payee Only"

3i Infotech Limited

3i Infotech Limited

Sunita Vijay Jadhav

Digitally signed by Sunita Vijay Jadhav
Date: 2021.07.05 23:08:29 +05'30'

Authorised Signatory

Delay in payment of this invoice or part there of will attract interest @18%p.a

PAN No. AAACI5205Q (Please quote the PAN No. in all the TDS certificates issued in relation to the invoice)

SBICAP Trustee

SBICAP Trustee Company Ltd.

TAX INVOICE
Original for the Recipient / Duplicate for Supplier

Reference Number : 1772/2020-2021

Client Name : Maithon Power Ltd

GSTIN : 27AAJCS8105J1Z2	Assignment Type : Debenture Trustee
Bill No : ACC/20-21/320	Bill of Costs for : Acceptance Fees
Consent Letter No. : 2020-2021/CL - 3131	Date : December 30, 2020
Facility Amount : Rs. 200 Crores	Date of Consent : 17-DEC-2020
Chargeable under Reverse Charge : No	Ref. Receipt Voucher No. :

Billed to	Supplied to
Mr. Pradip Roy, CFO & CS Maithon Power Ltd PO Dombhui, Nirsha,Barbeindia Dist. Dhanbad, Jharkhand Dhanbad - 828205 20 - Jharkhand GSTIN - 20AACCM8705H1ZS	Mr. Pradip Roy, CFO & CS Maithon Power Ltd PO Dombhui, Nirsha,Barbeindia Dist. Dhanbad, Jharkhand Dhanbad - 828205 20 - Jharkhand GSTIN - 20AACCM8705H1ZS

	SAC/HSN	Amount in Rs.	Amount in Rs.
A. Financial Fees:			
Acceptance Fees - One Time Payment	9971	100,000.00	
CERSAI Fees	9971	5,000.00	
			105,000.00
B. Trust Amount :			
Trust Settlement Amount		1,000.00	1,000.00

Nature of Tax	Taxable Value	Rate		
a. IGST	105,000	18%	18,900.00	
C. Total Tax (a)				18,900.00
D. TOTAL (A + B + C)				124,900.00
E. TOTAL PAYABLE (D)				124,900.00

(Rs. One Lakh Twenty Four Thousand Nine Hundred Only)

PAN Number : AAJCS8105J **TAN Number :** MUMS51988G **Service Description :** Financial and Related Services

<Please make all cheques/demand drafts payable to 'SBICAP Trustee Company Limited', crossed 'A/c payee only', payable at MUMBAI> and send to 4th Floor, Mistry Bhavan,122, Dinshaw Vachha RoadChurchgate, Mumbai - 400020

*** NO TDS ON TRUST SETTLEMENT FEES**

RTGS Details:- Beneficiary Name : SBICAP Trustee Company Limited; Account No. 34075964557;
Beneficiary Bank & Code: State Bank of India (8586); IFSC Code : SBIN0008586
Branch Address : Madame Cama Road Branch, Post Bag No. 11588, Madame Cama Road, Mumbai - 400021.

Note: While Making Payment, Kindly Mention the Invoice No. against which payment has been made.

Disclaimers: 1. Kindly make the payment within 30 days. Overdue payment of Annual Services Charges, if any, will carry an interest at 18% (Eighteen percent) per annum payable after 30 days from the date of invoice till the date of actual payment.
2. In case payment is not made within 180 days from the date of invoice, ITC availed on such invoice needs to be reversed along with interest @ 18%.
3. Invoice once issued cannot be cancelled/modified.
4. GSTIN and address shown in the invoice is as provided to us. We do not take any responsibility of wrong GSTIN and consequential non-availability of the ITC.
5. In case of any correction/change in the GSTIN and/or address, please revert immediately with documentary proof and request letter within 5 working days from the date of the invoice.

for SBICAP Trustee Company Limited
Signature Not Verified
Digitally signed by:
ARDHENDU MUKHOPADHYAY
Fri Jan 01 11:18:43 IST 2021

Authorised Signatory

Ratings

CRISIL
An S&P Global Company

Tax Invoice
Original for Recipient

Maithon Power Limited
KUMAR SATISH
CHIEF FINANCIAL OFFICER
Coast of River Barakar,
North Dombhuin village,
Taluka Maithon,Dhanbad
Jharkhand,
Jharkhand - 828205

Client State Code: 20
Pan#: AACCM8705H
Client GST Number : 20AACCM8705H1ZS
Place of Supply State code: 20

Invoice Number:	20319908585	**Invoice Date:**	21/12/2020
Acknowledgement #:	122010263340374	**Acknowledgement Date:**	2020-12-21 16:06:00.0
IRN:	19c9c4ab71dd36b226bacd5ec80a4f31cc2e8b84a3bf5274fb5b3ab5cffc284e		

Bill Details	Amount (in Rs.)
Initial Rating Fees for Non Convertible Debentures of Rs 200 Crore of Maithon Power Limited	800000
SGST Tax (0)	0
CGST Tax (0)	0
IGST Tax (18)	144,000
Rupees: Nine Lakh Forty Four Thousands Only	944000

Note:

- Payment to be made immediately within receipt of invoice. Please disregard this note if your payment has already been settled.
- For online fund transfer from ICICI bank: A/c No.003205000032,IFSC Code: ICIC0000032,Bank Name :ICICI Bank Limited, Branch Address: Poonawadi, Dr. Ambedkar Road, Dadar, Mumbai 400014
- Cheque to be drawn in favour of "CRISIL Limited".
- Please send all Cheques / UTR No. in case of NEFT/RTGS transfer / TDS Certificates to Rajendra Kate at CRISIL House, Central Avenue, Hiranandani Business Park, Powai, Mumbai, 400076.
- As per the recent circular from CBDT – 1/2014 dated 13th January, 2014 - TDS Deductions should be done on Basic Invoice Amount i.e., excluding GST component (calculated on total basic invoice amount) in the Invoice.
- Payments can also be made through Electronic modes as specified in rule 119AA of Income – tax (16th Amendment) Rules, 2019. Please visit www.crisil.com
- PAN No.: AAACT3151E. Incase tax is deducted, Kindly issue a TDS Certificate at the earliest.
- Crisil GST Number : 27AAACT3151E1ZP, Location of Supply State Code: Maharashtra(27)
- HSN\SAC Code: 9985
- In case of any clarifications, please send a mail to hemant.bilay@crisil.com. You may also contact your relationship manager Hemant J Bilay by calling on +91 9769922192.

For CRISIL Ltd

Hemant J Bilay
Director - Rating Business Developments

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

Independent Auditor's Report on Statement of Gross Block of Assets (Property, Plant & Equipment, Right of Use and Other intangibles Assets) as on year ended March 31, 2019, March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024, in support to the requirements of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019

To
The Board of Directors
Maithon Power Limited
Corporate Center
34, Sant Tukaram Road,
Carnac Bunder, Mumbai- 400009

1. This Report is issued in accordance with the terms of our service scope letter dated November 18, 2024 and Master Engagement Agreement dated October 13, 2022, as amended with Maithon Power Limited (hereinafter the "Company")

2. At the request of the management, we have examined the accompanying Statement of Gross Block of Assets (Property, Plant & Equipment, Right of Use and Other intangibles Assets) as on year ended March 31, 2019, March 31, 2020, March 31, 2021 and March 31, 2022, March 31, 2023 and March 31, 2024 (hereinafter referred to as the "Statement"), which we have initialled for identification purposes only.

3. The Company intends to submit the accompanying Statement for consideration of and evaluation by the Central Electricity Regulatory Commission in connection with true up petitions filed by the Company as required by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the control period 2019-2020 to 2023-24.

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

5. The Management is responsible for ensuring that the Company complies with the requirements of the CERC Regulation and for providing all relevant information to the CERC.

Auditor's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a limited assurance based on our examination whether details of Gross block of Property, Plant & Equipment for the financial years ended March 31, 2019 to March 31, 2024 are in agreement with books of account and records which were examined by us as considered necessary for the purpose of our audit underlying the audited financial statements for the year ended March 31, 2019 to March 31, 2024.

   The above paragraph constitutes the "Reporting Criteria".

7. The financial statements of the Company referred to in paragraph 6 above, were audited by us, on which we had issued unmodified audit opinions vide our reports dated April 17, 2019, April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023 and April 16, 2024 respectively. Our audit of these financial statements was conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test check basis, evidence supporting the amounts and disclosures in the financial statements. Our audits were not planned and performed in connection with any transactions to identify matters that may be of potential interest to third parties.

8. We conducted our examination of the Statement in accordance with the requirements of the Guidance Note on Reports or Certificates for Special Purposes issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

10. Our scope of work did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of the amounts reported in the Statement. We have not performed an audit, the objective of which would be the expression of an opinion on the financial results, specified elements, accounts or items thereof, for the Company taken as a whole. Accordingly, we do not express such audit opinion.

11. A limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 6 above. The procedures performed vary in nature and timing from and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

12. We have performed the following procedures in relation to the Statement:

    a. Traced the total gross block of assets as per audited financial statements as set out in the Statement for the year ended on March 31, 2019, March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024 from audited financial statements of respective years.

    b. Obtained the listing of year wise gross block of assets prepared and compiled as per the description of assets mentioned in Appendix 1 - Depreciation Schedule to the CERC Regulation by the management based on information available in the SAP (ERP used by the Company for its accounting purpose) and reconciled the year wise total amount of gross block of assets to the books of account and other records underlying the audited annual financial statements.

    c. Examined sample items from the list on a test basis from the underlying information available in the ERP as stated in paragraph 12(b) above and noted the description for each of the selected samples. We have however not performed any procedures to ensure the completeness and accuracy of the details containing segregation of gross block of assets and the identification/classification of the same as prepared by the management.

    d. We have traced amount of fair valuation of freehold land to respective audited financial statements.

    e. Performed necessary enquires with the management and obtained necessary representations. The Company has provided all relevant information for the respective financial years stated above. We have relied on the same and have not performed any independent procedures.

    The above-mentioned procedures include examining evidence supporting the particulars in this Statement. Further, our scope of work did not involve us performing audit test for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.

Conclusion

13. Based on procedures performed by us, and on observations as set out in paragraph 12 above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes thereon, are in agreement with books of account and records underlying the audited financial statements of the Company for the years ended March 31, 2019, March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024.



S.R. BATLIBOI & CO. LLP
Chartered Accountants

Restriction on Use

14. This report has been issued at the request of the Company, solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar.Sarkar
Digitally signed by Bhaswar.Sarkar
DN: cn=Bhaswar.Sarkar, email=Bhaswar.Sarkar@srb.in
Date: 2024.12.12 20:13:43 +05'30'

per Bhaswar Sarkar
Partner
UDIN: 24055596BKFOCO8935
Membership Number: 055596
Place of Signature: Kolkata
Date: December 12, 2024

MAITHON POWER LIMITED

Statement of Gross Block of Assets (Property, Plant & Equipment, Right of Use and Other intangibles Assets) as on year ended March 31, 2019, March 31, 2020 and March 31, 2021

Amount in Lakhs

			Gross Block as on 31st March		
S. No	**Name of Asset**		**2019**	**2020**	**2021**
1	**2**		**3**	**4**	**5**
A	**Land under full ownership (net of revaluation)**		17,513.13	17,513.13	17,639.91
B	**Land under lease**				
(a)	for investment in the land		9,877.83	9,877.83	9,877.83
(b)	For cost of clearing the site		-	-	-
(c)	Land for reservoir in case of hydro generating station		-	-	-
C	**Assets purchased new**				
a.	PI & Machinery in generating stations				
(i)	Hydro electric		-	-	-
(ii)	Steam electric NHRB & waste heat recovery boilers		3,95,327.87	3,97,325.22	3,99,973.59
(iii)	Diesel electric and gas plant		-	-	-
b.	Cooling towers & circulating water systems		10,070.52	10,070.52	10,070.52
c.	Hydraulic works forming part of the Hydro-generating stations				
(i)	Dams, Spillways, Weirs, Canals, Reinforced concrete flumes and siphons		-	-	-
(ii)	Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates, steel surge tanks, hydraulic control valves and hydraulic works		-	-	-
d.	Building & Civil Engineering works				
(i)	Offices and showrooms		14,933.09	14,996.17	15,083.20
(ii)	Containing thermo-electric generating plant		24,344.76	24,342.83	24,342.83
(iii)	Containing hydro-electric generating plant		-	-	-
(iv)	Temporary erections such as wooden structures		-	-	-
(v)	Roads other than Kutcha roads		18.37	25.36	25.36
(vi)	Others		766.10	1,042.98	1,179.51
e.	Transformers, Kiosk, sub-station equipment & other fixed apparatus (including plant				
(i)	Transformers including foundations having rating of 100 KVA and over		5,709.26	5,725.25	5,725.25
(ii)	Others		-	-	-
f.	Switchgear including cable connections		13,544.66	13,579.40	13,579.40
g.	Lightning arrestor				
(i)	Station type		-	-	-
(ii)	Pole type		-	-	-
(iii)	Synchronous condenser		-	-	-
h.	Batteries				-
(i)	Underground cable including joint boxes and disconnected boxes		-	-	-
(ii)	Cable duct system		-	-	-
i.	Overhead lines including cable support				
(i)	Lines on fabricated steel operating at terminal voltages higher than 66 KV		-	-	-
(ii)	Lines on steel supports operating at terminal voltages higher than 13.2 KV but not exceeding 66 KV		-	-	-
(iii)	Lines on steel on reinforced concrete support		-	-	-
(iv)	Lines on treated wood support		-	-	-
j.	Meters		-	-	-
k.	Self propelled vehicles		288.38	272.03	267.24
l.	Air Conditioning Plants				
(i)	Static		-	-	-
(ii)	Portable		5.84	10.13	23.95
m.(i)	Office furniture and furnishing		778.10	810.32	827.40
(ii)	Office equipment		684.37	693.61	712.25
(iii)	Internal wiring including fittings and apparatus		579.64	579.64	580.64
(iv)	Street Light fittings		-	-	-
n.	Apparatus let on hire				
(i)	Other than motors		-	-	-
(ii)	Motors		-	-	-
o.	Communication equipment			-	-
(i)	Radio and high frequency carrier system		-	-	-
(ii)	Telephone lines and telephones		10.19	10.19	10.19
(iii)	Fibre Optic		-	-	-
p.	I. T Equipment including software		324.54	314.36	357.18
q.	Any other assets not covered above		396.97	491.86	502.19
	Gross Block of assets Excluding Railway Assets	**A**	**4,95,173.61**	**4,97,680.83**	**5,00,778.44**
	Gross Block of assets Excluding Freehold Land & Railway		**4,77,660.48**	**4,80,167.70**	**4,83,138.53**

Gross Block - Railway Assets			**Gross Block as on 31st March**		
S. No	**Name of Asset**		**2019**	**2020**	**2021**
B(a)	Land under lease		-	-	326.86
C i(i)	Lines on fabricated steel operating at terminal voltages higher than 66 KV		-	45.75	45.75
C i(ii)	Lines on steel supports operating at terminal voltages higher than 13.2 KV but not exceeding 66 KV		-	-	4,739.09
C(d)(vi)	Building & Civil Engineering works (Others)		2,860.92	2,860.92	52,951.26
C(e)(i)	Transformers including foundations having rating of 100 KVA and over		-	2,466.67	2,466.67
C(f)	Switchgear including cable connections		-	8.48	8.48
C(h)(i)	Underground cable including joint boxes and disconnected boxes		-	3.79	3.79
C(o)(ii)	Communication equipment (Telephone lines and telephones)		-	0.00	5,725.46
	Gross Block of Railway Assets	**B**	**2,860.92**	**5,385.60**	**66,267.36**
	Impact of fair valuation of freehold land on adoption on Ind AS	**C**	**12,351.21**	**12,351.21**	**12,351.21**
	Total Gross assets as per audited financial statements	**A+B+C**	**5,10,385.74**	**5,15,417.65**	**5,79,397.00**

MAITHON POWER LIMITED

Statement of Gross Block of Assets (Property, Plant & Equipment, Right of Use and Other intangibles Assets) as on year ended March 31, 2022, March 31, 2023 and March 31, 2024

Amount in Lakhs

			Gross Block as on 31st March		
S. No	Name of Asset		2022	2023	2024
1	2		6	7	8
A	**Land under full ownership (net of revaluation)**		17,639.91	17,639.91	17,639.91
B	**Land under lease**				
(a)	for investment in the land		10,529.94	10,529.94	15,399.00
(b)	For cost of clearing the site		-	-	-
(c)	Land for reservoir in case of hydro generating station		-	-	-
C	**Assets purchased new**				
a.	Pl & Machinery in generating stations				
(i)	Hydro electric		-	-	-
(ii)	Steam electric NHRB & waste heat recovery boilers		4,03,524.07	4,56,059.89	4,63,078.90
(iii)	Diesel electric and gas plant		-	-	-
b.	Cooling towers & circulating water systems		10,075.26	10,075.26	10,865.42
c.	Hydraulic works forming part of the Hydro-generating stations				
(i)	Dams, Spillways, Weirs, Canals, Reinforced concrete flumes and siphons		-	-	-
(ii)	Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates, steel surge tanks, hydraulic control valves and hydraulic works		-	-	-
d.	Building & Civil Engineering works				
(i)	Offices and showrooms		15,085.12	17,121.66	17,463.26
(ii)	Containing thermo-electric generating plant		24,396.99	24,398.96	27,918.96
(iii)	Containing hydro-electric generating plant		-	-	-
(iv)	Temporary erections such as wooden structures		-	-	-
(v)	Roads other than Kutcha roads		25.36	25.36	-
(vi)	Others		54,145.74	8,441.06	5,340.19
e.	Transformers, Kiosk, sub-station equipment & other fixed apparatus (including plant				
(i)	Transformers including foundations having rating of 100 KVA and over		8,195.13	8,195.13	6,546.62
(ii)	Others		-	-	-
f.	Switchgear including cable connections		13,656.23	13,656.23	15,641.63
g.	Lightning arrestor				
(i)	Station type		-	-	-
(ii)	Pole type		-	-	-
(iii)	Synchronous condenser		-	-	-
h.	Batteries		230.66	925.10	1,016.45
(i)	Underground cable including joint boxes and disconnected boxes		3.79	3.79	-
(ii)	Cable duct system		-	-	-
i.	Overhead lines including cable support				
(i)	Lines on fabricated steel operating at terminal voltages higher than 66 KV		45.75	45.75	-
(ii)	Lines on steel supports operating at terminal voltages higher than 13.2 KV but not exceeding 66 KV		4,739.09	-	-
(iii)	Lines on steel on reinforced concrete support		-	-	-
(iv)	Lines on treated wood support		-	-	-
j.	Meters		-	-	-
k.	Self propelled vehicles		267.24	339.54	518.88
l.	Air Conditioning Plants		-	-	-
(i)	Static		-	-	-
(ii)	Portable		23.95	26.80	93.53
m.(i)	Office furniture and furnishing		775.91	803.68	776.99
(ii)	Office equipment		713.07	738.87	659.47
(iii)	Internal wiring including fittings and apparatus		579.64	579.64	579.64
(iv)	Street Light fittings		-	-	-
n.	Apparatus let on hire		-	-	-
(i)	Other than motors		-	-	-
(ii)	Motors		-	-	-
o.	Communication equipment		-	-	-
(i)	Radio and high frequency carrier system		-	-	-
(ii)	Telephone lines and telephones		5,981.13	6,047.31	474.91
(iii)	Fibre Optic		-	-	-
p.	I. T Equipment including software		469.19	504.29	493.86
q.	Any other assets not covered above		508.68	617.47	908.99
	Total Gross Block of assets	**A**	**5,71,611.85**	**5,76,775.65**	**5,85,416.62**
	Gross Block of assets Excluding Freehold Land		**5,53,971.94**	**5,59,135.74**	**5,67,776.72**
	Impact of fair valuation of freehold land on adoption on Ind AS	**B**	**12,351.21**	**12,351.21**	**12,351.21**
	Total Gross Block of assets as per audited financial statements	**A+B**	**5,83,963.06**	**5,89,126.86**	**5,97,767.83**

Notes:

1. Name of the Assets as mentioned in above statement confirms to the description of assets mentioned in Appendix 1 - Depreciation Schedule to the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
2. Land under full ownership excludes addition of Rs.12351.21 lakhs being the fair valuation as per Ind AS.
3. The package wise details have been prepared by us based on information available in SAP which is ERP used by management for its accounting purpose.
4. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 17:10:03 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

MPL
MAITHON POWER LIMITED

Ref. No. MPL/CL/CCL/17-18/ 64 Dated: 01.06.17

To,

GM(S&M),
Central Coalfields Limited
Darbhanga House,
Ranchi, Jharkhand

Subject: Claim settlement for stones (+250 mm) as per joint assessment

Ref: MPL/CL/CCL/ 2017-18/35 dated: 2nd May' 17

Dear Sir,

This has reference to letter no. **MPL/CL/**CCL/ 2017-18/35 dated: 02.05.2016 submitted to CCL in regard to claim settlement for stone (+250 mm) as per joint assessment of CCL and Maithon Power Ltd on dated 26th & 27th April 2016.
The assessment was for the period of FY 14-15 and from April' 15 to Dec' 15. The stone qty assessed and agreed by both the parties 2279.06 Mts for FY 14-15 and 2255.98 Mts for the period of April' 15 to Dec' 15.

Based on the assessment, we hereby once again requesting for the settlement of stone compensation as per billed grade of coal being supplied in mentioned tenure.

Your kind co-operation in this matter is highly solicited.

Thanking you,

Yours faithfully,

For Maithon Power Limited

MAITHON POWER LIMITED MPL

1/6/17

(Dinesh Kr Gangwal)
Head – Coal Logistics

CC: General Manager (QM), CCL, Darbhanga House, Ranchi, Jharkhand

MPL
MAITHON POWER LIMITED

Ref. No. MPL/CL/CCL/16-17/ 43 Dated: 25.05.2017

To,

GM, Hazaribagh Area
Central Coalfields Limited

Subject: Third Party sampling and analysis of coal at loading points of CCL till CSIR-CIMFR is not taking over the sampling & analysis work and for witnessing the sampling and sample preparation as per tripartite MOU signed with CSIR-CIMFR, Central Coalfields Limited and Maithon Power Limited

Ref. No. MPL/CL/CCL/16-17/935 Dated: 20.01.2017
MPL/CL/CCL/16-17/926 Dated: 06.01.2017
MPL/CL/CCL/16-17/924 Dated: 06.01.2017
MOU-CIMFR-CCL Dated: 28.11.2016

Dear Sir,

This has reference to the Letter no. MPL/CL/CCL/16-17/924&925 dated: 06.01.2017 regarding the authorisation given to M/s SGS India Pvt. Ltd (M/s SGS) as a Third Party Agency for Third Party sampling of coal as per Tripartite MOU at loading ends of CCL on behalf of Maithon Power Limited for the period of six months i.e. from 1st Jan 2017 to 30th June 2017.

We hereby submit the analysis reports for the coal samples collected at loading points of CCL for Road mode and analysed as per the the standard operating procedure circulated by CIL in NABL Lab of M/s SGS India Pvt. Ltd, Dhanbad for 4th May to 19th May-17.

The above is for your information only for quality improvement.

Your kind cooperation in the matter is highly solicited.

Thanking you,

Yours faithfully,
For Maithon Power Limited

(Dinesh Kr. Gangwal)
Head – Coal Logistics

Encl: a.a. Annexure 1 – Quality reports
CC: GM (S&M), Central Coalfields Limited, Darbhanga House, Ranchi, Jharkhand
GM (QM), Central Coalfields Limited, Darbhanga House, Ranchi, Jharkhand

o/c

SGS

STATEMENT OF COAL SAMPLING AND ANALYSIS BY ROAD

For the Month : MAY' 2017
Client : M/s MPL (MAITHON POWER LTD)
Coal Company : CCL
Cargo : ROM COAL

Sl. No.	Name of Siding/Colliety/ Loading Point	Sized and Declared GCV/Grade	Date of Loading	Date of Sample Preparation	Challan Qty (t)	TM % (ARB)	Analysis Result on Equilibrated Condition of 60% RH 40°C Temp/GCV/ASTM - 5865 - 13			Analyzed Grade
							IM %	Ash %	GCV (Kcal/kg) (ADB)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1	PEOCP	G9	4-May-17	8-May-17	488.52	5.29	1.37	39.38	4608	G9
2		G9	5-May-17	8-May-17	1239.08	4.94	1.34	40.03	4563	G10
3		G9	6-May-17	8-May-17	209.62	5.61	1.39	38.14	4728	G9
4		G9	7-May-17	8-May-17	1722.96	5.01	1.18	40.30	4529	G10

Note:- Analysis carried out at our NABL accredited Laboratory- Dhanbad. NABL Certificate No. T-2220

1. Samples received for analysis were sealed and jointly signed at loading ends
2. Proximate analysis has been done in accordance with BIS specification IS 1350 (Part - I), 1984 Reaffirmed 2007 & ASTM D5865-13 for GCV

Distribution
1.Concerned Area SM (QC)
2.Office of the GM (QC) Coal Comp.
3.Office of the Purchaser/Consumer

Signature of the Reprresentative of Coal Co.

Name

Signature of 3rd party representative on behalf of Tata Power Co.

Name

SGS INDIA PVT. LTD. DHANBAD

This report is a worksheet for internal purposes only. SGS has no responsibility and / or liability whatsoever for the consequences of any action taken or not taken on the basis of this Report. All orders are accepted and all reports and certificates issued subject to the General Conditions of Service which are accessible at www.sgs.com/terms_and_conditions.htm

The above reflects our findings at time and place of Inspection. This Status does not relieve sellers/suppliers from their contractual responsibilities nor does prejudice buyer's right of claim towards seller/Supplier for compensation for any apparent and/or hidden defects not detected during our random Inspection or occurring thereafter.

The manual sampling method was agreed with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible. The Holder of this document is cautioned that collected MANUAL samples of this type do not satisfy the minimum requirements for probability sampling, and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

The consignement from which the samples were collected had a nominal top size of over 80millimeter.While the sampling method was agreed upon by all parties to this report,due to the limited ability to extract representative increments from the cargo,the samples collected will not necessarily be representative of the entire cargo.SGS has no responsibility and /or liability for the consequences of any action taken or not taken on the basis of this report.

SGS

STATEMENT OF COAL SAMPLING AND ANALYSIS BY ROAD

For the Month : MAY' 2017
Client : M/s MPL (MAITHON POWER LTD)
Coal Company : CCL
Cargo : ROM COAL

Sl. No.	Name of Siding/Colliety/ Loading Point	Sized and Declared GCV/Grade	Date of Loading	Date of Sample Preparation	Challan Qty (t)	TM % (ARB)	Analysis Result on Equilibrated Condition of 60% RH 40°C Temp/GCV/ASTM - 5865 - 13			Analyzed Grade
							IM %	Ash %	GCV (Kcal/kg) (ADB)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1	PEOCP	G9	8-May-17	10-May-17	1788.12	4.98	1.11	39.82	4670	G9
2		G9	9-May-17	10-May-17	2205.06	4.34	1.07	37.72	4355	G10

Note:- Analysis carried out at our NABL accredited Laboratory- Dhanbad. NABL Certificate No. T-2220

1. Samples received for analysis were sealed and jointly signed at loading ends
2. Proximate analysis has been done in accordance with BIS specification IS 1350 (Part - I), 1984 Reaffirmed 2007 & ASTM D5865-13 for GCV

Distribution
1.Concerned Area SM (QC)
2.Office of the GM (QC) Coal Comp.
3.Office of the Purchaser/Consumer

Signature of the Representative of Coal Co.
Name

Signature of 3rd party representative on behalf of Tata Power Co.
Name

INDIA PVT. LTD. SGS DHANBAD

This report is a worksheet for internal purposes only. SGS has no responsibility and / or liability whatsoever for the consequences of any action taken or not taken on the basis of this Report. All orders are accepted and all reports and certificates issued subject to the General Conditions of Service which are accessible at www.sgs.com/terms_and_conditions.htm

The above reflects our findings at time and place of Inspection. This Status does not relieve sellers/suppliers from their contractual responsibilities nor does prejudice buyer's right of claim towards seller/Supplier for compensation for any apparent and/or hidden defects not detected during our random Inspection or occurring thereafter.

The manual sampling method was agreed with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible. The Holder of this document is cautioned that collected MANUAL samples of this type do not satisfy the minimum requirements for probability sampling, and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

The consignement from which the samples were collected had a nominal top size of over 80millimeter.While the sampling method was agreed upon by all parties to this report,due to the limited ability to extract representative increments from the cargo,the samples collected will not necessarily be representative of the entire cargo.SGS has no responsibility and /or liability for the consequences of any action taken or not taken on the basis of this report.

SGS

STATEMENT OF COAL SAMPLING AND ANALYSIS BY ROAD

For the Month : MAY' 2017
Client : M/s MPL (MAITHON POWER LTD)
Coal Company : CCL
Cargo : ROM COAL

Sl. No.	Name of Siding/Colliety/ Loading Point	Sized and Declared GCV/Grade	Date of Loading	Date of Sample Preparation	Challan Qty (t)	TM % (ARB)	Analysis Result on Equilibrated Condition of 60% RH 40°C Temp/GCV/ASTM - 5865 - 13			Analyzed Grade
							IM %	Ash %	GCV (Kcal/kg) (ADB)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1	PEOCP	G9	10-May-17	12-May-17	1122.15	5.55	1.29	39.22	4684	G9
2		G9	11-May-17	12-May-17	1503.6	4.77	1.54	38.41	4734	G9

Note:- Analysis carried out at our NABL accredited Laboratory- Dhanbad. NABL Certificate No. T-2220

1. Samples received for analysis were sealed and jointly signed at loading ends
2. Proximate analysis has been done in accordance with BIS specification IS 1350 (Part - I), 1984 Reaffirmed 2007 & ASTM D5865-13 for GCV

Distribution
1.Concerned Area SM (QC)
2.Office of the GM (QC) Coal Comp.
3.Office of the Purchaser/Consumer

Signature of the Reprresentative of Coal Co.
Name

Signature of 3rd party representative on behalf of Tata Power Co.
Name

SGS INDIA PVT. LTD. DHANBAD

This report is a worksheet for internal purposes only. SGS has no responsibility and / or liability whatsoever for the consequences of any action taken or not taken on the basis of this Report. All orders are accepted and all reports and certificates issued subject to the General Conditions of Service which are accessible at www.sgs.com/terms_and_conditions.htm

The above reflects our findings at time and place of Inspection. This Status does not relieve sellers/suppliers from their contractual responsibilities nor does prejudice buyer's right of claim towards seller/Supplier for compensation for any apparent and/or hidden defects not detected during our random Inspection or occurring thereafter.

The manual sampling method was agreed with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible. The Holder of this document is cautioned that collected MANUAL samples of this type do not satisfy the minimum requirements for probability sampling, and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

The consignement from which the samples were collected had a nominal top size of over 80millimeter.While the sampling method was agreed upon by all parties to this report,due to the limited ability to extract representative increments from the cargo,the samples collected will not necessarily be representative of the entire cargo.SGS has no responsibility and /or liability for the consequences of any action taken or not taken on the basis of this report.

SGS

STATEMENT OF COAL SAMPLING AND ANALYSIS BY ROAD

For the Month : MAY' 2017
Client : M/s MPL (MAITHON POWER LTD)
Coal Company : CCL
Cargo : ROM COAL

Sl. No.	Name of Siding/Colliety/ Loading Point	Sized and Declared GCV/Grade	Date of Loading	Date of Sample Preparation	Challan Qty (t)	TM % (ARB)	Analysis Result on Equilibrated Condition of 60% RH 40°C Temp/GCV/ASTM - 5865 - 13			Analyzed Grade
							IM %	Ash %	GCV (Kcal/kg) (ADB)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
12	PEOCP	G9	12-May-17	13-May-17	1992.98	4.36	1.47	48.76	3798	G12
13		G9	13-May-17	14-May-17	1617.7	4.92	1.45	46.91	3985	G12
14		G9	14-May-17	15-May-17	2796.17	5.68	1.44	52.22	3473	G13
15		G9	15-May-17	16-May-17	2335.81	4.55	1.52	52.67	3405	G13

Note:- Analysis carried out at our NABL accredited Laboratory- Dhanbad. NABL Certificate No. T-2220

1. Samples received for analysis were sealed at loading ends
2. Proximate analysis has been done in accordance with BIS specification IS 1350 (Part - I), 1984 Reaffirmed 2007 & ASTM D5865-13 for GCV

Distribution
1.Concerned Area SM (QC)
2.Office of the GM (QC) Coal Comp.
3.Office of the Purchaser/Consumer

Signature of the Reprresentative of Coal Co.

Name

Signature of 3rd party representative on behalf of Tata Power Co.

Name

SGS INDIA PVT. LTD. SGS DHANBAD

This report is a worksheet for internal purposes only. SGS has no responsibility and / or liability whatsoever for the consequences of any action taken or not taken on the basis of this Report. All orders are accepted and all reports and certificates issued subject to the General Conditions of Service which are accessible at www.sgs.com/terms_and_conditions.htm

The above reflects our findings at time and place of Inspection. This Status does not relieve sellers/suppliers from their contractual responsibilities nor does prejudice buyer's right of claim towards seller/Supplier for compensation for any apparent and/or hidden defects not detected during our random Inspection or occurring thereafter.

The manual sampling method was agreed with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible. The Holder of this document is cautioned that collected MANUAL samples of this type do not satisfy the minimum requirements for probability sampling, and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

The consignement from which the samples were collected had a nominal top size of over 80millimeter.While the sampling method was agreed upon by all parties to this report,due to the limited ability to extract representative increments from the cargo,the samples collected will not necessarily be representative of the entire cargo.SGS has no responsibility and /or liability for the consequences of any action taken or not taken on the basis of this report.

SGS

STATEMENT OF COAL SAMPLING AND ANALYSIS BY ROAD

For the Month : MAY' 2017
Client : M/s MPL (MAITHON POWER LTD)
Coal Company : CCL
Cargo : ROM COAL

Sl. No.	Name of Siding/Colliety/ Loading Point	Sized and Declared GCV/Grade	Date of Loading	Date of Sample Preparation	Challan Qty (t)	TM % (ARB)	Analysis Result on Equilibrated Condition of 60% RH 40°C Temp/GCV/ASTM - 5865 - 13			Analyzed Grade
							IM %	Ash %	GCV (Kcal/kg) (ADB)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
16	PEOCP	G9	16-May-17	19-May-17	1219.81	5.03	1.22	43.46	4234	G11
17		G9	17-May-17	19-May-17	1368.17	4.57	1.31	42.28	4331	G10
18		G9	18-May-17	19-May-17	1590.11	5.70	1.33	41.29	4451	G10
19		G9	19-May-17	20-May-17	2051.11	5.32	1.38	41.26	4410	G10

Note:- Analysis carried out at our NABL accredited Laboratory- Dhanbad. NABL Certificate No. T-2220

1. Samples received for analysis were sealed at loading ends
2. Proximate analysis has been done in accordance with BIS specification IS 1350 (Part - I), 1984 Reaffirmed 2007 & ASTM D5865-13 for GCV

Distribution
1.Concerned Area SM (QC)
2.Office of the GM (QC) Coal Comp.
3.Office of the Purchaser/Consumer

Signature of the Reprresentative of Coal Co.

Name

Signature of 3rd party representative on behalf of Tata Power Co.

Name

SGS INDIA PVT. LTD. DHANBAD

This report is a worksheet for internal purposes only. SGS has no responsibility and / or liability whatsoever for the consequences of any action taken or not taken on the basis of this Report. All orders are accepted and all reports and certificates issued subject to the General Conditions of Service which are accessible at www.sgs.com/terms_and_conditions.htm

The above reflects our findings at time and place of Inspection. This Status does not relieve sellers/suppliers from their contractual responsibilities nor does prejudice buyer's right of claim towards seller/Supplier for compensation for any apparent and/or hidden defects not detected during our random Inspection or occurring thereafter.

The manual sampling method was agreed with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible. The Holder of this document is cautioned that collected MANUAL samples of this type do not satisfy the minimum requirements for probability sampling, and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

The consignement from which the samples were collected had a nominal top size of over 80millimeter.While the sampling method was agreed upon by all parties to this report,due to the limited ability to extract representative increments from the cargo,the samples collected will not necessarily be representative of the entire cargo.SGS has no responsibility and /or liability for the consequences of any action taken or not taken on the basis of this report.

MPL
MAITHON POWER LIMITED

Ref. No. MPL/CL/CCL/17-18/95 Dated: 10-04-2017

To,

GM, Hazaribag Area
Central Coalfields Limited

Subject: Third Party sampling and analysis of coal at loading points of CCL till CSIR-CIMFR is not taking over the sampling & analysis work and for witnessing the sampling and sample preparation as per tripartite MOU signed with CSIR-CIMFR, Central Coalfields Limited and Maithon Power Limited

Ref. No.	MPL/CL/CCL/16-17/935	Dated: 20.01.2017
	MPL/CL/CCL/16-17/926	Dated: 06.01.2017
	MPL/CL/CCL/16-17/924	Dated: 06.01.2017
	MOU-CIMFR-CCL	Dated: 28.11.2016

Dear Sir,

This has reference to the Letter no. MPL/CL/CCL/16-17/924&925 dated: 06.01.2017 regarding the authorisation given to M/s SGS India Pvt. Ltd (M/s SGS) as a Third Party Agency for Third Party sampling of coal as per Tripartite MOU at loading ends of CCL on behalf of Maithon Power Limited for the period of six months i.e. from 1st Jan 2017 to 30th June 2017.

We hereby submit the analysis reports for the coal samples collected at loading points of CCL for Road mode and analysed as per the the standard operating procedure circulated by CIL in NABL Lab of M/s SGS India Pvt. Ltd, Dhanbad for 1st June to 8th June 2017

The above is for your information only for quality improvement.

Your kind cooperation in the matter is highly solicited.

Thanking you,

Yours faithfully,
For Maithon Power Limited

(Dinesh Kr. Gangwal)
Head – Coal Logistics

MAITHON PO MPL

Encl: a.a. Annexure 1 – Quality reports
CC: GM (S&M), Central Coalfields Limited, Darbhanga House, Ranchi, Jharkhand

SGS

STATEMENT OF COAL SAMPLING AND ANALYSIS BY ROAD

For the Month : JUNE' 2017
Client : M/s MPL (MAITHON POWER LTD)
Coal Company : CCL
Cargo : ROM COAL

Sl. No.	Name of Siding/Colliety/ Loading Point	Sized and Declared GCV/Grade	Date of Loading	Date of Sample Preparation	Challan Qty (t)	TM % (ARB)	Analysis Result on Equilibrated Condition of 60% RH 40°C Temp/GCV/ASTM - 5865 - 13			Analyzed Grade
							IM %	Ash %	GCV (Kcal/kg) (ADB)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1	PEOCP	G 11	1-Jun-17	2-Jun-17	1128.05	4.93	1.33	50.40	3558	G13
2		G 11	2-Jun-17	3-Jun-17	576.82	4.48	1.56	47.42	3865	G12
3		G 11	3-Jun-17	4-Jun-17	1912.72	4.23	1.51	45.81	4006	G11

Note:- Analysis carried out at our NABL accredited Laboratory- Dhanbad. NABL Certificate No. T-2220

1. Samples received for analysis were sealed at loading ends
2. Proximate analysis has been done in accordance with BIS specification IS 1350 (Part - I), 1984 Reaffirmed 2007 & ASTM D5865-13 for GCV

Distribution
1.Concerned Area SM (QC)
2.Office of the GM (QC) Coal Comp.
3.Office of the Purchaser/Consumer

Signature of the Reprrsentative of Coal Co.
Name

Signature of 3rd party representative on behalf of Tata Power Co.
Name

This report is a worksheet for internal purposes only. SGS has no responsibility and / or liability whatsoever for the consequences of any action taken or not taken on the basis of this Report. All orders are accepted and all reports and certificates issued subject to the General Conditions of Service which are accessible at www.sgs.com/terms_and_conditions.htm

The above reflects our findings at time and place of Inspection. This Status does not relieve sellers/suppliers from their contractual responsibilities nor does prejudice buyer's right of claim towards seller/Supplier for compensation for any apparent and/or hidden defects not detected during our random Inspection or occurring thereafter.

The manual sampling method was agreed with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible. The Holder of this document is cautioned that collected MANUAL samples of this type do not satisfy the minimum requirements for probability sampling, and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

The consignement from which the samples were collected had a nominal top size of over 80millimeter.While the sampling method was agreed upon by all parties to this report,due to the limited ability to extract representative increments from the cargo,the samples collected will not necessarily be representative of the entire cargo.SGS has no responsibility and /or liability for the consequences of any action taken or not taken on the basis of this report.

SGS

STATEMENT OF COAL SAMPLING AND ANALYSIS BY ROAD

For the Month : JUNE' 2017
Client : M/s MPL (MAITHON POWER LTD)
Coal Company : CCL
Cargo : ROM COAL

Sl. No.	Name of Siding/Colliety/ Loading Point	Sized and Declared GCV/Grade	Date of Loading	Date of Sample Preparation	Challan Qty (t)	TM % (ARB)	Analysis Result on Equilibrated Condition of 60% RH 40°C Temp/GCV/ASTM - 5865 - 13			Analyzed Grade
							IM %	Ash %	GCV (Kcal/kg) (ADB)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1	PEOCP	G 11	4-Jun-17	5-Jun-17	2514.33	7.02	1.60	47.81	3795	G12
2		G 11	5-Jun-17	6-Jun-17	2874.71	5.02	1.25	48.36	3798	G12

Note:- Analysis carried out at our NABL accredited Laboratory- Dhanbad. NABL Certificate No. T-2220

1. Samples received for analysis were sealed at loading ends
2. Proximate analysis has been done in accordance with BIS specification IS 1350 (Part - I), 1984 Reaffirmed 2007 & ASTM D5865-13 for GCV

Distribution
1.Concerned Area SM (QC)
2.Office of the GM (QC) Coal Comp.
3.Office of the Purchaser/Consumer

Signature of the Reprresentative of Coal Co.
Name

Signature of 3rd party representative on behalf of Tata Power Co.
Name

SGS INDIA PVT. LTD. DHANBAD

This report is a worksheet for internal purposes only. SGS has no responsibility and / or liability whatsoever for the consequences of any action taken or not taken on the basis of this Report. All orders are accepted and all reports and certificates issued subject to the General Conditions of Service which are accessible at www.sgs.com/terms_and_conditions.htm

The above reflects our findings at time and place of Inspection. This Status does not relieve sellers/suppliers from their contractual responsibilities nor does prejudice buyer's right of claim towards seller/Supplier for compensation for any apparent and/or hidden defects not detected during our random Inspection or occurring thereafter.

The manual sampling method was agreed with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible. The Holder of this document is cautioned that collected MANUAL samples of this type do not satisfy the minimum requirements for probability sampling, and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

The consignement from which the samples were collected had a nominal top size of over 80millimeter.While the sampling method was agreed upon by all parties to this report,due to the limited ability to extract representative increments from the cargo,the samples collected will not necessarily be representative of the entire cargo.SGS has no responsibility and /or liability for the consequences of any action taken or not taken on the basis of this report.

SGS

STATEMENT OF COAL SAMPLING AND ANALYSIS BY ROAD

For the Month : JUNE' 2017
Client : M/s MPL (MAITHON POWER LTD)
Coal Company : CCL
Cargo : ROM COAL

Sl. No.	Name of Siding/Colliety/ Loading Point	Sized and Declared GCV/Grade	Date of Loading	Date of Sample Preparation	Challan Qty (t)	TM % (ARB)	Analysis Result on Equilibrated Condition of 60% RH 40°C Temp/GCV/ASTM - 5865 - 13			Analyzed Grade
							IM %	Ash %	GCV (Kcal/kg) (ADB)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
3	PEOCP	G9	6-Jun-17	9-Jun-17		4.57	1.99	48.53	3705	G12
4		G9	7-Jun-17	9-Jun-17		4.93	1.82	47.99	3787	G12
1		G9	8-Jun-17	9-Jun-17		4.91	1.76	49.60	3675	G13

Note:- Analysis carried out at our NABL accredited Laboratory- Dhanbad. NABL Certificate No. T-2220

1. Samples received for analysis were sealed at loading ends
2. Proximate analysis has been done in accordance with BIS specification IS 1350 (Part - I), 1984 Reaffirmed 2007 & ASTM D5865-13 for GCV

Distribution
1.Concerned Area SM (QC)
2.Office of the GM (QC) Coal Comp.
3.Office of the Purchaser/Consumer

Signature of the Reprresentative of Coal Co.
Name

Signature of 3rd party representative on behalf of Tata Power Co.
Name

SGS INDIA PVT. LTD. DHANBAD

This report is a worksheet for internal purposes only. SGS has no responsibility and / or liability whatsoever for the consequences of any action taken or not taken on the basis of this Report. All orders are accepted and all reports and certificates issued subject to the General Conditions of Service which are accessible at www.sgs.com/terms_and_conditions.htm

The above reflects our findings at time and place of Inspection. This Status does not relieve sellers/suppliers from their contractual responsibilities nor does prejudice buyer's right of claim towards seller/Supplier for compensation for any apparent and/or hidden defects not detected during our random Inspection or occurring thereafter.

The manual sampling method was agreed with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible. The Holder of this document is cautioned that collected MANUAL samples of this type do not satisfy the minimum requirements for probability sampling, and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

The consignement from which the samples were collected had a nominal top size of over 80millimeter.While the sampling method was agreed upon by all parties to this report,due to the limited ability to extract representative increments from the cargo,the samples collected will not necessarily be representative of the entire cargo.SGS has no responsibility and /or liability for the consequences of any action taken or not taken on the basis of this report.

// TRUE COPY //

BHARAT COKING COAL LIMITED
(A Subsidiary of Coal India Limited)
QUALITY CONTROL DEPARTMENT

Ref,No-BCCL/GM(QC)/F-TP/19/408 Dated 26/9/19

To,
Mr. Tarun Chattopadhyay
Head –Coal Logistics
Maithon Power Limited.

Sub- Third Party Sampling reports in regard to provision for engagement of independent Third Party Agency for sampling and analysis of coal at loading end of BCCL by Power producers/Utilities.

(Letter Ref Nos ;MPL/CL/BCCL/19-20/16 to 23 (for 08 Areas) Dated 22Aug 19)

Dear Sir,

Please refer to The MoU(executed on 26.06.2016 between CIL,Power Utilities and CSIR-CIMFR) and Tripartite Agreement on Third Party Sampling(TPS) for coal quality monitoring at loading end of BCCL for dispatch to Power Utilities executed on 28.11.2016 between BCCL (First party),MPL (Second party) and CSIR-CIMFR (Third party).

For your kind information, as per the MoU (signed on 28.06.2016 between CIL,Power Utilities and CIMFR) and Tripartite Agreement (signed on 2.11.2016 between BCCL,MPL and CIMFR) ,there is no provision for appointment of an independent 3rd Party sampling agency by Power Producers/Utilities .

Accordingly, only CSIR-CIMFR will work as a Third Party sampling Agency and carry out the collection ,preparation and analysis of coal at the loading end of BCCL. So,only CSIR-CIMFR's analysis reports will be acceptable to both of BCCL &MPL.Any analysis reports submitted by you will not be admissible for BCCL.

Also please refer to clause No S.6.9 of your Agreement,

Quote,

Collection and preparation of samples will be witnessed by the representative of Coal Company and Power Utility, however if they are not present or do not participate, the work will be done by CSIR-CIMFR/TPS representative and absence or failure of participation shall not be considered as a ground for disputing the result.

Unquote

Vide your letter no MPL/CL/BCCL/18-19/342 Dated 27.02.2019,you have requested to the General Manager (Quality Management),BCCL for authorization of your representative named M/s Mitra SK to witness the sampling and analysis of coal at loading end as per MoU and your representative has been authorized for the same.

your representative named M/s Mitra SK to witness the sampling and analysis of coal at loading end as per MoU and your representative has been authorized for the same.

Therefore, your representative is **authorized only to witness the sampling and analysis of coal samples being carried out by CSIR- CIMFR(as Third Party sampling Agency) at the loading end.**

If you carry out any sampling and analysis of coal samples in any lab and submit the same to BCCL, it is immaterial /useless for BCCL and such results will not be entertained by BCCL. Your all letters along with analysis reports are being returned to you.

Hope, you will not send such irrelevant letter to this office or any office of BCCL in future.

Thanking you.

6/9/2019

General Manager(QC)

BCCL

Copy to
All Area Sales managers
BCCL

REPORT OF

ASSESSMENT OF PERFORMANCE OF BOILERS

Conducted at

MAITHON POWER LIMITED, JHARKHAND

REPORT NO.: CPRI/ERED/EA/225/24

(Work order No.: 6000073507 dated 28/06/2024)

Project code: CPRI/CS&CD/2024-25/ERED/C/03

Study conducted by

October 2024

Energy Efficiency and Renewable Energy Division

Central Power Research Institute

Prof. Sir C.V. Raman Road, P.B. No 8066,

Sadashiva Nagar, Bangaluru – 560 080,

Phone: 080 2207 2033.

Work carried out by :		
Energy Efficiency and Renewable Division **Central Power Research Institute** Prof. Sir C.V. Raman Road, P.B. No 8066, Sadashiva Nagar, Bangaluru – 560 080, Phone: 080 2207 2033		
Work carried out for :		
Maithon Power Limited Maithon, Dhanbad – 828205, Jharkhand.		
Head of the division	N. Rajkumar	Joint Director
Study conducted by	N. Rajkumar Prashob. S Amit Kumar Sharma Akshay S. Vidhate	Joint Director Engg. Officer Gr. 2 Engg. Officer Gr. 1 Engg. Officer Gr. 1
Assistance provided for measurement at site by	Ajit Kumar Mohanty	Technician Gr.2
Report no.	CPRI/ERED/EA/225/24	
Date of issue of report	9th October 2024	
Signature of team leader		
Signature of the division head	09/10/24	

सी पी आर आई / CPRI
ई आर ई डी ERED
बेंगलूर / Bangalore-80

EXECUTIVE SUMMARY

- The performance assessment of boilers was conducted in ***August 2024.*** The work at the site consisted of measurement of input and output variables of different equipment and auxiliary loads in the plant.

- The boiler efficiency of unit 1 and 2 were found to be **84.98 %** and **84.89%**, respectively at test conditions, against the design value of **87.80%.**

- The performance test results of boilers indicate that both the boilers are performing with a maximum achievable efficiency point even with firing of coal with low GCV and higher ash content.

CONTENTS

	Page Nos.
1.0 INTRODUCTION	*01*
1.1 Maithon Power Limited, Jharkhand	01
1.2 Scope of the work	01
2.0 WORK CARRIED OUT	*02*
3.0 OBSERVATIONS AND STUDY RESULTS	*02*
3.1 Coal Analysis	*02*
3.2 Boiler Efficiency	*04*
4.0 RESULTS AND DISCUSSIONS	*09*
5.0 CONCLUSIONS	*10*
Annexure -1	*11*

1.0 INTRODUCTION

This section introduces the plant, & process and defines the scope of the work.

1.1 Maithon Power Limited

Maithon Power Limited (MPL) is a joint venture of Tata Power and Damodar Valley Corporation. It has established 2*525 MW units, coal fired thermal power plant in Nirsa, Dist. Dhanbad. This is India's first public private power project. The power is evacuated through 400 kV transmission lines by PGCIL to benefit New Delhi, Jharakhand, West Bengal and Kerala. In this audit, both the units of the plant (unit 1 and 2) have been studied for boiler performance.

1.2 Scope of the work

The scope of the work is given below:

1. Performance assessment of boilers of 2*525 MW units.
2. Submission of detailed study report based on performance test carried out.

The performance evaluation of the boiler will be carried out based on indirect method (heat loss method) as per ASME PTC-4 guidelines, which includes,

- Dry and wet stack loss including moisture in combustion air, H2 in fuel
- Sensible heat loss in fly ash and bottom ash
- Furnace surface convection and radiation loss
- Flue gas analysis (O2 and CO measurement)

The following parameters will be collected from plant,

- Coal samples (two from each units) for ultimate and proximate analysis.
- Fly ash and bottom ash samples for % unburned carbon knowledge.

2.0 WORK CARRIED OUT

The assessment work of performance of boilers was conducted during ***August 2024.*** The work at the site consisted of measurement of input and output variables of different equipment and auxiliary loads in the plant. The performance test on boilers of Unit # 1 and 2 was carried out as per ASME PTC-4 guidelines. The performance tests were carried out at following plant loads:

Unit 1 – 528.00 MW
Unit 2 – 524.74 MW

The coal and ash samples were collected during the test. The data is processed at CPRI to evaluate Boiler Efficiency. The boiler efficiency was evaluated based on indirect method (heat loss method) as per ASME PTC-4 guidelines.

3.0 OBSERVATIONS AND STUDY RESULTS

3.1 Coal Analysis

Coal and ash samples were collected during the tests. The results of ultimate and proximate analysis of the same are given in Table 1. The GCV of coal used during boiler performance tests of Unit-1 and Unit-2 are 3978.62 kcal/kg and 3724.3 kcal/kg respectively. Both the boilers are designed to handle coal with GCV of 4671 kcal/kg. The ash content of the coal used during the performance testing of boilers of Unit # 1 is 41.97 % and that of Unit # 2 is 46.02 % against the design ash content of 36.19 %.

The trend of monthly average GCV of coal being used in unit 1 and unit 2 for the period from April 2021 to July 2024 are depicted in Fig. 1 and Fig. 2 respectively. From both the graphs, it can be observed that the boilers of both the units are not receiving coal of designed GCV of 4671 kcal/kg. Most of the time, the GCV of coal remained below 4200 kcal/kg.

Table 1: Results of proximate & ultimate analysis of raw coal samples of unit #1 & #2 (as fired basis)

Sl. No.	Particulars	Unit	Design	Unit – 1	Unit – 2
1	Gross calorific value	kcal/kg	4671.89	3978.62	3724.30
2	Carbon in fuel	%	47.84	40.39	37.47
3	Hydrogen in fuel	%	2.89	2.70	2.54
4	Sulphur in fuel	%	0.39	0.30	0.33
5	Ash in fuel	%	36.19	41.97	46.02
6	Moisture in fuel	%	7.11	6.85	6.13
7	Oxygen in fuel	%	4.58	7.78	7.34

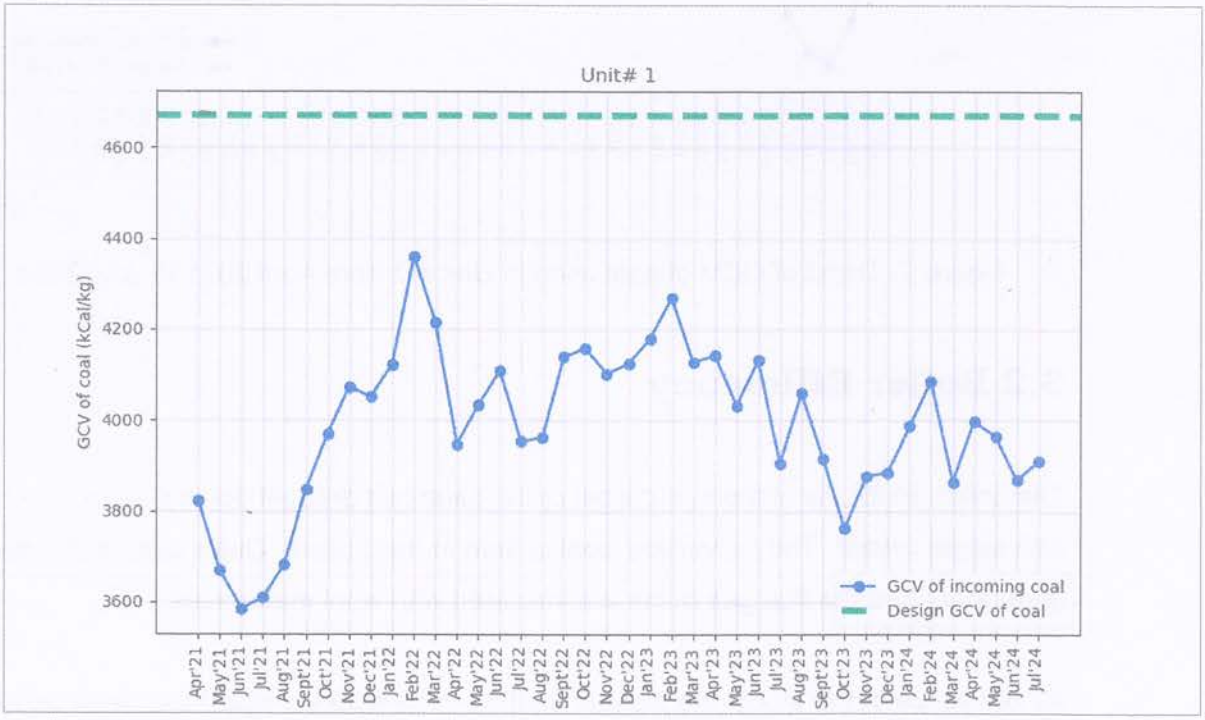


Figure 1. Trend of GCV of coal used in Unit # 1 from April 2021 to July 2024

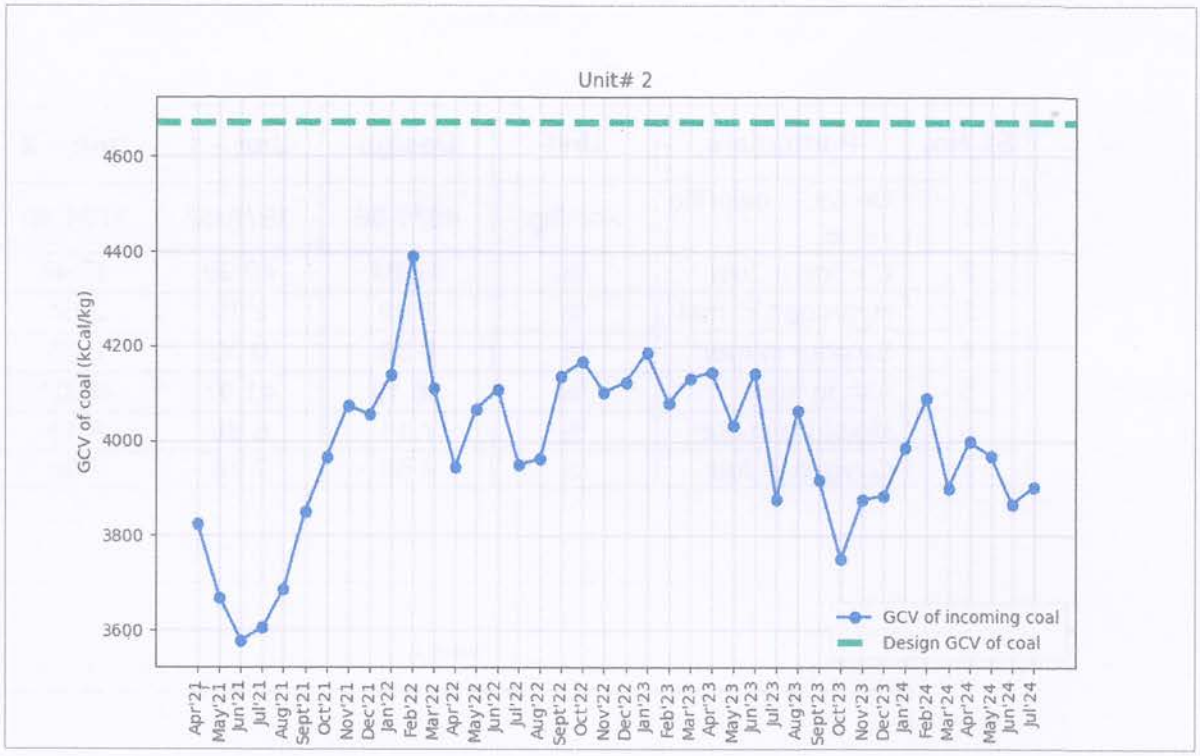


Figure 2. Trend of GCV of coal used in Unit # 2 from April 2021 to July 2024

3.2 Boiler Efficiency

The boiler (BHEL) is of the sub-critical cycle, balanced draught, forced circulation type with single reheat. The pulverized coal is fired in the boilers. Outer side of the steam generators and the flue gas ducts are insulated with wool mattresses.

As per scope of the study, the indirect method or heat loss method has been adopted for assessment of boiler performance as described in ASME standard: PTC-4-1, power test code for steam generating units. In short, the boiler efficiency is calculated as 100 minus all the computed energy losses taking place in the boiler.

Following losses are involved in the boiler efficiency calculation,

- Loss due to dry flue gas

- Loss due to hydrogen in fuel
- Loss due to moisture in fuel
- Loss due to moisture in air
- Loss due to carbon monoxide
- Loss due to surface radiation
- Unburnt losses in fly ash
- Unburnt losses in bottom ash

The unburnt analysis was carried out for the fly and bottom ash samples collected from Unit – 1 and 2 during test. The results are given in Table 2.

Table 2: Results of unburnt analysis of bottom ash and fly ash samples collected for unit -1 & 2

Sl. No.	Particulars	Unit	Unit – 1	Unit - 2
1	Bottom ash	%	3.39	4.57
2	Fly ash	%	2.95	2.27

The O_2, CO and temperature measurements in flue gas was carried out during testing of both the boilers. The measured values are given in Table 3.

Table 3: Flue gas analysis at different zones of boiler during heat rate test of unit - 1 & 2.

Sl. No.	Particulars	Unit - 1			Unit - 2		
		O_2, %	CO, ppm	Temp. °C	O_2, %	CO, ppm	Temp. °C
1	Before RAPH # A	3.80	8.00	315.33	3.12	7.00	312.00
2	After RAPH # A	6.43	7.00	129.17	5.54	4.25	135.75
3	Before RAPH # B	3.63	9.00	316.63	3.69	8.75	308.35
4	After RAPH # B	6.00	6.75	136.10	6.33	6.67	131.13

The APHs in the plants are of tri-sector type. The dry flue gas analysis (O_2, CO and temperature measurement) were carried out at APH inlet and outlet to get the air leakage inside the APH. This leakage reduces the exit flue gas temperature. The outlet flue gas temperature is corrected to account for this leakage using the equation,

$$CorrectedExitFGTemperature = \frac{AirHeaterLeakage \times (C_P)_{air} \times (T_{gas} - T_{air})}{100 \times (C_P)_{gas}}$$

The corrected exit gas temperature calculated for LHS and RHS for both the units are given in Table 4 and 5. The dry flue gas loss forms biggest part of loss in boiler. After getting the corrected exit flue gas temperature, the same is used in boiler efficiency computation.

Table 4: Corrected Flue Gas Temperature for APH outlet of Unit-1 (at test conditions)

Sl. No.	Particular	Unit	Design	Operating	
				LHS	RHS
Oxygen in Flue gas					
1	Before APH	%	3.56	3.80	3.63
2	After APH	%	--	6.43	6
Flue gas temperature					
3	Before APH	^{0}C	322	315.3	316.6
4	After APH	^{0}C	137	129.1	136.1
Primary air temperature					
6	Before APH	^{0}C	--	40.2	39.4
7	After APH	^{0}C	295	--	--
Secondary air temperature					
9	Before APH	^{0}C	--	34.2	33.6
10	After APH	^{0}C	301	--	--
Leakage					
12	Air in leakage	%	--	16.32	14.31
Correction					
13	Corrected Gas Temp	^{0}C	--	144.2	150.3

Table 5: Corrected Flue Gas Temperature for APH outlet of Unit-2 (at test conditions)

Sl. No.	Particular	Unit	Design	Operating	
				LHS	RHS
Oxygen in Flue gas					
1	Before APH	%	3.56	3.12	3.69
2	After APH	%	--	5.54	6.33
Flue gas temperature					
3	Before APH	^{0}C	322	312	308.3
4	After APH	^{0}C	137	135.7	131.1
Primary air temperature					
6	Before APH	^{0}C	--	41.6	41.5
7	After APH	^{0}C	295	--	--
Secondary air temperature					
9	Before APH	^{0}C	--	36.2	35.8
10	After APH	^{0}C	301	--	--
Leakage					
12	Air in leakage	%	--	14.21	16.27
Correction					
13	Corrected Gas Temp	^{0}C	--	149.5	146.2

The water (product of combustion of H_2) released in hot vapour state along with exit flue gas incurs loss because of its latent heat. The loss due to H_2 is calculated for both the units as shown in table 6 and 7. The moisture in the fuel leaves the boiler as superheated steam along with dry exhaust after combustion. Some loss of heat takes place to convert the moisture (in liquid state) to superheated steam. The moisture % in coal samples taken during unit tests found to be 6.85 for Unit – 1 and 6.13 % for Unit - 2 against the design value of 7.11%. The loss due to this component is computed for both the units separately and given in table 6 and 7. Water vapours present in the incoming air get converted into water vapour during combustion and leaves the flue gas in superheated form. The relative humidity of atmospheric air measured during field visit was in the range of 74-78 % with barometric pressure of 995 mbar and atmospheric temperature was in the range of 30-33 ^{0}C during the performance test of Unit – 1 and 2 boilers.

The % of CO measured at APH inlet and outlet is given in table 3. The loss because of the incomplete combustion (presence of CO) is computed for both the units separately.

The measured values of boiler skin temperature at various levels on all sides of the boiler – 1 and 2 is given Annexure - 1. The boiler surface temperature was measured using infra-red camera during the test period. The surface heat loss due to radiation is computed as shown in table 6 and 7.

The overall boiler efficiency was computed for Unit – 1 and 2. The results of boiler efficiency for Unit – 1 and 2 are given in Table 6 and 7.

Table 6: Boiler thermal performance by losses method of unit - 1

Sl. No.	Particulars	Design	Operating
1.1	Loss due to sensible heat in dry flue gas	4.701	5.42
1.2	Loss due to unburnt CO in flue gas		0.01
1	Dry flue gas loss		5.43
2.1	Loss due to moisture in fuel	0.970	1.09
2.2	Loss due to hydrogen in fuel	3.523	3.85
2	Wet flue gas loss	4.493	4.94
3	Loss due to moisture in comb. Air	0.185	0.17
4.1	Loss due to unburnt in bottom ash	2.000	0.58
4.2	Loss due to unburnt in fly ash		2.01
4.3	Loss due to sensible heat of bottom ash		0.61
4.4	Loss due to sensible heat of fly ash		0.20
4	Losses due to ash		3.40
5	Loss due to radiation	0.187	1.48
6	Un-accounted losses	1.390	--
7	Total losses	12.956	15.42
8	Heat Credit	0.759	0.40
9	**Thermal efficiency**	**87.80**	**84.98**

Table 7: Boiler thermal performance by losses method of unit - 2

Sl. No.	Particulars	Design	Operating
1.1	Loss due to sensible heat in dry flue gas	4.701	5.16
1.2	Loss due to unburnt CO in flue gas		0.01
1	Dry flue gas loss		5.17
2.1	Loss due to moisture in fuel	0.970	1.03
2.2	Loss due to hydrogen in fuel	3.523	3.86
2	Wet flue gas loss	4.493	4.89
3	Loss due to moisture in comb. Air	0.185	0.19
4.1	Loss due to unburnt in bottom ash	2.000	0.91
4.2	Loss due to unburnt in fly ash		1.81
4.3	Loss due to sensible heat of bottom ash		0.71
4.4	Loss due to sensible heat of fly ash		0.23
4	Losses due to ash		3.66
5	Loss due to radiation	0.187	1.65
6	Un-accounted losses	1.390	--
7	Total losses	12.956	15.56
8	Heat Credit	0.759	0.45
9	**Thermal efficiency**	**87.80**	**84.89**

4.0 RESULTS AND DISCUSSIONS

From the performance testing results it can be observed that the boilers of Unit -1 and Unit – 2 are operating at an efficiency of 84.98 % and 84.89 % against the design value of 87.80 % at a maximum plant operating load of 528 and 524.74 MW.

The dry flue gas loss is predominant in both the boilers followed by the wet flue gas which is uncontrollable. The excess air ratio in both the boilers are maintained well within the limit. The measured CO varies from 8 to 9 ppm in Unit – 1 and the same for Unit – 2 varies from 7 to 8.75 ppm. These trace amount of CO indicates that the combustion is complete and hence there is no loss on account of CO.

From the coal analysis it can be observed that the boilers are designed to handle coal with GCV of 4671 and ash content of 36.19 %. During the performance testing the

GCV of coal used in boiler - 1 was 3978.6 and for boiler – 2 was 3724.3 kcal/kg. Ash content of the coal used in boiler – 1 was 41.97 % and for boiler – 2 was 46.02 %. Hence, to operate the plant with highest possible load, more coal has to be burnt in boiler as the used coal GCV is far below the design GCV. The ash content in coal is very high compared to the design. Thus with high firing rate of coal, more ash is being generated in the boiler. This will result in more boiler related auxiliary power consumption in terms of handling more fuel, flue gas and ash handling. The internal heat exchanging infrastructure of the boilers are exposed to such a high ash flow than it is designed for leads to high erosion rate and reduction in its life time.

From the past three years trend (refer Figure – 1 and 2) it can be seen that the plant has never received coal of design GCV and operated most of the time with coal of GCV less than 4000 kcal/kg.

The performance test results of boilers indicate that both the boilers are performing with a maximum achievable efficiency point even with firing of coal with low GCV and higher ash content.

5.0 CONCLUSIONS

The main conclusions from the study are as follows:

- The GCV of coal varies from 3724.3 to 3978.62 kCal/kg, which is lower than design GCV of 4671 kCal/kg for both the units. The boiler operates with a coal GCV far away from what it is designed for.

- The boiler efficiency for unit 1 and 2 were found to be **84.98 %** and **84.89%**, respectively at test conditions, against the design value of **87.80%**.

- The performance test results of boilers indicates that both the boilers are performing with a maximum achievable efficiency point even with firing of coal with low GCV and higher ash content.

Annexure - 1

Boiler Skin Temperature Measurement of Unit - 1

Pent House							
Right	56.5	61.4	73.2				
Left	64.8	53.3	67.8	66.4	69.3	69.9	
Drum Floor "-0" (72m)							
Front	38.1	40.7	44.4	42.6	42.7		
Right	52.2	47.5	54.8	58.8	51.9	42.8	
Back	42	42.4	45.9	41.7			
Left	43.7	44.9	50.4	62.1	57.5	55.7	48.1
"-1" (69m)							
Front	53.2	57.9	58.5	54.6			
Right	54	68.9	67.9	66.4	71.3	56.2	
Left	54.7	64.8	71.7	73.3	63.5		
"-2" (66m)							
Front	55.1	55.4	54.2	58.6			
Right	57.3	53.9	53.9	58.6	44.2	43.1	
Back	45.1	43.7	45.2	43.5			
Left	59.4	54	74.4	69.8	63	60.9	57.6
"-3" (63m)							
Left	57.6	59.4	65				
Front	55.3	54.1	54.3	53.1			
Right	61.9	54.4	58.4				
"-4" (60m)							
Right	49.3	57.6	65.7	56.1	52.4	57.8	
Back	57.3	59.8	58.2	53.7			
Left	63.6	52.3	67.8	64.2	69.6		
Front	61.9	57.8	67.6	57			
"-5" (57m)							
Right	55.5	61.2	61.6	59.5			
Front	58.2	58.8	72.4	59.7			
Left	66.2	61	72.4	46			
"-6" (54m)							
Left	58.5	62.3	54	57.8	44.1	66.1	54.1
Back	71.3	52.7	63.4	60.4			
Right	55.4	55.4	57.3	59.4	59.8	51.1	
"-7" (50m)							
Right	51.6	55.7	71.1	46.8			
Front	55.6	60	52.8	55.8			
Left	58	59.3	59.4	45.5			
"-8" (45m) First Pass							
Front	60.4	67.9	69.1	64.6			
Right	53.7	56.9	57.5	62.4			
Back	72	58.7	57.8	57.3			
Left	60.8	65.2	69.3				

"-8" (45m) Second Pass							
Front	58	57.9	58.1	54.7			
Right	52	47.7	54				
Back	69.2	70.2	55.5				
Left	46.5	52.3	55.6	50.5			
"-9" (40m) First Pass							
Front	62.5	52.7	53.9	59.2			
Right	52.4	46.5	47.7	52.6			
Back	70	65.1	65.1	65.1			
Left	68.5	65.2	54.2				
"-9" (40m) Second Pass							
Front	57.8	62.6	62.3	55.4			
Left	55.7	55.3	50.4	45.4			
Back	63.6	62.7					
Right	59	67.7	64.4	72.7			
"-10" (37.5m) First Pass							
Back	67.6	62.7	57.9				
Left	68.6	68.3					
Front	60.9	57	60				
Right	54.4	67.7	70.8				
"-10" (37.5m) Second Pass							
Right	45.8	62.2	65.9	60.8			
Back	60.4						
Front	45	49	49.1	51.6			
Left	49.1	48.2	59.2				
"-11" (35m)							
Right	62.3	68.1	62.1				
Back	68	52	57.3	66.8			
Left							
Front	61.3	62.1	53.2				
"-12" (31m)							
Front	68.2	64.6	59.5				
Back	61.2	56	56.8				
Left							
Right							
"-13" (27m)							
Front	56.7	62.3	54.9	62			
Left	59.3						
Right	48.8						
Back	71.4	57.9	56.5	64.5			
"-14" (25.5m)							
Back	54.3	56.8	52.5	61.6			
Left	59.2	59.6	60				
Front	55.8	61.2	56.1	54.3			
Right	66.5	46.6	46				

"-15" (24m)							
Back	57.2	61.6	50.5	58.8			
Left	58.6	55.7	53.5	57.3			
Front	58.5	69.1	68.8	66.8			
Right	53.8	45.1	44.3	53.7			
"-16" (22m)							
Back	73.2	60	63.4	52			
Left	74.1	65.6	61.4	68	67.4		
Front	72.6	66.3	64.7	65.6	54.5		
Right	58.4	56					
"-17" (17m)							
Front	52.1	58.9	50.4				
"-18" (8.5m)							
Front	37.4	37.4	37.4	38.6			
Right	42.6	50.8	50.7	47			
Back	37.8	38	38.6				
Left	44.5	51	54.7	45.6			

Boiler Skin Temperature Measurement of Unit - 2

Drum Floor -0 (72m)								
Front	52.4	54.2	54	56.4	53.1	61.6	56.1	57
	58	59.4	63.8	54.8	64.6			
Right	59.6	65.7	60.5	65.7	55.8	58.4	58.3	66.2
	59	40	48.9	36.2	48.3	67.4	45.8	63.7
	61.8	52.1						
Back	35.9	38.8	37.1	40.7	37.2	39.3	36.4	38.9
	37	39.7						
Left	41.3	41.9	45.9	53.6	52.9	56.7	69.2	53.7
	59.2	61.2	66.7					
Above Drum (75m)								
Right	71.3	66.9	64.4	72	69.1			
"-1" (69 m)								
Right	72.9	68.3	73.6	62.6	67			
Front	71.7	72.7	67.9					
Left	72.4	70.8	71.1	68.6	63.1	70.8		
"-2" (66 m)								
Left	60.1	64.3	64	71.9	71	69.8	65.1	64.8
	59.3							
Back	46.5	47.8	45.7	48.8	53.7	51.4	48	49.9
Right	50.2	53.9	56.4	61.1	69.8	69.5	71.1	65.3
Front	64.1	66.3	68.8	68.2	65.7			
"-3" (63 m)								
Right	65.2	67.5						
Front	65.6	69.6	70.2					
Left	63.8	58.1	64.4					
"-4" (60 m)								
Front	73	72	73.8					
Right	68.3	62.1	62.9	63	64.2	48.9	58.1	50.4
	45.8							
Back	55.6	50.7	53.7	50.2	43.3	43.6		
Left	54.9	58.4	71.6	64.9	61.8			
"-5" (57 m)								
Front	71.9							
Back	67.1	55.1						
Left	63.3	59.2	62.7					
"-6" (54 m)								
Left	67	70	61.8	61.7	69.2	65.1	61.1	
Back	57.1	51.3	52.7	54.8	54.9			
Right	54	61.3	67	57.5	74.6	73.5	63.3	
"-7" (50 m)								
Right	73.4	72.3	62.2	53.1	46.7			
Front	71.7	74.8						

Left	65.4	67.7	69.8	48.1				
"-8" (45 m) First Pass								
Front	74.9	70.6						
Right	66	67.1	63.4	73				
Back	63.5	62.3						
Left	58.1	72.4	67.8	70.2				
"-8" (45 m) Second Pass								
Front	60.4	63.3	62.9	61.1	66.1			
Right	57.2	61.1	57.2	52.8				
Left	56.8	56.6	58.6	61.6	61.2			
Back	58							
"-9" (40 m) First Pass								
Front								
Right	71.6	63.6	65.8					
Back	65.2	62.4						
Left	71.7							
"-9" (40 m) Second Pass								
Front	62.2	57.6	61.2	57.6	57.8			
Left	59.9	63.7	60.1	72.7				
Back	43.8	49.3	49.9	45.5	44.9			
Right	57.9	58.9	61.3	55.1	72.9			
"-10" (37.5 m) First Pass								
Front	71.7	65.9	55.1	64.9	74			
Left	71.3							
Right	67.4	63.2	75	65.8				
Back	73.6	74.8	68.5					
"-10" (37.5 m) First Pass								
Front	63.5	64.9	63.3					
Right	59.6	61.1						
Left	54	63.5	66.5	66.2				
Back								
"-11" (35m)								
Left	75							
Back	71.4	70.2	68.2					
Right	72.2							
Front	67.6	66.6						
"-12" (31 m)								
Front	58.4	62.3	69.7					
Back	67.1	66.1	71.8					
"-13" (27 m)								
Back								
Left	53.9							
Front	60.5	66						
Right	69.6	66.9	61.4	73.3				

"-14" (25.5 m)								
Back	74.8	68.5	60.2	59.9	71.7			
Right	57.9	55.8	55.7	54.3				
Front	69.3	59	58.8					
Left	57.9	58.4	70.4					
"-15" (24 m)								
Back	55.9	65.6						
Right	70.3	52.6	56.1	66.1				
Front	58.6	62.8	62.2					
Left	50.8	51.4	51.4	64.9				
"-16" (22 m)								
Left	61.6	68.2	72.9					
Back	63.4	69.8	65.2					
Right	71.4	62						
Front	69.8	66.8	69.6	66.7				
"-17" (17 m)								
Front	61	51.4	71.6					
"-18" (8.5 m)								
Front	37.7	41.1	40.8	39.1				
Left	43.5	46.3	47.2	42				
Back								
Right	47.8	63.2	44.7					

MAITHON POWER LIMITED

MPL/FY23/23-03/011
Date: 17.03.2023

To
The Chief Engineer (commercial)
Damodar Valley Corporation
DVC Towers
VIP Road, Kolkata
West Bengal-700054

Subject: Consent for Procurement of imported coal in compliance of directions given by Hon'ble CERC in MPL Tariff Order dated 08.01.2022

Dear Sir

As you are aware, Hon'ble CERC in its Order dated 08.01.2022 (Order) in MPL's Tariff Petition No. 408/GT/2020 (Petition) has revised the Station Heat Rate of Maithon Right Bank Thermal Power Plant (MRBTPP) of Maithon Power Limited (MPL) from 2375 kCal/kWh to 2326.03 kCal/kWh and has directed MPL to explore alternate coal to maintain design quality/GCV of coal (i.e. 4671 kCal/kg). Relevant extract of the Order is reproduced below for ready references:

> *"305. The Petitioner has considered PG Test performance based on the quality of coal permissible to the Boiler and Plant characteristics. Also, the PPA was executed by the Petitioner based on demonstrable plant characteristics. The Boiler efficiency had undergone changes due to receipt of poor quality of coal in comparison to the quality envisaged at the time of PG test. The deterioration of coal quality is temporary and cannot alter the plant characteristics on a perpetual basis. Coal is being procured by the Petitioner after execution of the Fuel Supply Agreement with the coal supplier. It was the obligation of the Petitioner, while entering into FSA, to ensure the desired quality of coal, by enforcing the provisions of FSA or by exploring any other alternate sources of coal.* ***The Petitioner, having not been prevented from exploring alternate source of coal, cannot, on a perpetual basis, be permitted to pass on the burden on the beneficiaries on this count****, more so when the Petitioner has not fulfilled the said obligations. It is further noticed that the Petitioner has not furnished any documentary evidence substantiating the efforts taken by it to ensure the good quality of coal. In our view, the relaxation of SHR of the generating station, in perpetuity, based on coal quality, will render the operational parameters specified under the 2019-24 Tariff Regulations for all generators redundant, as more often than not, the coal quality may no match with design coal. In view of this, there is no merit in the prayer of the Petitioner for relaxation of SHR on grounds of deterioration in quality of coal.* ***The Petitioner is directed to ensure the required quality of coal as envisaged during the PG test.*** *Accordingly, considering the operating margin of 5% as specified in Regulation 49(C)(b)(i) of the 2019 Tariff Regulations, the GSHR of the generating station works out as 2326.03 kcal/kWh [1945*1.05)/0.878] and the same is considered and allowed."*

With respect to the above Order, on 25.02.2022 MPL filed a Review Petition No. 04/RP/2022 (Review Petition) *inter-alia* seeking relaxation in heat rate norm from 2326.03 kCal/kWh to 2375 kCal/kWh and for withdrawing the direction for ensuring Design GCV coal. On the issue of SHR, vide its Order dated 26.05.2022 (Review Order), the Review Petition was held as not maintainable. Subsequently, an Appeal No. DFR 209 of 2022 was filed on 30.05.2022 mainly challenging

disallowance of relaxation of Station Heat Rate, which is pending before Hon'ble Appellate Tribunal for Electricity.

In another letter of even date, MPL has separately sought your consent for sourcing middling coal for meeting anticipated shortage of linkage coal. However, the same will also not enable MPL to meet the above direction as neither the quantum of middling coal would be enough nor design GCV would be achieved. Therefore, maintaining Design GCV as per above directions of Hon'ble CERC is possible only if the existing linkage coal is blended with high GCV imported coal.

Now, to comply with the above direction of Hon'ble CERC to MPL in order to ensure Design GCV, you are requested to give your consent latest by 24.03.2023 to import coal for required blending up to around 40-50% during FY 2023-24, which is expected to increase ECR by about 75%-100%. In case, MPL does not receive timely consent of beneficiary, which causes lower GCV due to use of only domestic coal and, hence, SHR to be above stipulated norm, all risks associated with attendant consequences shall be with the beneficiary.

Therefore, we earnestly request for your consent on the issues in preceding para latest by 24.03.2023 to proceed further in the matter.

Yours Faithfully

Sudip Dash

Sudip Dash
Head Commercial & Regulation

MAITHON POWER LIMITED
(A Joint Venture of Tata Power & DVC)
Registered Office: Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400 009, Tel: 91 22 67171232
Works: Village Dambhui, P.O.Barbindia, P.S.Nirsa, District Dhanbad 828 205, Jharkhand
Tel: +91 6540 278001/27 Fax: +91 6540 278040/ +91 8860075658
Corporate Identity Number (CIN):U74899MH2000PLC267297, **Website Address:**www.tatapower.com/mpl

MPL/FY23/23-03/012
Date: 17.03.2023

To
Chief Engineer (C&T),
Kerala State Electricity Board Ltd.,
8th Floor, Vyduthi Bhavanam,
Pattom, Thiruvananthapuram,
Kerala-695004

Subject: Consent for Procurement of imported coal in compliance of directions given by Hon'ble CERC in MPL Tariff Order dated 08.01.2022

Dear Sir

As you are aware, Hon'ble CERC in its Order dated 08.01.2022 (Order) in MPL's Tariff Petition No. 408/GT/2020 (Petition) has revised the Station Heat Rate of Maithon Right Bank Thermal Power Plant (MRBTPP) of Maithon Power Limited (MPL) from 2375 kCal/kWh to 2326.03 kCal/kWh and has directed MPL to explore alternate coal to maintain design quality/GCV of coal (i.e. 4671 kCal/kg). Relevant extract of the Order is reproduced below for ready references:

> *"305. The Petitioner has considered PG Test performance based on the quality of coal permissible to the Boiler and Plant characteristics. Also, the PPA was executed by the Petitioner based on demonstrable plant characteristics. The Boiler efficiency had undergone changes due to receipt of poor quality of coal in comparison to the quality envisaged at the time of PG test. The deterioration of coal quality is temporary and cannot alter the plant characteristics on a perpetual basis. Coal is being procured by the Petitioner after execution of the Fuel Supply Agreement with the coal supplier. It was the obligation of the Petitioner, while entering into FSA, to ensure the desired quality of coal, by enforcing the provisions of FSA or by exploring any other alternate sources of coal.* ***The Petitioner, having not been prevented from exploring alternate source of coal, cannot, on a perpetual basis, be permitted to pass on the burden on the beneficiaries on this count****, more so when the Petitioner has not fulfilled the said obligations. It is further noticed that the Petitioner has not furnished any documentary evidence substantiating the efforts taken by it to ensure the good quality of coal. In our view, the relaxation of SHR of the generating station, in perpetuity, based on coal quality, will render the operational parameters specified under the 2019-24 Tariff Regulations for all generators redundant, as more often than not, the coal quality may no match with design coal. In view of this, there is no merit in the prayer of the Petitioner for relaxation of SHR on grounds of deterioration in quality of coal.* ***The Petitioner is directed to ensure the required quality of coal as envisaged during the PG test.*** *Accordingly, considering the operating margin of 5% as specified in Regulation 49(C)(b)(i) of the 2019 Tariff Regulations, the GSHR of the generating station works out as 2326.03 kcal/kWh [1945*1.05)/0.878] and the same is considered and allowed."*

With respect to the above Order, on 25.02.2022 MPL filed a Review Petition No. 04/RP/2022 (Review Petition) *inter-alia* seeking relaxation in heat rate norm from 2326.03 kCal/kWh to 2375 kCal/kWh and for withdrawing the direction for ensuring Design GCV coal. On the issue of SHR, vide its Order dated 26.05.2022 (Review Order), the Review Petition was held as not maintainable. Subsequently, an Appeal No. DFR 209 of 2022 was filed on 30.05.2022 mainly challenging

disallowance of relaxation of Station Heat Rate, which is pending before Hon'ble Appellate Tribunal for Electricity.

In another letter of even date, MPL has separately sought your consent for sourcing middling coal for meeting anticipated shortage of linkage coal. However, the same will also not enable MPL to meet the above direction as neither the quantum of middling coal would be enough nor design GCV would be achieved. Therefore, maintaining Design GCV as per above directions of Hon'ble CERC is possible only if the existing linkage coal is blended with high GCV imported coal.

Now, to comply with the above direction of Hon'ble CERC to MPL in order to ensure Design GCV, you are requested to give your consent latest by 24.03.2023 to import coal for required blending up to around 40-50% during FY 2023-24, which is expected to increase ECR by about 75%-100%. In case, MPL does not receive timely consent of beneficiary, which causes lower GCV due to use of only domestic coal and, hence, SHR to be above stipulated norm, all risks associated with attendant consequences shall be with the beneficiary.

Therefore, we earnestly request for your consent on the issues in preceding para latest by 24.03.2023 to proceed further in the matter.

Yours Faithfully

Sudip Dash

Sudip Dash
Head Commercial & Regulation

MAITHON POWER LIMITED
(A Joint Venture of Tata Power & DVC)
Registered Office: Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400 009, Tel: 91 22 67171232
Works: Village Dambhui, P.O.Barbindia, P.S.Nirsa, District Dhanbad 828 205, Jharkhand
Tel: +91 6540 278001/27 Fax: +91 6540 278040/ +91 8860075658
Corporate Identity Number (CIN):U74899MH2000PLC267297, **Website Address:**www.tatapower.com/mpl

MPL/FY23/23-03/010
Date: 17.03.2023

To
The Head (commercial)
Tata Power Trading Company Limited
2nd Floor, Shatabdi Bhawan
Sector- 4, Noida 201 301

Subject: Consent for Procurement of imported coal in compliance of directions given by Hon'ble CERC in MPL Tariff Order dated 08.01.2022

Dear Sir

As you are aware, Hon'ble CERC in its Order dated 08.01.2022 (Order) in MPL's Tariff Petition No. 408/GT/2020 (Petition) has revised the Station Heat Rate of Maithon Right Bank Thermal Power Plant (MRBTPP) of Maithon Power Limited (MPL) from 2375 kCal/kWh to 2326.03 kCal/kWh and has directed MPL to explore alternate coal to maintain design quality/GCV of coal (i.e. 4671 kCal/kg). Relevant extract of the Order is reproduced below for ready references:

> *"305. The Petitioner has considered PG Test performance based on the quality of coal permissible to the Boiler and Plant characteristics. Also, the PPA was executed by the Petitioner based on demonstrable plant characteristics. The Boiler efficiency had undergone changes due to receipt of poor quality of coal in comparison to the quality envisaged at the time of PG test. The deterioration of coal quality is temporary and cannot alter the plant characteristics on a perpetual basis. Coal is being procured by the Petitioner after execution of the Fuel Supply Agreement with the coal supplier. It was the obligation of the Petitioner, while entering into FSA, to ensure the desired quality of coal, by enforcing the provisions of FSA or by exploring any other alternate sources of coal.* ***The Petitioner, having not been prevented from exploring alternate source of coal, cannot, on a perpetual basis, be permitted to pass on the burden on the beneficiaries on this count****, more so when the Petitioner has not fulfilled the said obligations. It is further noticed that the Petitioner has not furnished any documentary evidence substantiating the efforts taken by it to ensure the good quality of coal. In our view, the relaxation of SHR of the generating station, in perpetuity, based on coal quality, will render the operational parameters specified under the 2019-24 Tariff Regulations for all generators redundant, as more often than not, the coal quality may no match with design coal. In view of this, there is no merit in the prayer of the Petitioner for relaxation of SHR on grounds of deterioration in quality of coal.* ***The Petitioner is directed to ensure the required quality of coal as envisaged during the PG test.*** *Accordingly, considering the operating margin of 5% as specified in Regulation 49(C)(b)(i) of the 2019 Tariff Regulations, the GSHR of the generating station works out as 2326.03 kcal/kWh [1945*1.05)/0.878] and the same is considered and allowed."*

With respect to the above Order, on 25.02.2022 MPL filed a Review Petition No. 04/RP/2022 (Review Petition) *inter-alia* seeking relaxation in heat rate norm from 2326.03 kCal/kWh to 2375 kCal/kWh and for withdrawing the direction for ensuring Design GCV coal. On the issue of SHR, vide its Order dated 26.05.2022 (Review Order), the Review Petition was held as not maintainable. Subsequently, an Appeal No. DFR 209 of 2022 was filed on 30.05.2022 mainly challenging

disallowance of relaxation of Station Heat Rate, which is pending before Hon'ble Appellate Tribunal for Electricity.

In another letter of even date, MPL has separately sought your consent for sourcing middling coal for meeting anticipated shortage of linkage coal. However, the same will also not enable MPL to meet the above direction as neither the quantum of middling coal would be enough nor design GCV would be achieved. Therefore, maintaining Design GCV as per above directions of Hon'ble CERC is possible only if the existing linkage coal is blended with high GCV imported coal.

Now, to comply with the above direction of Hon'ble CERC to MPL in order to ensure Design GCV, you are requested to give your consent latest by 24.03.2023 to import coal for required blending up to around 40-50% during FY 2023-24, which is expected to increase ECR by about 75%-100%. In case, MPL does not receive timely consent of beneficiary, which causes lower GCV due to use of only domestic coal and, hence, SHR to be above stipulated norm, all risks associated with attendant consequences shall be with the beneficiary.

Therefore, we earnestly request for your consent on the issues in preceding para latest by 24.03.2023 to proceed further in the matter.

Yours Faithfully

Sudip Dash

Sudip Dash
Head Commercial & Regulation

MAITHON POWER LIMITED
(A Joint Venture of Tata Power & DVC)
Registered Office: Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400 009, Tel: 91 22 67171232
Works: Village Dambhui, P.O.Barbindia, P.S.Nirsa, District Dhanbad 828 205, Jharkhand
Tel: +91 6540 278001/27 Fax: +91 6540 278040/ +91 8860075658
Corporate Identity Number (CIN):U74899MH2000PLC267297, **Website Address:**www.tatapower.com/mpl

West Bengal State Electricity Distribution Company Limited
(A West Bengal Government Enterprise)
Office Of Chief Engineer
Power Trading And Procurement Cell.

CIN: U40109WB2007SGC113473
FAX : 033-2334-5862
Telephones : 2321-0078

Vidyut Bhavan (7th Floor)
DJ - Block, Sector - II
Salt Lake, Kolkata - 700 091

Ref. No. : PTP/TPTCL/MPL/

Date : 22nd March, 2023

To,
The Head Commercial
Tata Power Trading Company Limited
Shatabdi Bhawan, 2nd Floor,B-12 & 13
Sector-4, Noida-201301
(Email ID: Divygaurav.sharma@tatapower.com)

Sub : Regarding import of coal

Ref:
1. Your letter No.-TPTCL-COMM-2022-23-132 dated 17.03.2023
2. Letter No.- MPL/FY23/23-03/009 dtd 17.03.2023 of MPL
3. Letter No.- MPL/FY23/23-03/010 dtd 17.03.2023 of MPL

Dear Sir,

We are in receipt of your letters dtd 17.03.2023 referred above through which you have raised the issue of requirement of imported coal. It is requested to clarify the following issues:-

1. Assured quantum of coal as per annual contracted quantity for Maithon Right Bank Thermal Power Station of MPL as per FSA and the average GCV of the coal.
2. Quantity of coal required for maintaining 85% availability of Maithon Right Bank Thermal Power Station of MPL. Quantum of coal expected to be delivered by Coal India month-wise.
3. Station heat rate of Maithon Right Bank Thermal Power Station of MPL is revised from 2375 Kcal/kg to 2326.03 kcal/kg, i.e., decreased approx. 2.06%. But, to ensure the design GCV your requirement for blending of imported coal upto around 40-50% is not clear to us. Please clarify the same.
4. Please furnish us the documentary evidence substantiating the effort taken by MPL to ensure the good quality of coal till date.

Hon'ble CERC in its order dtd 08.01.2022 against MPL tariff petition no. 408/GT/2020 has revised the station heat rate of Maithon Right Bank Thermal Power Station of MPL from 2375 Kcal/kg to 2326.03 kcal/kg and directed you to explore alternate coal to maintain design quality / GCV of coal. Further CERC in its order mentioned that the deterioration of coal quantity is temporary and can not alter the

22/03/23

plant characteristics on a perpetual basis and remind the obligation of MPL to ensure the desired quality of coal, by enforcing the provision of FSA. In this regard, you are requested to use indigenous coal and tight supervision with the objective of assurance of coal quality so that GCV loss at mines end to power station end should be minimized.

Please note that arranging coal of desired quality and quantity is the absolute responsibility and risk of the generator which cannot be passed on to the beneficiaries in any case.

We appreciate your effort in last year by not blending imported coal and managing operation with the domestic coal supply to keep the energy charge within control. This year also, you are requested to continue to pursue the coal company for supplying domestic coal of desired quality and quantity and put in sustained effort to keep the energy charge minimum.

Thanking you.

Yours faithfully,

Sd/-
(S.Sarkar)
Chief Engineer, PT&P Cell
WBSEDCL

Ref. No. : PTP/TPTCL/MPL/ 375(1)

Date : 22nd March, 2023

Copy to:-
Head Commercial & Regulation, Maithon Power Ltd.

22/03/23
Chief Engineer, PT&P Cell
WBSEDCL

DAMODAR VALLEY CORPORATION
COMMERCIAL DEPARTMENT
DVC TOWERS: V I P ROAD, KOLKATA- 700 054.

Tel. No: 033-2355-7041/6041 FAX: 033-2355-2129

Ref No.: Coml./Purchase/MPL/2023/692 Date: 22.03.2023

To
The Head Commercial & Regulation,
Maithon Power Limited,
Village: Dambhui, PO: Barbindia,
PS: Nirsa, Dist: Dhanbad - 828205.

Sub: - Procurement of imported coal in compliance of directions given by Hon'ble CERC in MPL tariff order dated 08.01.2022.
Ref: Your letter: MPL/FY23/23-03/011 dated 17.03.2023.

Sir,

This is with reference to your letter dated 17.03.2023.

Hon'ble CERC while pronouncing tariff order for MPL, has kindly noted that the obligation of MPL is to ensure the desired quality of coal or to explore alternate source of coal to restrict ECR within reasonable value so that the any extra burden may not pass on to the beneficiaries on a perpetual basis.

Further, you are kindly aware Ministry of Power, GOI, vide its order dated 9.1.2023 has directed to all Central & State GENCOs including IPPs to import coal through a transparent competitive procurement for blending @6% by weight for smooth operations of their power plants. DVC is also already complying with the above directives of MOP by restricting blending of imported coal within 6%.

In view of the above, DVC submits that MPL shall adhere to the above directives of Hon'ble CERC & MOP and any deviation in this regard is not acceptable to DVC.

Regards,

Yours sincerely,

Chief Engineer (Commercial)

TATA POWER-DDL

Tata Power-DDL/PMG/MPL-SHR/27032023 Dated: 27 Mar'2023

Mr. Sudip Dash
Head (Commercial & Regulation),
Maithon Power Ltd.,
Village Dambhuri, P.O. Barbindia, P.S. Nirsa,
Dhanbad – 828205

Subject: Seeking opinion/consent for import of coal in compliance to the directives by Hon'ble CERC in reference to MPL Tariff Order Dated 08.01.2022.

Reference:

i) **MPL letter no. MPL/FY23/23-03/010 dated 17.03.2023**
ii) **Hon'ble CERC Order for MPL's Tariff Petition No. 408/GT/2020**
iii) **MPL Review Petition No. 04/RP/2022**

Dear Sir,

This is in reference to your letter dated 17.03.2023 and Hon'ble CERC Order dated 08.01.2022 in MPL's Tariff Petition No. 408/GT/2020. As per the above-mentioned order MPL has to revise the Station heat Rate from 2375 kCal/kWh to 2326.03 kCal/kWh and directed MPL to explore alternate coal to maintain design quality/GCV of coal (i.e., 4671 kCal/kg)

Extract from the order is being reproduced:

> *"305. The Petitioner has considered PG Test performance based on the quality of coal permissible to the Boiler and Plant characteristics. Also, the PPA was executed by the Petitioner based on demonstrable plant characteristics. The Boiler efficiency had undergone changes due to receipt of poor quality of coal in comparison to the quality envisaged at the time of PG test. The deterioration of coal quality is temporary and cannot alter the plant characteristics on a perpetual basis. Coal is being procured by the Petitioner after execution of the Fuel Supply Agreement with the coal supplier. It was the obligation of the Petitioner, while entering into FSA, to ensure the desired quality of coal, by enforcing the provisions of FSA or by exploring any other alternate sources of coal. The Petitioner, having not been prevented from exploring alternate source of coal, cannot, on a perpetual basis, be permitted to pass on the burden on the beneficiaries on this count, more so when the Petitioner has not fulfilled the said obligations. It is further noticed that the Petitioner has not furnished any documentary evidence substantiating the efforts taken by it to ensure the good quality of coal. In our view, the relaxation of SHR of the generating station, in perpetuity, based on coal quality, will render the operational parameters specified under the 2019-24 Tariff Regulations for all generators redundant, as more often than not, the coal quality may no match with design coal. In view of this, there is no merit in the prayer of the Petitioner for relaxation of SHR on grounds of deterioration in quality of coal. The Petitioner is directed to ensure the required quality of coal as envisaged during the PG test. Accordingly, considering the operating margin of 5% as specified in Regulation 49(C)(b)(i) of the 2019 Tariff Regulations, the GSHR of the generating station works out as 2326.03 kcal/kWh [1945*1.05)/0.878] and the same is considered and allowed."*

TATA POWER-DDL

We understand that, MPL has also filed a Review Petition No. 04/RP/2022 inter-alia seeking relaxation in heat rate norm from 2326.03 kCal/kWh to 2375 kCal/kWh and for withdrawing the direction for ensuring Design GCV coal. On the issue of SHR, vide its Order dated 26.05.2022 (Review Order), the Review Petition was held as not maintainable. Further, an Appeal No. DFR 209 of 2022 has been filed by MPL before Hon'ble Appellate Tribunal for Electricity on 30.05.2022 mainly challenging disallowance of relaxation of Station Heat Rat and the same is pending adjudication.

As per letter referred above, it is submitted that MPL will have to import coal for blending around 40-50% during FY2023-24, which is expected to increase the ECR to 75-100%. Tata Power-DDL being a regulated entity and committed towards providing cost effective power to its consumers, any increase in ECR will have a significant impact on the Power Purchase cost.

Accordingly, Tata Power-DDL requests MPL to take necessary approval from appropriate Commission on the aforesaid matter for blending of 40-50% imported coal and relaxation in the Heat Rate norms.

Thanking you,
Yours Sincerely,
For **TATA Power Delhi Distribution Limited**

Lalit Kumar Wasan
HOD (Power Management Group and BESS)

ANNEXURE P/39E

TABLE SHOWING DIFFERENCE/COMPARISON OF SHR AMONGST VARIOUS THERMAL GENERATING STATIONS

S.No.	Stations (500 MW series)	COD	Turbine Cycle Heat	Design Boiler Efficiency	2009-14 Actual SHR	2014-19 Actual SHR
1	Dadri Stage-II (2X 490)	31-01-2010; 31-07-2010	1936	85.00%	2,415	2,390
2	Simhadri-II (2 X 500)	16-9-2011; 30-9-2012	1933	84.84%	2,383	2,362
3	Rihand-III (2 X 500)	19-11-2012; 2-27-3-2014	1932	84.05%	2,404	2,365
4	Vindhyachal-IV (2 X 500)	01-3-2013; 27-03-2014	1932	84.00%	2,427	2,375
A	**Average of NTPC Sets of machines having Turbine Cycle HR 1935**				**2,407**	**2,372**
5	Sipat -II (2 X 500)	20-06-2008; 01-01-2009	1948	85.85%	2,359	2,351
6	Farraka Stage- III (1 X 500)	04/04/12	1944	83.39%	2,422	2,396
7	Kahalgaon-II (3 X 500)	01-08-2008; 31-12-2008; 20-03-2010	1944	83.29%	2,366	2,380
8	Korba Stage-III (1 X 500)	21/03/11	1944	84.91%	2,473	2,352
B	**Average of NTPC Sets of machines having Turbine Cycle HR 1950**				**2,405**	**2,370**
9	Ramagundam- III (1 X 500)	Aug:2004		86.88%	2,363	2,346
10	Simhadri-I (2 X 500)	01-09-2002; 01-03-2003.		87.27%	2,354	2,378
11	Rihand-I (2 X 500)	01-01-1990 ; 01-01-1991		86.99%	2,348	2,364
12	Rihand-II (2 X 500)	15-08-2005; 4-01-04-2006		87.12%	2,360	2,360
13	Vindhyachal-II (2 X 500)	1-07-2000; 01-10-2000		87.77%	2,333	2,382
14	Vindhyachal-III (2 X 500)	1-12-2006; 15-07-2007		85.14%	2,332	2,367
C	**Average of NTPC Plants >10 years (1935 and 1945 THR)**				**2,348**	**2,366**
	Average of All NTPC Plants(1935 and 1950 THR)				**2,387**	**2,369**
D	**Maithon Power Ltd (2x525 MW)**	1-9-2011; 24-7-2012	**1945**	**87.8%**	**2,409**	**2,376**

Tele. No.- (06540) 279402 / 279683 / 279445
Fax No.- 06540-274313

DAMODAR VALLEY CORPORATION

दामोदर घाटी निगम

OFFICE OF THE CHIEF ENGINEER (CIVIL),
P. O.- MAITHON DAM, DHANBAD, JHARKHAND, PIN.- 828207

Ref. No. : CE -17/51-1120 Date: 23rd July 2019

To,
The Chief Executive Officer, Maithon Power Limited, MA-5, Gogna Colony, P.O.- Maithon Dam, Dist.Dhanbad, PIN:828 207

NOTICE

REVISION OF WATER TARIFF FOR SUPPLY OF RAW WATER FOR INDUSTRIAL & DOMESTIC USES

Damodar Valley Corporation (DVC) has revised, vide Resolution No.- 8900 (Agenda Item No. - 10) of 641 meeting of Corporation held on 25th June 2019, the rate for Industrial & Domestic Water Supply of raw water with effect from 01.04.2019 in exercise of its power under section 15 of the DVC Act 1948 & as per Clause No.- 11(a) of the agreement executed between DVC & Consumers based on the allocation of water by DVRRC (Damodar Valley Reservoir Regulation Committee). To stress upon the need for reducing water pollution, a scheme of incentive has been continued for 'Zero Effluent Discharge'. **All future bills for consumption of Industrial & Domestic raw water with effect from 1st April 2019 will be preferred at the Revised Water Tariff given below.**

REVISED WATER TARIFF FOR DOMESTIC/MUNICIPALITY/PHED AND INDUSTRIAL WATER SUPPLY

1. Damodar Valley Corporation has revised Water Tariff of Raw Water for Industrial & Domestic supply w.e.f. **01.04.2019**

2. The Revised water tariff for drawal of water from DVC sources as under:

SOURCES OF DRAWAL	INDUSTRIES	DOMESTIC/MUNICIPALITY/PHED
	Revised Rate	Revised Rate
Reservoir / River (Per KL)	Rs. 10.64	Rs. 1.725
Extra Charges for drawing water from water supply canal (Per KL)	Rs. 0.52	

3. The Tariff will be enhanced annually at the end of every financial year (i.e. w.e.f. 1st April) as follows:

(i) For Domestic/Municipality/PHED use - 05% shall be increased in raw water tariff annually.
(ii) For Industrial use - 10% shall be increased in raw water tariff annually.

4. The water supply bills shall be raised on the basis of actual drawal of water for all the consumers with the tariff as indicated above.

5. As incentive @ 10% on the monthly bills shall be allowed to those industries who have taken appropriate measures for " Zero Effluent Discharge". The said incentive shall be made applicable only if the payments are made within due date and on production of requisite certificate from **State Pollution Control Authority.**

All previous orders in this regard stand modified to the above extent.

For and on Behalf of
DAMODAR VALLEY CORPORATION
CHIEF ENGINEER (CIVIL),
MAITHON DAM, DHANBAD, JHARKHAND

दामोदर घाटी निगम / Damodar Valley Corporation
मुख्य अभियंता/Chief Engineer(Civil),
मैथन डैम,धनबाद/ Maithon Dam, Dhanbad
दूरभाष/Phone: 06540 279402 : : झारखंड /Jharkhand-828207

संख्या No.CE-17/51-1120 दिनांक /Date: 23-07-2019

OFFICE MEMORANDUM

SUBJECT:-REVISION OF WATER TARIFF OF SUPPLY OF RAW WATER BY DVC FOR INDUSTRIAL & DOMESTIOC USES.

Damodar Valley Corporation (DVC) has revised, vide Resolution No.8900(Agenda Item No.10)of 641st meeti of Corporation held on 25th June 2019,the rate for Industrial & Domestic Water Supply of raw Water with effect fro 01.04.2019 in exercise of its power under section 15 of the DVC Act 1948 & as per clause No-11(a) of the agreeme executed between DVC & Consumers based on the allocation of water by DVRRC (Damodar Valley Reserv Regulation Committee). The stress upon the need for reducing water pollution, a scheme of incentive has been continu for 'zero effluent discharge'. **All future bills for consumption of Industrial & Domestic raw water with effect fro 1st April 2019 will be preferred at the Revised Water Tariff given below.**

REVISED WATER TARIFF FOR DOMESTIC/MUNICIPALITY/ PHED AND INDUSTRIAL WATER SUPPLY.

1. Damodar Valley Corporation has revised Water Tariff of Raw Water for Industrial & Domestic supply w.e **01.04.2019.**

2. **The Revised water tariff for drawal of water from DVC sources as under.**

SOURCES OF DRAWAL	INDUSTRIES	DOMESTIC /MUNICIPALITY/ PHED
	Revised Rate	Revised Rate
Reservoir / River (Per KL)	Rs.10.64	Rs.1.725
Extra Charges for drawing water from water supply canal (Per KL)	Rs.0.52	

3. **The Tariff rate will be enhanced annually at the end of every financial year (i.e w.r.f 1st April) as follows :**
   (i). For Domestic use- 05% shall be increased annually.
   (ii). For Industrial use-10% shall be increased annually.

4. The water supply bills shall be raised on the basis of actual drawal of water for all the consumers with the tariff indicated above.

5. As incentive @ 10% on the monthly bills shall be allowed to those industries who have taken appropri measures for ''Zero Effluent Discharge''.The said incentive shall be made applicable only if the payments a made within due date and on production of requisite certificate from State Pollution control Authority.

All previous orders in this regard stands modified to the above extent.

23/07/19

(सत्यब्रतबनर्जी/ Satyabrata Banerjee)
मुख्यअभियंता (असैनिक))/Chief Engineer(C)
दा.घा.नि, मैथन/ DVC, Maithon
ई-मेल / Email Id: satyabrata.banerjee@dvc.gov.in

Distribution:-All HODs/Plant Chiefs/Project Heads.

MAITHON POWER LIMITED

Ref: MPL/FY20/2008 033 Date: 20.08.2019

To

Chief Engineer (Civil),
Damodar Valley Corporation,

Post - Maithon Dam, Dhanbad,

Jharkhand – 828207.

Ref: to earlier communications:

1) Notice ref no. CE-17/51-1120 dated 23rd July 2019
2) Agreement between Damodar Valley Corporation AND Maithon Power Limited for supply of raw water from Maithon Reservoir for Industrial & /or Domestic use
3) Bill for Raw water during the period from 01.07.2019 to 31.07.2019

Subject: MPL's observation regarding your revision of water tariff for supply of Raw water for Industrial and Domestic usage.

Dear Sir,

We are in receipt of a notice issued from your office referred as (1) above. As per the notice, water rate has been enhanced from Rs. 5.70/Kl to Rs. 10.64/Kl, also with a provision of 10% escalation of rate annually. We have started receiving our monthly water consumption bill as per the revised unit rate, with arrears with effect from 1st April 2019.

We find the above enhancement abrupt, arbitrary, uncalled for and without any prior intimation to us. As a result of this enhancement,

generation cost of power shall get costlier which will have adverse impact on all the long-term beneficiaries of MPL including DVC.

Therefore, considering all the above facts, this is to request your good office to reconsider this steep rise in water tariff.

A line of confirmation from your office in this regard will be highly appreciable.

Thanking you,

Yours truly,

For Maithon Power Limited,

MS Rahman 20/08/2019

(M S Rahman)

Head – Projects.

Cc-

1. MRO office, DVC
2. CEO, MPL

Annexures:

1. Notice ref no. CE-17/51-1120 dated 23rd July 2019
2. A copy of Bill for Raw water during the period from 01.07.2019 to 31.07.2019.

दामोदर घाटी निगम
Damodar Valley Corporation
प्रबंधन जलाशय प्रचालन का कार्यालय
Office of the Manager Reservoir Operations
डाकः मैथन, जिलाः धनबाद, राज्यः झारखण्ड
Post: Maithan, Dist. Dhanbad, State: Jharkhand
फोन/Phone: 06540-252445, फैक्स/Fax: 06540-274313. ई–मेल /E-mail: samir.maji@dvc.gov.in,
skm.mro.dvcindia@gmail.com

No.: MRO/ Water Tariff Cell/MPL/127/594 Date: 03.09.2019

To
The Chief Executive Officer,
Maithon Power Limited,
MA_5,Gogna Colony, P.O.-Maithon Dam,
Dist.- Dhanbad-828207.,

Subject: - Revision of Water Tariff for Supply of Raw Water for Industrial & Domestic uses.
Reference:-Your letter No.MPL/FY20/2008 033 dated 20.08.2019

With reference to your letter dated 20.08.2019, the comments of DVC are as follows.

- An agreement has been executed on 14.05.2010 between Damodar Valley Corporation and Maithon Power Limited for drawal of 30.0 MGD raw water from Maithon Reservoir at Maithon for Maithon Right Bank Thermal Power Project.
- As per clause No-11 of the agreement executed between Damodar Valley Corporation (DVC) & Maithon Power Limited (MPL) dated 14.05.2010 it is mentioned that **'the price for supply of water extracted shall be charged to the 'Second Party' in accordance with the First Party's Schedule of rates.**
- In the Schedule of rates on Annexure **–A** at page 13 of the agreement, it is clearly noted that **"Revised rate will be applicable as and when notified by the Corporation" & hence the argument raised by you in 2nd Para under your reference letter has no meaning at all.**
- The water tariff bills for supply of raw water for Industrial & Municipal uses was being raised by this office up to June 2019 considering the rate revised by the Corporation in the Year Oct. 2012, vide Office Order No. Coml/WS/Tariff Notice/2012-13/2240 dated 09/08/2012.
- Damodar Valley Corporation (DVC) revised the water tariff rate for Industrial & Domestic Water Supply of raw water with effect from 1st April 2019 in exercise of its power under Section 15 of DVC Act, 1948.

In the light the above, you are requested to make necessary arrangement for payment of arrear dues of amount of Rs.2,06,74,840/-**(Rupees Two Crore Six Lakh Seventy Four Thousand Eight Hundred Forty Only)** from 1st April 2019 to 30th June 2019 as mentioned in our bill no CE(C)/Tariff/19-20/MPL/127/Bill-216/1 dated 01.08.2019 as early as possible and make the monthly payment **on revised rates** on regularly basic against the raised bill on actual drawal.

An early action in the matter is highly solicited.

Yours faithfully

(S.K.Maji)
Deputy Chief Engineer(Civil),
Water Resources,
DVC, Maithon.

Copy to:

01. The Chief Engineer (Civil) & Head of Civil Engineering Department, DVC, Maithon.
02. The G.M (Finance), DVC, DVC Tower, Kol. 54.
03. The SDE (Civil), Water Tariff Cell, MRO's Office, DVC, Maithon.

S.R. BATLIBOI & CO. LLP
Chartered Accountants

22, Camac Street
3rd Floor, Block 'B'
Kolkata – 700 016, India
Tel: +91 33 6134 4000

Independent Auditor's Report on Statement of details of actual expenses towards Water Charges, Ash Disposal Expenses and Security Expenses for financial years ended on March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024, in support to the requirements of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019

To
The Board of Directors
Maithon Power Limited
Corporate Center 34,
Sant Tukaram Road,
Carnac Bunder, Mumbai- 400009

1. This Report is issued in accordance with the terms of our service scope letter dated November 18, 2024 and Master Engagement Agreement dated October 13, 2022, as amended with Maithon Power Limited (hereinafter the "Company")

2. At the request of the management, we have examined the accompanying Statement of actual expenses towards Water Charges, Ash Disposal Expenses and Security Expenses for financial years ended on March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024 (hereinafter referred to as the "Statement"), which we have initialled for identification purposes only.

3. The Company is required to submit the accompanying Statement in response to the information required in support of filing of its True up Petition in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("CERC Regulation") for the control period 2019-2020 to 2023-24 before Central Electricity Regulatory Commission (CERC).

Management's Responsibility

4. The preparation of the accompanying Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation and making estimates that are reasonable in the circumstances.

5. The Management is responsible for ensuring that the Company complies with the requirements of the CERC Regulation and for providing all relevant information to the CERC.

Auditor's Responsibility

6. Pursuant to the request of the Company for its onward submission to CERC as mentioned in paragraph 3 above, it is our responsibility to provide a limited assurance based on our examination whether details of actual expenses towards Water Charges, Ash Disposal Expenses and Security Expenses for the financial years ended March 31, 2020 to March 31, 2024 are in agreement with books of account and records which were examined by us as considered necessary for the purpose of our audit underlying the audited financial statements each of the years ended March 31, 2020 to March 31, 2024.

   The above paragraph constitutes the "Reporting Criteria".

7. The financial statements of the Company referred to in paragraph 6 above, were audited by us, on which we had issued unmodified audit opinions vide our report dated April 27, 2020, April 16, 2021, April 19, 2022, April 13, 2023 and April 16, 2024 respectively. Our audit of these financial statements was conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test check basis, evidence supporting the amounts and disclosures in the financial statements. Our audits were not planned and performed in connection with any transactions to identify matters that may be of potential interest to third parties.

8. We conducted our examination of the Statement in accordance with the requirements of the Guidance Note on Reports or Certificates for Special Purposes issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.

9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

10. Our scope of work did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of the amounts reported in the Statement. We have not performed an audit, the objective of which would be the expression of an opinion on the financial results, specified elements, accounts or items thereof, for the Company taken as a whole. Accordingly, we do not express such opinion.

11. A limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 6 above. The procedures performed vary in nature and timing from and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

12. We have performed the following procedures in relation to the Statement:

    a. Expenses pertaining to security as set out in the Statement for financial years ended March 31, 2020 to March 31, 2024 were traced to the audited financial statements of the respective years.

    b. Expenses pertaining to water charges and ash disposal as set out in the Statement for the financial years ended March 31, 2020 to March 31, 2024 were traced to the books of account and other records maintained by the Company underlying audited financial statements of the Company.

    c. Obtained the listing of monthly bills of water consumption in Kilo Litres (KL) for each of financial years ended March 31, 2020 to March 31, 2024 as prepared and compiled by the management and traced it the invoices from Damodar Valley Corporation on a test check basis.

    d. Performed necessary enquires with the management and obtained necessary representations. The Company has provided all relevant information for the respective financial years as stated above. We have relied on the same and have not performed any independent procedures.

       The above-mentioned procedures include examining evidence supporting the particulars in this Statement. Further, our scope of work did not involve us performing audit test for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.

Conclusion

13. Based on procedures performed by us, and on observations as set out in paragraph 12 above and according to the information and explanations and management representations obtained, nothing has come to our attention that causes us to believe that the details provided in the Statement, together with explanatory notes thereon, are in agreement with books of account and records underlying the audited financial statements of the Company for the years ended March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024.



S.R. BATLIBOI & CO. LLP
Chartered Accountants

Restriction on Use

14. This report has been issued at the request of the Company, solely in connection with the purpose mentioned in paragraph 3 above and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For **S.R. Batliboi & CO. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

Bhaswar.Sarkar
Digitally signed by Bhaswar.Sarkar
DN: cn=Bhaswar.Sarkar, email=Bhaswar.Sarkar@srb.in
Date: 2024.12.12 20:14:45 +05'30'

per Bhaswar Sarkar
Partner
UDIN: 24055596BKFOCM3069
Membership Number: 055596
Place of Signature: Kolkata
Date: December 12, 2024

MAITHON POWER LIMITED

Statement of details of actual expenses towards Water Charges, Ash Disposal Expenses and Security Expenses for financial years ended on March 31, 2020, March 31, 2021, March 31, 2022, March 31, 2023 and March 31, 2024

		Year ended 31st March				
Particulars		**2020**	**2021**	**2022**	**2023**	**2024**
Water consumption	KL	1,50,42,680	1,51,55,920	1,69,73,517	1,74,71,776	1,81,14,864
Water Charges	Rs. Lakh	1,600.66	1,773.85	2,149.43	2,236.33	2,537.69
Security Expenses	Rs. Lakh	723.82	834.98	918.57	1,056.85	1,039.65
Ash Disposal Expenses	Rs. Lakh	2,883.40	3,719.98	3,023.57	3,337.21	5,832.29

Notes:

1. Water charges pertains the water bill after rebate from Damodar Valley Corporation.

2. Ash disposal expenses exclude the provision made for stock of flyash lying in pond for the year ended 2022-23 and 2023-24 of Rs. 1060.79 lakhs and Rs. 113.25 lakhs respectively.

3. All the above expenditures were solely incurred for the purpose of the company's business of generating power.

4. The above statement is true and correct to the best of our knowledge and belief.

For Maithon Power Limited

KAJAL KUMAR SINGH

Digitally signed by KAJAL KUMAR SINGH
Date: 2024.12.12 17:07:03 +05'30'

Authorised Signatory

Place: Dhanbad

Date: 12.12.2024

Eastern Coalfields Limited
OFFICE OF THE AGENT; DHEMOMAIN COLLIERY

Ref. No. DMA/C-6/22/Agent/ 1272 DATED: 20/05/2022

To
The Chief Executive Officer
Maithan Power Limited,
Dombhui Nirsha,Dhanbad

Sub: Filling/blanketing of illegal OCP at Bichhed Bandh under Narsamuda Colliery by incombustible materials ash by MPL

Dear Sir,

As desired by you furnishing hereunder the details where Filling/blanketing of illegal OCPs by incombustible materials ash is required: -

Location - Biched Bandh under the lease hold area of Narsamuda Colliery under Sodepur Area of M/S Eastern Coalfields Limited.

Quantity – 1,00,000 qbk mtr

Therefore, you are requested to please do the above job at the place as mentioned above to save the ECL property.

Yours faithfully
29/5/22
Chief Manager (M)/Agent
Dhemomain Group

CC: The General Manager, Sodepur Area
CC: The Manager, Narsamuda Colliery
CC: Office file.

MPL

No: - MPL/ECL/ FY 22-23/131022 Date: 13th Oct, 2022

To,
The General Manager,
Mugma Area, ECL.

Sub:- Request for Abandoned Mine Voids nearby of MPL for backfilling of fly ash.

Dear Sir,

Maithon Power Ltd., "MPL", is a 26:74 JV Company of DVC and Tata Power comprising of two units of 525 MW each operational since 2011 and 2012 and supplying power to DVC, WBSEDCL, KSEB and TPDDL as per CERC regulated tariff.

MPL is utilizing its generated ash for filling in abandoned mine voids as per Environment clearance laid down by the Office Memorandum of MOEF and CC as permitted for Fly Ash to be used in backfilling in mine voids.

As you are aware, evacuation of ash from MPL to abandoned mines is an utmost need to sustain its power generation as ash supply to cement industries and export through bulkers are limited.

We are greatly thankful for allotting us Gopinathpur Mine for backfilling purpose. However, due to conjested road conditions and limited access of Hywas in the Site, there is a restricted movement of Ash Hywas in the Site impacting our ash disposal process.

We therefore request your good office to enable allocation of additional mine voids in the vicinity of MPL Plant for backfilling of Fly Ash and help sustain power generation from MPL.

Your kind cooperation in this matter is highly solicited.

Thanking You,

For Maithon Power Limited

MAITHON POWER LIMITED

13/10/2022

Sudhakar Tandon
(Chief- O&M Services, MPL)

Received Copy
CMS
13/10/22

ECL

CIN-U10101WB1975GOI030295
Website – www.easterncoal.gov.in
E mail- mugmaecl@gmail.com

EASTERNCOALFIELDSLIMITED
(A Subsidiary of Coal India Ltd.)
Office of the General Manager,
MUGMA AREA,P.O:MUGMA
Dt.DHANBAD(JH), Pin-828204
Ph: No. 06540-285425,FAX NO: 056540-285811

Ref. No. ECL/GM/MA/2022/13/190

Date: 15.10.2022

To,
The Chief Executive Officer (CMd - O&M services)
Maithan Power Limited
Nirsa, Dhanbad

Subject: Backfilling of mine void in Gopinathpur Colliery using flyash-regarding

Dear Sir,

With reference to your letter no. MPL/ECL/FY 22-23/131022 dated 13.10.2022, it is to be noted that the mine void of Gopinathpur Colliery is adjacent to both Pusai and Khoodia jores. As stipulated in the Office Memorandum of MoEF&CC dated 28th August, 2019 stated as,

" There should be at least clearance of 500 m of safe distance be maintained from river and water body in case of ash disposal in abandoned mines to prevent embankment failures and flyash flowing into the nearby water body".

The distance of the said mine void may be less than stipulated 500 metres from these jores. Hence, you are requested to stop dumping of flyash into mine void in Gopinathpur Colliery effective immediate in case you have already started flyash dumping activity in the area as this will amount to violation of conditions laid down in the OM of MoEF&CC.

This is for your kind information and necessary action please.

General Manager
Mugma Area
ECL

Cc to:
1. AGM, Mugma Area
2. Agent, GOCP, Mugma Area
3. AMPCD, Mugma Area

MPL
MAITHON POWER LIMITED

MPL/FY23/22-11/010 Dated: 22.11.2022

To
The Director Technical (P&P)
Eastern Coalfields Ltd.
Sanctoria, P.O. Dishergarh
Pin: 713333 (W.B.)
email id: dtpp.ecl@coalindia.in

Sub: Utilization of Ash in filling abandoned mines.

Dear Sir
First, we would like to thank the E.C.L management for supporting us for the last 10 years by allowing us to fill up various abandoned mines available at Mugma area.

At present MPL generates approximately 2 million MT of ash every year through its 2 x 525 MW Thermal Power station which needs to be disposed of as per applicable guidelines of Ministry of Environment Forest & Climate change (MoEFCC). As there is no ash utilizing plant near the company premises for gainful ash utilization therefore the option left with us is disposing of the ash generated in nearby abandoned mines.

We have identified few abandoned OCPs in Mugma area, which as per our knowledge, are presently available for ash dumping-

Sl No	Name of Mines	Name
1	**RAJPURA**	S.N.C Quarry of Rajpura Colliery P.S. Chirkunda
2	**RAJPURA**	R.K. Rajpura Quarry P.S. Chirkunda
3	**GOPINATHPUR**	S.G. Quarry of Gopinathpur Colliery P.S. Nirsha
4	**GOPINATHPUR**	Gopinathpur Quarry of Gopinathpur
5	**KHOODIA**	Khoodia OCP of Khoodia Colliery P.S. Nirsha
6	**KUMARDHUBI**	1M South Quarry of Kumardhubi Colliery P.S. Chirkunda
7	**KUMARDHUBI**	S,K, Quarry, Kumardhubi Colliery P.S. Chirkunda
8	**HARIAJAM**	B.P. Seam quarry near 27 & 28 incline & KSGM College
9	**SHYAMPUR-A**	V & VI quarry Near Nayadanga Quarry

Therefore, we would request your kind intervention in this matter and request to allow us to dispose the ash in the above abandoned mines.
Looking forward for your continued support,

Thanking you

Yours faithfully

(Sudhakar Tandon)
Chief- O&M Services

MPL
MAITHON POWER LIMITED

No: - MPL/ECL/ FY 22-23/010223 Date: 1st Feb,2023

To,
The General Manager,
Mugma Area, ECL.

Sub:- Request for Abandoned Mine Voids nearby of MPL for backfilling of fly ash.

Dear Sir,

Maithon Power Ltd., "MPL", is a 26:74 JV Company of DVC and Tata Power comprising of two units of 525 MW each operational since 2011 and 2012 and supplying power to DVC, WBSEDCL, KSEB and TPDDL as per CERC regulated tariff.

MPL is utilizing its generated ash for filling in abandoned mine voids as per Environment clearance laid down by the Office Memorandum of MOEF and CC as permitted for Fly Ash to be used in backfilling in mine voids.

As you are aware, evacuation of ash from MPL to abandoned mines is an utmost need to sustain its power generation as ash supply to cement industries and export through bulkers are limited.

We therefore request your good office to enable allocation of additional mine voids in the vicinity of MPL Plant for backfilling of Fly Ash and help sustain power generation from MPL.

Your kind cooperation in this matter is highly solicited.

Thanking You,

For Maithon Power Limited

Durgesh Sharma 1/2/23
(Head - Fuel & Ash Management , MPL)

C.G.M. MUGMA
S. Singh
2-2-23
GM Copy

MAITHON POWER LIMITED
(A Joint Venture Company of Tata Power & DVC)
Registered Office: Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai 400 009. Tel: +91 22 67171232
Works: Village Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand Tel: +91 6540 2780 19/20 Fax: +91 8860075658

Kumar Dilip

Subject: RE: Requirement of bottom ash at Satgram-Sripur Area, ECL.

From: UPENDRA SINGH <gmsatgram.ecl@coalindia.in>
Sent: 09 July 2024 11:34
To: Ranjan Rajiv <rajivranjan@tatapower.com>
Cc: ampcd2013 <ampcd2013@gmail.com>; Rahul Sarkar <rahul.sarkar@coalindia.in>
Subject: Requirement of bottom ash at Satgram-Sripur Area, ECL.

You don't often get email from gmsatgram.ecl@coalindia.in. Learn why this is important

[EXTERNAL sender, Exercise caution..!]

Dear Sir,

At present we are running depillaring districts underground mines in our area, as a result void is created in below ground working. We used to fill up those voids by sand. Now in the monsoon season sand supply will be stopped due to suspension of lifting of sand from river bed by district authority. Hence bottom ash from power plants is an alternative material in place of sand which may be used for filling up those voids.

Therefore it is requested to you for the supply of 25000 CUM of bottom ash monthly to the underground mines of Satgram-Sripur Area. If you agree to supply bottom ash to our area then our representative will contact you for discussion regarding the matter.

Awaiting for your positive response.
Thanking You,

Regards,
Upendra Singh
General Manager, Satgram-Sripur Area, ECL

Eastern Coalfields Limited

https://maps.google.com/maps?q=23.662025451660156%2C87.06539154052734&z=17&hl=en
Satgram-Sripur Area, ECL
Office of the General Manager
Satgram-Sripur Area, P.O.: Devchandnagar
Dist.-Paschim Bardhman, West Bengal-713332

MPL
MAITHON POWER LIMITED

No: - MPL/CEA/ FY 24-25/09082024 Date: 9th Aug,2024

To,
The Chief Engineer (Civil Design),
Central Electricity Authority,
Sewa Bhawan, R K Puram,
New Delhi-110066.

Sub:- Request for allocation of Abandoned Mine Voids nearby MPL for backfilling of fly ash.

Dear Sir,
Maithon Power Ltd., "MPL", is a 26:74 JV Company of DVC and Tata Power comprising of two units of 525 MW each operational since 2011 and 2012 and supplying power to DVC, WBSEDCL, KSEB and TPDDL as per CERC regulated tariff.

MPL is utilizing its generated ash for filling in abandoned mine voids as per Environment clearance laid down by the Office Memorandum of MOEF and CC as permitted for Fly Ash to be used in backfilling in mine voids. You are already aware that the evacuation of ash from MPL to abandoned mines is an utmost need to sustain its power generation as ash supply to cement industries and export through bulkers are limited.

As per Office Corigendum (OC) Ref: CPAM/43020/33/2023-CPIAM[e-357558] by the GOI (Ministry of Coal) regarding SOPs in respect to fly ash filling and as per OC Ref: 9/11/2022-St. th. regarding Inputs/Suggestions on Draft SOPs for disposal of fly ash we came to understand that it is required by the TPPs to apply to CEA for allocation of abaondoned mines for ash disposal.

We therefore would like to submit to your good office the list of Abandoned Mine Voids from ECL for backfilling of Fly Ash in the vicinity of MPL Plant for your kind consideration and onward allotment to us so that MPL could stow atleast some part of its ash to the allocated abandoned mines as per the rules and regulations laid down by the MOEFCC and continue its journey as a major power producing unit thereby serving the Nation.

Your kind cooperation in this matter is highly solicited.

Thanking You,

For Maithon Power Limited

Durgesh Sharma
(Head-FAM, MPL)

Annexure 1

Format of the request to CEA by TPPs for the allocation of the Mines

A	**List of Identified mines:**						
	Name of the TPP	Name of the mines	Distance (km)	Void space available (L cum)	Void space required (L cum.)	Tentative time required for dumping	Proposed mode of transport
1.	MPL	Rajpura-A	25	2.5	2.5	3 Months	Road-Hywa
2.	MPL	Rajpura-B	25	3.5	3.5	4 Months	Road-Hywa
3.	MPL	Raja Colliery	20	3	3	4 Months	Road-Hywa
4	MPL	Gopinathpur	20	1.5	1.5	2 Months	Road-Hywa
5	MPL	Shyampur-A	20	2	2	3 Months	Road-Hywa
6	MPL	Bhutani	20	6	6	8 Months	Road-Hywa
	Total void space available/required			18.5	18.5	--	--

C.	**Details of past allotments to the company**					
	Name of the TPP	Name of the mines	Date of allotment	Status of MoU and operation		Remarks
1.	MPL	Pusai	19/8/2020	Closed		Open Closed
2.	MPL	Gopinathpur	4/7/22	Closed		Open Closed
3.	MPL	Lakhimata	15/6/20	Closed		Open closed
4	MPL	Narsimuda	6/9/23	Running		Open Running
5	MPL	Demomain	20/5/22	Running		Open Running
D	**Suggestions/grievances etc.**					

TATA POWER
The Tata Power Company Limited
(Corporate Contracts Department)
Smart Center of Procurement Excellence, 2nd Floor, Sahar Receiving Station, Near Hotel Leela, Sahar Airport Road Andheri (E), Mumbai 400 059, Maharashtra, India
Board Line : 022-67173188| CIN: L28920MH1919PLC000567

NOTICE INVITING EXPRESSION OF INTEREST

The Tata Power Company Limited hereby invites Expression of Interest (EOI) from eligible bidders for participation in following tender:

"Sale of Fly Ash from Maithon Power Limited through Bulkers (Tender Ref: CC/FY22/VK/MPL Fly Ash Sale)"

For details of pre-qualification requirements, purchasing of tender document, bid security etc., please visit Tender section of our website URL: **https://www.tatapower.com/tender/tenderlist.aspx**). Eligible bidders willing to participate may submit their EOI along with the tender fee by **12th July, 2021**, for issue of tender documents.

NMDC Limited

(A GOVERNMENT OF INDIA ENTERPRISE)

10-3-311/A, CASTLE HILLS, MASAB TANK, HYDERABAD-500 028. Tel : 0091-40-23538710/ 23538713 to 23538721 Ext: 229 CIN : L13100TG1958GOI001674

Email : jpsingh@nmdc.co.in; bmkumar@nmdc.co.in; jvenkatesan@nmdc.co.in

Tender No. HQMM/3009-20/1100000020/296 Dt.01-07-2021

OPEN TENDER NOTICE

Tenders are invited through e-procurement mode for supply of following items:

Description of Equipment	Qty (No.)	Pre Bid Meeting	Display & Sale of Tender Documents Period	Last date & Time for submission of offer	Tender Fee (Rs.)
Supply and Supervision of Erection & Commissioning of 01 No. 6" Diesel Driven Blast Hole Drill with COST CAP Spares – 6 Years/ 12000 Hrs. Operation whichever is earlier for Donimalai Complex	01	09.07.2021 at 11 AM	DRAFT 01.07.2021 to 09.07.2021 FINAL 23.07.2021 to 23.08.2021	23.08.2021 By 02:30 PM (IST)	Rs.5,900/-

Complete Tender document is available in websites : **www.nmdc.co.in** under tender section **www.mstccommerce.com/eprochome**; **http://eprocure.gov.in**. Any corrigendum to the above tender will be uploaded only on our website **www.nmdc.co.in** and will not be published. Prospective bidders should visit the above NMDC Limited website from time to time to take note of corrigendum, if any. For further details logon to Tender Section of our website : **www.nmdc.co.in** under tender section.

Chief General Manager (Materials)

SOLAR INDUSTRIES INDIA LIMITED

CIN: L74999MH1995PLC085878
Registered office: "Solar" House, 14, Kachimet, Amravati Road, Nagpur - 440023.
Phone : 0712-6634555/50
Fax : 0712-2500200/2560202
E-mail: investor.relations@solargroup.com
Website: www.solargroup.com

NOTICE TO THE SHAREHOLDERS

In order to send Annual Reports, Notices and other communications to the shareholders in electronic form, we request to the members of Solar Industries India Limited who have not yet registered their email address or Bank account details, to register the same in respect of shares held in electronic form with the depository through their Depository Participant(s) and in respect of shares held in physical form by writing to the Company's Registrar and Share Transfer Agent, Link Intime India Private Limited.

Pursuant to General Circular No. 20/2020 dated May 5, 2020 and Circular No. 02/2021 dated January 13, 2021 and all other relevant circulars issued from time to time by Ministry of Corporate Affairs, the Company has enabled a process for the limited purpose of receiving the Company's Annual Report and notice of the Annual General Meeting (Including E-voting Instructions) electronically, the members may temporarily update their email id's with the Company's Registrar and Share Transfer Agent, Link Intime India Private Limited by using link https://linkintime.co.in/emailreg/email_register.html and follow the registration process as guided thereafter on or before July 30, 2021.

For **Solar Industries India Limited**
Sd/-
Khushboo Pasari
Company Secretary & Compliance Officer

Place : Nagpur
Date : 01.07.2021

TELANGANA STATE POWER GENERATION CORPORATION LIMITED

VIDYUT SOUDHA : HYDERABAD – 500 082.

T.No.e-10/CE/Civil/Thermal/TSGENCO/2021-22

YTPS - Design, Engineering, Supply & Construction of Intake Structure, Raw Water pump House and laying of MS Pipeline (2 Nos) from pump house to Raw Water Reservoir including Civil, Mechanical and Electrical works for drawal of 150 Cusecs of water throughout the water Reservoir of Yadadri Thermal Power Station, Veerlapalem (V), Damaracherla (Mdl), Nalgonda Dist. **Value of the Works: ₹.6,72,46,000/-. Scheduled Open & Closing Date: 19.06.2021 at 17:00 Hrs & 20.07.2021 at 15:00 Hrs.**

T.No.e-63/CE/O&M/KTPS VII Stage/EM-VII/P12/TSGENCO/21-22

KTPS-VII Stage - Procurement of various LT Motors for Kothagudem Thermal Power Station, Stage-VII, Paloncha, Bhadradri Kothagudem Dist. **Value of the Works: ₹.16,12,500/-. Scheduled Open & Closing Date: 19.06.2021 at 17:30 Hrs & 09.07.2021 at 15:30 Hrs.**

For further Details: "www.tsgenco.co.in & https://tender.telangana.gov.in

PSPCL Punjab State Power Corporation Limited

Regd. Office :- PSEB H.O.Building, The Mall, Patiala
Corporate Identification Number (CIN) : U40109PB2010GC033813
Contact NO. 96461-06022

Tender Enquiry No. 02/CE/JAL/2021-22 **Dated: 30.06.2021**

Chief Engineer/DS North Zone, PSPCL, Jalandhar invites e-tender for work of attending to or resolving the Fuse-Off-Call Complaints & LT/HT line Breakdowns for restoration of Electrical Power Supply in the various Sub-divisions under CE/DS, North Zone, Jalandhar.
For detailed NIT and Tender Specifications, please refer to https://eproc.punjab.gov.in from 30.06.2021, (05:00 PM onwards.)

NOTE: Corrigendum and addendum, if any will be published online at https://eproc.punjab.gov.in

Chief Engineer/DS
C 253/21 North Zone, PSPCL, Jalandhar
76155/12/338/2021/5676

Coforge Coforge Limited

(erstwhile NIIT Technologies Limited)
CIN: L72100DL1992PLC046753
Regd Office: 8, Balaji Estate, Third Floor, Guru Ravi Das Marg, Kalkaji, New Delhi-110019.
Ph: 91 (11) 41029297. **Fax:** 91 (11) 26414900
Email: investors@coforgetech.com,
Website: https://www.coforgetech.com

NOTICE- 29th ANNUAL GENERAL MEETING

NOTICE is hereby given that the 29th Annual General Meeting ('AGM') of the Members of Coforge Limited (erstwhile NIIT Technologies Limited) ('the Company') for financial year 2020-21 will be held on **Friday, July 30, 2021 at 09:00 AM** through Video Conference facility ('VC')/or Other Audio Visual Means ('OVAM') in compliance with the General Circular Nos. 14/2020, 17/2020, 20/2020 dated April 08, 2020, April 13, 2020, May 05, 2020 respectively and clarification circular 02/2021 dated January 13, 2021, issued by the Ministry of Corporate Affairs ('MCA Circular'), Circular No. SEBI/HO/CFD/CMD1/ CIR/P/2020/79 dated May 12, 2020 issued by the Securities and Exchange Board of India ('SEBI Circular') and other applicable provisions of the Companies Act, 2013 and the rules made there under.

The Annual Report of the Company for the financial year 2020-21 along with Notice convening the AGM will be sent in due course only through email to all those Members whose email address is registered with the Company/Registrar and Share Transfer Agent ('RTA')/Depository Participants ('DP'), in accordance with the MCA Circulars and SEBI Circular. The aforesaid documents will also be made available at www.coforgetech.com, stock exchange websites at www.bseindia.com and www.nseindia.com. and on the NSDL website at https://www.evoting.nsdl.com.

The instruction for attending the meeting through VC/OVAM and the manner of participation in the remote e-voting or casting vote at the AGM through e-voting is provided in the Notice convening the AGM. The Notice also contains the instructions with regard to login credentials for shareholders, holding shares in physical form or in electronic form, who have not registered their email address either with the Company or their respective DP. Members participating through VC/OVAM facility shall be counted for the purpose of quorum u/s 103 of the Companies Act, 2013.

The members holding shares in physical form are requested to consider converting their physical shares into dematerialized and eliminate all risks associated with the physical shares.

Procedure for registration of email addresses and bank details:

Members holding shares in physical/demat form and who are yet to register/update their email IDs are requested to reach NSDL/CDSL ('Depository Participant') in case of dematerialized shares. In case shares are held in physical form, Members are requested to send their request letters to Alankit Assignments Limited, 4E/2, Jhandewalan Extension, New Delhi - 110055 ('RTA') signed by all the shareholders along with self- attested copies of PAN Card and address proof to register their email ids. Similarly, the Members may also reach out to the above mentioned for updation of Bank account details with Request letter, ID Proof & a copy of cancelled cheque. In case of any query you may write to Investor Services at investors@coforgetech.com or rta@alankit.com.

For **Coforge Limited**
(Erstwhile NIIT Technologies Limited)
Sd/-
Lalit Kumar Sharma
Company Secretary & Legal Counsel
FCS: 6218

Dated : July 01, 2021
Place : Noida

CCAL

CHEMFAB ALKALIS LIMITED

CIN:L24290TN2009PLC071563

Regd. Office: Team House, GST Road, Vandalur, Chennai 600 048.
Website: www.chemfabalkalis.com Email: chemfabalkalis@drraoholdings.com
Phone No: +91 44 22750323 Fax No: +91 44 22750860

NOTICE FOR THE ATTENTION OF SHAREHOLDERS OF THE COMPANY
12th ANNUAL GENERAL MEETING AND INFORMATION ON E-VOTING

The 12th Annual General Meeting **("AGM")** of the Company will be held through Video Conferencing **("VC")**/Other Audio-Visual Means **("OAVM")** on **Wednesday, August 04, 2021** at **10:00 A.M IST**, in compliance with all the applicable provisions of the Companies Act, 2013 and the Rules made thereunder and the Securities and Exchange Board of India ("SEBI") (Listing Obligations and Disclosure Requirements) Regulations, 2015, read with General Circular No. 14/2020 dated April 08, 2020, General Circular No. 17/2020 dated April 13, 2020 and General Circular No. 20/2020 dated May 5, 2020, and Circular No. 02/2021 dated January 13, 2021 other applicable circulars issued by the Ministry of Corporate Affairs **("MCA")** and SEBI (collectively referred to as **"relevant circulars"**), to transact the business set out in the Notice calling the AGM. Members participating through the VC/OAVM facility shall be reckoned for the purpose of quorum under Section 103 of the Companies Act, 2013. In compliance with the relevant circulars, the Notice of the AGM and the standalone and consolidated financial statements for the financial year 2020-2021, along with Board's Report, Auditors' Report and other documents required to be attached thereto, have been sent on June 30, 2021 to the Members of the Company whose email addresses are registered with the Company/Depository Participant(s). The aforesaid documents are also available on the Company's website at **www.chemfabalkalis.com** and on the website of the Stock Exchanges, i.e., BSE Limited and National Stock Exchange of India Limited at **www.bseindia.com** and **www.nseindia.com**, respectively, and on the website of CDSL (agency for providing the e-voting facility and e-voting system during the AGM) i.e www.evotingindia.com. The documents referred to in the Notice of the AGM are available electronically for inspection without any fee by the members from the date of circulation of this Notice up to the date of AGM.
Members seeking to inspect such documents can send an email to ccaldcs@drraoholdings.com.

Instruction for E-voting and joining Meeting through VC/OAVM:

The Company is providing to its members facility to exercise their right to vote on resolutions proposed to be passed at AGM by electronic means ("e-voting"). Members may cast their votes electronically, using the electronic voting system of CDSL on the dates mentioned herein below **("E-voting")**
Further, the facility for voting through electronic voting system will also be made available at the AGM and members attending the AGM who have not cast their vote(s) by electronically will be able to vote at the AGM. The Company has engaged the services of **CDSL** as the agency to provide e-voting facility. Information and instructions including details of user id and password relating to e-voting have been sent to the members through e-mail as well as available in the Annual Report. The same login credentials should be used for attending the AGM through **VC/OAVM**. The manner of e-voting and shares in dematerialized mode, physical mode and for members who have not registered their email addresses is provided in the Notice of the AGM and is also available on the website of the Company: www.chemfabalkalis.com and on the website of the Stock Exchanges, i.e. BSE Limited and National Stock Exchange of India Limited at www.bseindia.com and www.nseindia.com, respectively, and on the website of CDSL, at www.evotingindia.com
The e-voting facility will be available during the following voting period:
Commencement of remote e-voting: **9:00 a.m. on Sunday, August 01, 2021**
End of remote e-voting : **5:00 p.m. on Tuesday, August 03, 2021**
The e-voting will not be allowed beyond the aforesaid date and time and the e-voting module shall be forthwith disabled by **CDSL** upon expiry of the aforesaid period.
A person, whose name is recorded in the register of members or in the register of beneficial owners maintained by the depositories as on the cut-off date, i.e., Wednesday, July 28, 2021 only shall be entitled to avail the facility of remote e-voting or for participation at the AGM and to cast AGM e-voting.
Manner of registering/updating email addresses is as below:
Members holding shares in physical mode, who have not registered/updated their email addresses with the Company, are requested to register/update the same by writing to the Company with details of folio number and attaching a self- attested copy of PAN card at ccaldcs@drraoholdings.com or to CAMEO at jessy@cameoindia.com
Members holding shares dematerialized mode, who have not registered / updated their email addresses with their Depository Participants, are requested to register / update their email addresses with the Depository Participants with whom they maintain their demat accounts.
After due verification, the Company / CDSL will forward their login credentials to their registered email address.
● Any person who becomes a member of the Company after dispatch of the Notice of the AGM and holding shares as on the cut-off date may obtain the User ID and password in the manner as provided in the Notice of the AGM, which is available on Company's website and CDSL website.
● Such members may cast their votes using the e-voting instructions, in the manner specified by the Company in the Notice of AGM.
The members who have cast their vote(s) by remote e-voting may also attend the AGM but shall not be entitled to cast their vote(s) again at the AGM. In case of any query pertaining to e-voting, members may refer to the "Help" and "FAQS" sections /E-voting user manual available through a dropdown menu in the "Downloads" section of CDSL website
All grievances connected with the facility for voting by electronic means may be addressed to Mr. Rakesh Dalvi, Manager, (CDSL,) Central Depository Services (India) Limited, A Wing, 25th Floor, Marathon Futurex, Mafatlal Mill Compounds, N M Joshi Marg, Lower Parel (East), Mumbai - 400013 or send an email to helpdesk.evoting@cdslindia.com or call on 022-23058542/43.

By order of the Board of Directors
Sd/-
V.Rajesh
Company Secretary and Compliance officer

Place : Chennai
Dated : 01.07.2021

TARC Limited

(Formerly known as Anant Raj Global Limited)
(Corporate Identity Number L70100HR2016PLC065615)
Registered Office: G-002, MACEO, Sector-91, Gurugram, Haryana (India)-122505
Corporate Office: C-3, Qutab institutional Area, Katwaria Saria, New Delhi (India)-110016
Tel.: 011-41244300, E-mail:tarc@tarc.in, Website: www.tarc.in

Extract of Audited Consolidated Financial Results for the Quarter and Year Ended March, 31, 2021:
(Rs. in Lakhs except per share data)

Particulars	Consolidated			
	Quarter Ended 31.03.2021 (Audited)	Quarter Ended 31.03.2020 (Unaudited)	Year Ended 31.03.2021 (Audited)	Year Ended 31.03.2020 (Audited as Restated)
Total income from operations	9,470.10	5,968.37	22,086.98	19,103.30
Net Profit/(Loss) from ordinary activities before tax	172.64	50.91	92.72	6,471.47
Net Profit for the period after tax	95.19	149.41	617.26	5,310.31
Total Comprehensive Income for the period [Comprising Profit for the period (after tax) and Other Comprehensive Income (after tax)]	97.77	132.23	663.14	5,286.39
Paid-up Equity Share Capital (Face Value per share Rs. 2/-)	5,901.93	5,901.93	5,901.93	5,901.93
Other Equity	-	-	150,524.97	149,861.38
Earnings per share (Quarterly not annualised) :				
Basic (Rs.)	0.03	0.05	0.21	1.80
Diluted (Rs.)	0.03	0.05	0.21	1.80

Key Numbers of Audited Standalone Financial Results

(Rs. in Lakhs)

Particulars	Quarter Ended 31.03.2021 (Audited)	Quarter Ended 31.03.2020 (Unaudited)	Year Ended 31.03.2021 (Audited)	Year Ended 31.03.2020 (Audited as Restated)
Total income from operations	7,193.29	7,214.29	17,945.58	11,807.11
Profit before tax	325.18	116.90	527.48	265.98
Profit after tax	217.86	252.50	491.18	440.35
Total Comprehensive Income for the period [Comprising Profit for the period (after tax) and Other Comprehensive Income (after tax)]	220.34	250.25	536.96	431.35
Other Equity	-	-	142,594.31	142,057.35

1. The above audited standalone and consolidated results were reviewed and recommended by the Audit Committee & approved by the Board of Directors at their respective meetings held on June 30, 2021. The Statutory auditors have expressed an unmodified audit opinion on these standalone and consolidated financial results .
2. The above is an extract of the detailed format of Standalone and Consolidated Financial Results for the Quarter and year ended March 31, 2021 filed with the Stock Exchanges under Regulation 33 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015. The full format of the audited Financial Results are available on the Stock Exchange websites, www.bseindia.com, www.nseindia.com and on the company website www.tarc.in.

On behalf of Board of Directors
Sd/-
Amar Sarin
Managing Director & CEO

Place : New Delhi
Date : June 30, 2021

Union Bank of India

Central Office: Union Bank Bhawan, 239, Vidhan Bhavan Marg, Nariman Point, Mumbai - 400021.
Website: www.unionbankofindia.co.in
Email: investorservices@unionbankofindia.com

NOTICE OF 19th ANNUAL GENERAL MEETING TO BE HELD THROUGH VC/OAVM AND INTIMATION OF CUT-OFF DATE

Dear Shareholder,

NOTICE is hereby given that the **19th (Nineteenth) Annual General Meeting ("AGM")** of the Shareholders of Union Bank of India ("**Bank**") will be held on **Tuesday, August 10, 2021 at 11.00 am (IST)** at Central Office, Union Bank of India, Mumbai (the deemed venue of the Meeting) through Video Conferencing (VC) or Other Audio Visual Means (OAVM) facility.

In view of the continuing COVID-19 pandemic, the Ministry of Corporate Affairs(MCA) vide circular Nos. 14/2020, 17/2020, 20/2020, 22/2020, 33/2020, 39/2020 and 02/2021 dated 8th April 2020, 13th April 2020, 5th May 2020, 15th June 2020, 28th September, 2020, 31st December, 2020 and 13th January, 2021 respectively, ("MCA Circulars") and Securities and Exchange Board of India (SEBI) Circular No. SEBI/HO/CFD/CMD1/CIR/P/2020/79 dated 12th May 2020 and SEBI/HO/CFD/CMD2/CIR/P/2021/11 dated 15th January 2021 permitted the holding of AGM through VC/OAVM, without the physical presence of the members at a common venue. Accordingly, in compliance with the applicable provisions of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015 and the above guidelines, the AGM of the Bank will be held through VC/OAVM.

The Shareholders are further informed that:

i. The Notice of the AGM and the Annual Report including the financial statements for the year ended on March 31, 2021 will be sent only by email to all those shareholders, whose email addresses are registered with the Bank or with their respective Depository Participants (DP), in accordance with MCA Circulars and SEBI Circulars. Shareholders can join and participate in the AGM through VC/OAVM facility only. Shareholders participating through the VC/OAVM facility shall be counted for the purpose of reckoning the quorum.
ii. The instructions for joining the AGM and the manner for participation in the remote e-voting or casting vote through the e-voting system during the AGM will be provided in the detailed Notice of the AGM.
iii. The Annual Report along with Notice of AGM will also be hosted on the website of the Bank i.e. www.unionbankofindia.co.in and the website of BSE www.bseindia.com and NSE www.nseindia.com.
iv. In case you have not registered your email address with the Bank or Depository Participant, please follow below instructions to register your email ID:

Physical Shareholding	Send a duly signed request letter to the RTA of the Bank mentioning your email ID, mobile number and folio number to the following address: **Datamatics Business Solutions Ltd.,** Unit: Union Bank of India, Plot No. B-5, Part B, MIDC, Crosslane, Marol, Andheri (East), Mumbai - 400 093 You may also send scanned copy of the request letter to ubiinvestors@datamaticsbpm.com
Demat Holding	Please contact your Depository Participant (DP) with whom you are maintaining the demat account and register your email address as per the process advised by your DP.

v. The shareholders who have not registered their email ID can participate in the AGM after registering their email ID and Mobile Nos. in the weblink - https://ris.kfintech.com/clientservices/mobilereg/mobileemailreg.aspx The detailed process of participating in the AGM through VC / OAVM is also given in the Notice of the AGM.
vi. Bank has fixed Monday, July 12, 2021 as the Cut-off date to consider the names of the shareholders entitled to participate in the election i.e., to nominate and contest in the election of ONE Director from amongst shareholders other than the Central Government.

By order of the Board of Directors
For **UNION BANK OF INDIA**
Sd/-
(Mangesh M
Company

Place: Mumbai
Date: 01.07.2021

ZODIAC

FINEST QUALITY CLOTHING

EXTRACT FROM THE STANDALONE AND CONSOLIDATED FINANCIAL RESULTS FOR THE QUARTER AND YEAR ENDED MARCH 31, 2021

₹ in Lakhs

Sr. No.	PARTICULARS	STANDALONE					CONSOLIDATED				
		QUARTER ENDED ON			YEAR ENDED ON		QUARTER ENDED ON			YEAR ENDED ON	
		Mar 31, 2021 (Refer Note 'd' below)	Dec 31, 2020 Unaudited	Mar 31, 2020 (Refer Note 'd' below)	March 31, 2021 Audited	Mar 31, 2020 Audited	Mar 31, 2021 (Refer Note 'd' below)	Dec 31, 2020 Unaudited	Mar 31, 2020 (Refer Note 'd' below)	March 31, 2021 Audited	March 31, 2020 Audited
1.	Total Income from operations	3,848	3,242	4,667	13,249	20,683	3,872	3,241	4,707	12,751	20,296
2.	Net Loss for the period before tax	(535)	(696)	(639)	(2,317)	(2,335)	(562)	(721)	(717)	(2,977)	(3,005)
3.	Loss for the period after tax	(502)	(696)	(580)	(2,391)	(2,132)	(530)	(713)	(681)	(2,938)	(2,897)
4.	Total Comprehensive Loss for the period [Comprising Profit / (Loss) for the period (after tax) and Other Comprehensive Income (after tax)]	(412)	(546)	(1,312)	(2,198)	(3,278)	(446)	(579)	(1,177)	(2,797)	(3,733)
5.	Paid up Equity Share Capital	2,476	2,248	2,248	2,476	2,248	2,476	2,248	2,248	2,476	2,248
6.	Other Equity				20,326	20,252				23,137	23,662
7.	Loss Per Share (EPS) (of Rs. 10/- each) (in Rs.)										
	1. Basic:	(2.23)	(3.10)	(2.58)	(10.61)	(9.65)	(2.35)	(3.17)	(3.03)	(13.04)	(13.10)
	2. Diluted:	(2.23)	(3.10)	(2.58)	(10.61)	(9.65)	(2.35)	(3.17)	(3.03)	(13.04)	(13.10)

Notes:

a) The above is an extract of the detailed format of Quarterly/Annual Financial Results filed with the Stock Exchanges under Regulation 33 of the SEBI (Listing Obligations and Disclosure Requirements) Regulation, 2015.The full format of the Quarterly/Annual Financial Results are available on the Stock Exchange websites www.nseindia.com and www.bseindia.com and on Company's website www.zodiaconline.com.

b) The Central/State Government authorities had imposed various restrictions to control the spread of Covid19 pandemic during the year and consequently, the low market demand had affected the Company's operations for the year ended March31,2021.However, the Company had taken various steps including cost reduction measures, bringing in operational synergies etc.to ensure sufficient liquidity for the Company's operations. Towards the end of the current year,the second wave of Covid-19 pandemic hit the country and has once again resulted in disruption of business as State government authorities had announced partial /complete lockdown.With easing of certain restrictions in June 2021 by State government authorities, the Management expects demand to revive. The Company's Management has done an assessment of the situation (including the liquidity position after taking into consideration continuing cost reduction measures, available investments, surplus funds with the Group, undrawn bank facilities etc.), and carrying value of all its assets and liabilities as at March31,2021and concluded that there are no material adjustments required in the financial statements as at March31,2021. However, the impact assessment due to COVID-19 is acontinuing process given the uncertainty associated with its nature and duration.The Company will continue to monitor any material changes as the situation evolves."

c) The Company has allotted 22,81,854 equity shares of face value of Rs.10 each at a premium of Rs.99.56 per equity share on preferential basis to two promoters of the Company on March 23,2021and March 25, 2021equally amounting to Rs.2,500 Lakhs.

d) The figures for the last quarter are the balancing figures between audited figures in respect of the full financial year and the unaudited published year to date figures upto third quarterof the financial year.

For and on behalf of the Board of Directors
Sd/-
S. Y. NOORANI
Vice Chairman & Managing Director
DIN : 00068423

Place: Mumbai
Date: June 30, 2021

ZODIAC CLOTHING COMPANY LTD.

Regd. Office: Nyloc House, 254, D-2, Dr. Annie Besant Road, Worli, Mumbai - 400030.
Tel : 022-66677000, Fax : 022-66677279,
Website : www.zodiaconline.com, Email Id : cosecy@zodiacmtc.com
CIN: L17100MH1984PLC033143

ZODIAC | ZODIAC | ZODIAC | ZOD! CLUBWEAR ZODIAC

SLTRO for SFBs made on-tap following lacklustre auctions

Facility will allow banks to draw unutilised amount from previous auctions gradually

OUR BUREAU
Mumbai, October 11

The Reserve Bank of India seems to have turned the Special Long-Term Repo Operations (SLTRO) for small finance banks (SFBs) on-tap as the response to the monthly auctions it has conducted under SLTRO so far has been lacklustre.

In the five monthly auctions the central bank conducted since May, SFBs borrowed ₹2,040-crore funds for supporting the small business units, micro and small industries, and other unorganised sector entities adversely affected during the current wave of the pandemic.

In May, the RBI said it will conduct three-year SLTRO of ₹10,000 crore at the repo rate (4 per cent) for the SFBs, to be deployed for fresh lending of up to ₹10 lakh per borrower. There are 11 SFBs in the country.

As per the earlier SLTRO scheme, SFBs could have drawn the unutilised portion of ₹7,960 crore at the last auction, which was scheduled for October 14.

Meagre borrowings

But given that the average borrowing at the last five auctions was ₹408 crore, it is unlikely that these niche banks could have borrowed the unutilised portion in one go.

So, with the SLTRO going on-tap and available till December-end, SFBs can draw the unutilised amount gradually.

The central bank has also cancelled the last tranche of the SLTRO auction due on October 14.



In the revised SLTRO scheme, the RBI will aggregate all requests for funds and release them every Monday by initiating a 3-year repo contract at the repo rate with the requesting bank

As per the revised SLTRO scheme, RBI will aggregate all requests for funds and release them every Monday (on the subsequent working day if Monday is a holiday) by initiating a 3-year repo contract at repo rate with the requesting bank.

If a bank places multiple requests during the week, all such requests will be aggregated, and a single repo contract will be created on the date of operation.

Requests from SFBs desirous of availing funds from the RBI will be subject to availability of funds as on the date of application.

RBI said funds cannot be guaranteed in case the total amount of ₹10,000 crore is already availed.

PoI case: Airtel, Voda move tribunal against DoT's demand notice

PRESS TRUST OF INDIA
New Delhi, October 11

Bharti Airtel and Vodafone Idea have moved telecom tribunal to challenge Telecom Department's demand notices for payment of ₹3,050-crore cumulative penalties in the points of interconnect matter, a source said.

The Department of Telecommunications had recently issued demand notices to both the telcos to pay cumulative ₹3,050 crore in penalties in three weeks' time for violating norms by denying Reliance Jio points of interconnect (PoIs) way back in 2016.

Industry sources said that both Airtel and Vodafone Idea have now moved the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) challenging DoT's demand notices and penalty and that the matter could come up for hearing on Tuesday.

E-mails sent to Bharti Airtel and Vodafone Idea Ltd did not elicit a response.

'Covid pandemic converted into opportunity in sectors like FMCG'

CEO of Cavincare says making quick decisions during crisis period helped

OUR BUREAU
Chennai, October 11

The Covid pandemic has been an adversity, but the adversity was converted into an opportunity in many sectors, including FMCG, said Venkatesh Vijayaraghavan, Group CEO and Director, FMCG, CavinKare.

He was speaking at the Straight Talk 2021 Brand Summit organised by MediaNews4U on the theme 'Predicting the Consumer Pulse and Pivoting for Growth- Lessons from the Pandemic'.

During the pandemic, Chennai-based CavinKare concentrated on the 4Ps - process, productivity, product and people, he said.

In the process category, the company automated as much as possible. The time to bring out a new product was reduced to three months from 18-24 months. Sanitizer was brought out in two months and hygiene product in three months, he said.



Venkatesh Vijayaraghavan, CEO and Director- FMCG, Cavinkare

Promoting innovation

Decisions were made faster, and employees were told to come out with ideas and innovate and not to worry even if the idea failed. For instance, a decision on a ₹10-crore project was taken within minutes while it would have taken a minimum of six months earlier, he said.

Vijayaraghavan said that over 50 products were launched in 3-6 months and five new brands were launched in three new categories, he said. Unlike in the past, what is different today is that the strategy is to go digital, he said.

Global reach and local connect, understanding data and analytics to derive insights, building capacity to understand India by regions and clusters and understanding rural areas better are the key. "Opportunity in the rural market is huge. Ignoring the rural market comes at the cost of opportunity," he said.

The event, among other subjects, discussed various issues related to pandemic and the lessons learnt from it.

There were panel discussions on topics like 'are ad dollars following audiences to digital screens commensurately?

Intel India imparts artificial intelligence training to over two lakh students

'AI for All' programme aims to reach 1 million citizens: Nivruti Rai

DEBANGANA GHOSH
Mumbai, October 11

While several major technology companies are lending a hand to budding engineers and existing employees to upskill them in new technologies amidst talent crunch, global chip maker Intel India is on a mission to demystify artificial intelligence (AI) for all age groups, different levels of students, citizens and researchers with its skilling programmes in India.

As of today, the company has already trained over 2 lakh students between 8th standard and 12th standard in AI and has upskilled 5,000 government officials.

In July this year, Intel launched another programme 'AI for All' with a target of enabling over one million citizens with knowledge and know-how of AI, Nivruti Rai, Country Head, Intel India, told *BusinessLine*.

"Talent is a critical need for Intel and everybody else. AI is important and will generate even more jobs. Yet AI is a black box and many people talk about it without really understanding the technology. So, we first trained all our Intel employees. Then, we started looking to train students, government officials and citizens," Rai said.



Nivruti Rai, Country Head, Intel India

Gamified course

"AI for All is a 4-hour long gamified course. You can take it on your phone and it is available in multiple languages. Without even doing much marketing, we already have over 2 lakh people taking this course. Going at this pace, I don't believe there will be any challenge in getting one million users in a year," she added.

Intel India is also funding and working with academicians on research programmes. It has partnered with other industry consortiums to enable skilling.

"We are preparing workforce for the needs of tomorrow and in areas we believe are going to be critical. Our goal is to demystify AI and show that AI is mathematics, statistics, programming, data analytics and just generating and creating clean data," Rai said.

Speaking of her own fear and reluctance of learning a new technology, she shared, "I remember when HTML was new. Everybody thought it was this scary new thing. I had similar inhibitions when I started coding, only to learn that it was even easier than BASIC. Unless people know it and do it themselves, they'll be scared."

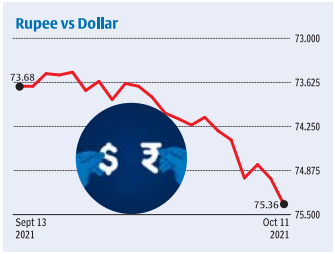
Rupee crashes to 15-month low with 17 paise slump against US dollar

OUR BUREAU
Mumbai, October 11

The rupee tumbled by 37 paise on Monday to hit the lowest level in about 15 months as oil marketing companies stepped up dollar purchases through banks in the wake of sharp uptick in Brent crude oil price and the greenback gaining strength.

The rupee closed at 75.36 to the US Dollar against the previous close of 74.99.

The Indian currency opened weaker at 75.11 per dollar. In intra-day trading, it saw a high and a low of 75.06 and 75.3950, respectively.



Crude oil price hike

Brent crude oil price rose almost 2 per cent to cross $84 a barrel.

A combination of factors, including banks' buying dollar on behalf of oil marketing companies, which probably expect crude oil to become more pricey and are mopping up dollars before it hardens further, and foreign institutional investors, who are liquidating some of their bond market positions before the ripple effect of the China's bond market slump is felt in emerging market economies, including India, pulling down the rupee, said a chief dealer with a private sector bank.

Brent crude oil could touch $90 per barrel as a global energy crisis looms and this could weaken the rupee further, cautioned the dealer.

Indian Bank to use Fisdom pact for more wealth management products

OUR BUREAU
Chennai, October 11

Indian Bank has said it has expanded the partnership with Fisdom, a fintech player, by adding new digital products to widen the suite of wealth management products for its customers.

In addition to existing products of mutual fund investment and e-NPS, new digital products such as mutual fund HNI advisory products, digital gold and e-tax filing were onboarded under the association by way of an agreement, according to a statement.

Imran Amin Siddiqui, Executive Director, Indian Bank pointed out that the bank's latest initiatives were part of its efforts to upscale business generation through digital channels both for liability and asset products of the bank. "We are confident that the partnership will be able to deliver a user-friendly wealth management ecosystem to Indian Bank customers," said Anand Dalmia, Co-founder, Fisdom.

TATA
TATA POWER
The Tata Power Company Limited
(Corporate Contracts Department)
Smart Center of Procurement Excellence, 2nd Floor, Sahar Receiving Station, Near Hotel Leela, Sahar Airport Road Andheri (E), Mumbai 400 059, Maharashtra, India
(Based Lines : 022-67173185) CIN : L28920MH1919PLC000567

NOTICE INVITING EXPRESSION OF INTEREST

The Tata Power Company Limited hereby invites Expression of Interest (EOI) from eligible bidders for participation in following tender:

"Ash evacuation via Rail Mode Logistics from Maithon Power Limited
(Tender Ref: CC/FY22/VK/MPL Ash Rail Logistics)"

For details of pre-qualification requirements, purchasing of tender document, bid security etc., please visit Tender section of our website URL :https://www.tatapower.com/tender/tenderlist.aspx). Eligible bidders willing to participate may submit their EOI along with the tender fee by 21st Oct, 2021, for issue of tender documents.

BusinessLine CLASSIFIED
PUBLIC NOTICE

M/s RUHR CHEMICALS (Partnership Firm) Mumbai, is under Dissolution Process. Inviting any Creditors who might have any Claims to be Lodged within 15 days, Pursuant to this Notice the firm will Stand Dissolved & No Further Claims will be Entertained. Write To:4-B, Surbala Bldg, S.VRd, Bandra W, Mumbai-400050, MH, India.

To Advertise log on to
www.thehinduads.com
For Placing Advertisements Online
Toll Free:180030700404

THE LAKSHMI MILLS COMPANY LIMITED
Regd. Office : 686, Avanashi Road, Coimbatore - 641 037
CIN : L17111TZ1910PLC000093
www.lakshmimills.com
E-mail : contact@lakshmimills.com
Ph : 0422-2245461

NOTICE

Notice is hereby given pursuant to Regulation 47 (1)(a) of SEBI (Listing Obligation and Disclosure Requirements) Regulation, 2015, that a Meeting of Board of Directors of the Company will be held on Wednesday, the 10th November 2021 at Coimbatore, interalia, to consider the Unaudited Financial Results of the Company for the quarter and half year ended 30.09.2021 and also to take the same on record. Further the details of the above notice also can be accessed from the website of the Company – www.lakshmimills.com and website of the Stock Exchange – www.bseindia.com.

For THE LAKSHMI MILLS CO. LTD.
Coimbatore 11.10.2021
N.SINGARAVEL
Company Secretary

KUDGI TRANSMISSION LIMITED

Regd. Office : P.B.No.979, Mount Poonamallee Road, Manapakkam, Chennai - 600 089.
CIN : U40106TN2012PLC111122

UNAUDITED STANDALONE FINANCIAL RESULTS FOR THE QUARTER ENDED SEPTEMBER 30, 2021

₹ Lakh

Sl. No.	Particulars	Quarter Year Ended Sep 30, 2021 (unaudited)	Quarter Year Ended Sep 30, 2020 (unaudited)	Year Ended March 31, 2021 (Audited)
1	Total Income from operations	4,524	4,812	18,878
2	Net Profit for the period (before Tax, Exceptional and/or Extraordinary items)	1,280	1,679	6,159
3	Net Profit for the period before tax (after Exceptional and/or Extraordinary items)	1,280	1,679	6,159
4	Net Profit for the period after tax (after Exceptional and/or Extraordinary items)	1,280	1,679	6,159
5	Total Comprehensive Income for the period [Comprising Profit for the period (after tax) and Other Comprehensive Income (after tax)]	1,280	1,679	6,159
6	Paid up Equity Share Capital	19,260	19,260	19,260
7	Reserves (excluding Revaluation Reserve)	30,690	25,188	28,156
8	Net worth	49,950	44,448	47,416
9	Paid up Debt Capital (including interest accrued thereon)	1,42,617	1,46,204	1,52,877
10	Debt Equity Ratio	2.86 : 1	3.29 : 1	3.22 : 1
11	Earnings Per Share (of face value ₹ 10 each)			
	1. Basic (₹) (*not annualised) 2. Diluted (₹) (*not annualised)	*0.66 : 1 *0.66 : 1	*0.87 : 1 *0.87 : 1	3.2 : 1 3.2 : 1
12	Debenture Redemption Reserve	10,006	10,006	10,006
13	Debt Service Coverage Ratio (refer note g)	NA	NA	1.16 : 1
14	Interest Service Coverage Ratio (refer note g)	1.4 : 1	1.49 : 1	1.47 : 1

Debt Equity Ratio = Debt/Equity, Debt Service Coverage Ratio = Earnings before Interest, Depreciation and Tax / (Interest expense + Principal Repayment), Interest Service Coverage Ratio = Earnings before Interest, Depreciation and Tax / Interest Expense.

Notes:

a) The above is an extract of the detailed format of quarterly / annual financial results filed with the Stock Exchange under Regulation 52 of the LODR Regulations. The full format of the quarter / annual financial results are available on the website of the stock Exchange(s) and the listed entity.

b) For the other line items referred in regulation 52 (4) of the LODR Regulations, pertinent disclosures have been made to the Stock Exchanges(s) BSE and can be accessed on the URL https://www.lntidpl.com/financials/kudgi-transmission-limited/

c) The above results have been reviewed by the Audit Committee and approved by the Board of Directors at its meeting held on October 11, 2021.

d) There were no exceptional items.

e) As per the Ministry of Corporate Affairs notification dated 16th August 2019, Creation of Debenture Redemption Reserve is not required for companies whose debentures are listed in any stock exchange. Hence, the same not be created for the quarter ended September 30, 2021.

f) In terms of clause 52(7A)of the listing agreement, we hereby confirm that there is no material deviation in the use of proceeds of debt securities from the objects specified in the offer document.

g) Debt servicing is only in the month of April in each financial year, hence debt service coverage ratio for the quarters ended 30th September not considered and accordingly have been computed for year ended.
The Debt Service Coverage ratio and Interest Service Coverage ratio are based on the result for the quarter ended June 30, 2021, Half year ended September 30, 2021 and Year ended March 31,2021.The aggregate of accumulated cash and cash equivalents and investments as on September 30, 2021 and March 31, 2021 is ₹305 crore and ₹486 crore respectively and is considered adequate to meet the debt service obligations for the financial year 2021-22.

h) Previous periods / year's figures are regrouped / reclassified, wherever necessary to conform to the classification of current period.

i) The Company's Non-Convertible Debentures have been rated AAA (Stable) by ICRA Limited and CRISIL.

j) The Company is engaged in the business of Power Transmission on build, own, operate and maintain in a single business segment. Hence reporting of operating segments is not required. The Company does not have operations outside India. Hence, disclosure of geographical segment information is also not required.

For and on behalf of the Board of Directors
Kudgi Transmission Limited
P.G.Suresh Kumar
Director
(DIN: 07124883)

Place : Chennai
Date : October 11, 2021

L&T INTERSTATE ROAD CORRIDOR LIMITED

Regd. Office : P.B.No.979, Mount Poonamallee Road, Manapakkam, Chennai - 600 089.
CIN : U45203TN2006PLC058735

STATEMENT OF UNAUDITED FINANCIAL RESULTS FOR THE QUARTER ENDED SEPTEMBER 30, 2021

₹Lakh

Sr.	Particulars	Quarter ended 30.09.2021	Quarter ended 30.09.2020	Year ended March, 31, 2021
		(Unaudited)	(Unaudited)	(Audited)
1	Total Income from Operations	489	658	2,915
2	Net Profit for the period (before Tax, Exceptional items)	(92)	(15)	340
3	Net Profit for the period before tax (after Exceptional items)	(92)	(15)	340
4	Net Profit for the period after tax (after Exceptional items)	(92)	(77)	186
5	Total Comprehensive Income for the period [Comprising Profit for the period (after tax) and Other Comprehensive Income (after tax)]	(92)	(77)	185
6	Paid up Equity Share Capital	5,716	5,716	5,716
7	Reserves (excluding Revaluation Reserve)	(1,207)	(1,218)	(1,051)
8	Net worth	4,509	4,498	4,665
9	Securities Premium Account	-	-	-
10	Paid-up Debt Capital (including interest accrued thereon)	13,137	18,437	15,727
11	Outstanding Redeemable Preference Shares	-	-	-
12	Debt Equity Ratio	2.91:1	4.1:1	3.37:1
13	Earnings Per Share (of face value ₹ 10 each)			
	1. Basic (₹) (* not annualised)	(0.16)*	(0.13)*	0.32
	2. Diluted (₹) (* not annualised)	(0.16)*	(0.13)*	0.32
14	Debenture Redemption Reserve	1,852	1,852	1,852
15	Capital Redemption Reserve	-	-	-
16	Debt Service Coverage Ratio (refer note F)	-	-	0.27:1
17	Interest Service Coverage Ratio (refer note F)	0.68:1	0.96:1	1.23:1

Note:

(a) The above is an extract of the detailed format of Quarterly financial results filed with the Stock Exchanges under Regulation 52 of the SEBI (Listing and Other Disclosure Requirements) Regulations, 2015. The full format of the Quarterly financial results are available on the websites of the Stock Exchange (BSE) in which the company is listed and the entity. (https://www.lntidpl.com/financials/lt-interstate-road-corridor-limited)

(b) For the other line items referred in regulation 52(4) of the LODR Regulations, pertinent disclosures have been made to the Stock Exchanges (BSE) and can be accessed on the URL (https://www.lntidpl.com/financials/lt-interstate-road-corridor-limited)

(c) There were no exceptional items.

(d) Debenture redemption reserve for the current period has not been created in terms of section 71 of the companies Act, 2013 and the rules made there under.(As per ammended rules notified by MCA vide notification dated 16th August 2019)

(e) In terms of clause 52(7A)of the listing agreement, we hereby confirm that there is no material deviation in the use of proceeds of debt securities from the objects specified in the offer document.

(f) The Debt Service Coverage ratio and Interest Service Coverage ratio are based on the result for the Quarter ended September 30, 2021 and Year ended March 31,2021. The aggregate of accumulated cash and cash equivalents and investments as on September 30, 2021 and March 31, 2021 is ₹67.60 crore and ₹108.84 crore respectively and is considered adequate to meet the debt service obligations for the financial year 2021-22.

(g) The Company is engaged in the business of construction, operation and maintenance of Toll road project on a Build Operate Transfer basis in a single business segment. Hence reporting of operating segments is not required. The Company does not have operations outside India. Hence, disclosure of geographical segment information is also not required.

For and on behalf of the Board of Directors of
L&T Interstate Road Corridor Limited
R.G.Ramchandran
Director
DIN : 02671982

Place : Chennai
Date : 11.10.2021

WHEAT SHIPMENT BAN

Export firms cancel deals with domestic traders, brokers

Arrivals at APMCs almost double; private trade quotes above ₹2,100 a quintal

SUBRAMANIRA MANCOMBU
Chennai, May 23

Firms exporting wheat are backing out of contracts in the domestic market following Centre's ban on export, with ITC Ltd being one of those firms declaring *force majeure* for consignments delivered at port locations.

Wheat prices in private trade are quoted above a quintal barring a couple of places. At the agricultural produce marketing committee (APMC) yards, the weighted average modal price (rates at which most trades take place) is at least ₹50 a quintal higher than the minimum support price (MSP) of ₹2,015 fixed for this year.

Unusual development

ITC, in a letter to suppliers and brokers, said purchase contracts with them had been entered for wheat exports from India. But the ban on the grain's export has resulted in a *force majeure* event. "...all our balance contracts with you stands cancelled with immediate effect," the firm said.

An ITC official admitted that it had declared *force majeure*, an unusual development that prevents a person from fulfilling a contract, on its domestic purchase contracts but said it would be difficult to share more details.

A trader who shared the details of the cancellation of contracts said a few others were backing out of their contracts, resulting in trucks loaded with wheat piling up at some places.

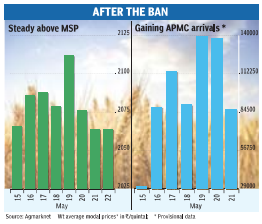
Growers counselled

One trader said companies such as ITC could have used the wheat for its flour manufacturing or even producing bread. An official of a multinational export-import company said wheat consignments, which were banned from exports and the cancelled lots, were of superior quality.

A Mumbai-based exporter said some sort of panic was setting in among growers but they have been counselled to hold back their produce as prices could tend to rule higher during the latter part of the year.

Commerce Ministry officials said they did not have any details of the cancelled contracts in the domestic market.

As a result of these developments, wheat arrivals between May 15, the day after the ban was imposed, and May 22, have almost doubled to 7.59 lakh tonnes (lt) against 3.95 lt during the year-ago period.



Wheat delivery to South

On Monday, the National weighted average modal price was ₹2,081, a four-day high, while arrivals by noon had topped 50,000 tonnes. A New Delhi-based trader said wheat was being delivered in South India at a price above ₹2,300 a quintal.

Though the ban on exports will bring down prices, traders and millers say wheat prices will rule still above the MSP this year. "It is unlikely that mills will be able to source wheat from the Food Corporation of India under the open market sale scheme (OMSS) this year due to low FCI procurement. They will have to buy wheat from the open market for their needs. This will keep prices above MSP," said a New Delhi-based analyst.

The Centre announced the ban on wheat exports as domestic production was feared to be lower than the initial record estimate of 111.32 million tonnes (mt). On May 22, the Ministry of Agriculture revised its estimate to 106 mt.

'Fraudulent' back-dated LCs being submitted for wheat: DGFT

PRABHUDATTA MISHRA
New Delhi, May 23

Pointing out that some fraudulent transactions have come to its notice, the Centre on Monday said it will not allow any wheat for export for which an irrevocable Letter of Credit (LC) has been opened after May 13, the day export was banned by India.

In a trade notice, the Directorate General of Foreign Trade said, "Information has been received from sources that fraudulent backdated LCs showing date of issuance as on or prior to May 13, 2022, are being submitted by some unscrupulous exporters for the issue of RCs. But as per LC's message exchange date between Indian and foreign banks and Swift message show it has been done after May 13."

So, it said both the LC and message exchange date between Indian and foreign banks should be "on or prior to May 13, 2022."

Meanwhile, a ship carrying 32,500 tonnes of Indian wheat arrived at Chittagong port in Bangladesh, while another ship laden with 65,000 tonnes of wheat left Kandla for Egypt during the weekend. This is India's first export to the African nation.

Soyabean output likely to be below Govt estimates: SEA

Industry pegs output at 10 mt against 13.83 mt forecast by Centre

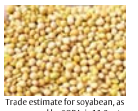
OUR BUREAU
Mangaluru, May 23

The Solvent Extractors' Association (SEA) of India feels that the soyabean crop is likely to be lower at 10 million tonnes (mt) against the government's estimate of 13.83 mt during the current season to June.

Atul Chaturvedi, President, SEA, in his monthly letter to members, said the Union Ministry of Agriculture and Farmers Welfare's third advance estimate for major crops had estimated the oilseeds output at 38.5 mt. It was at 35.95 mt last year.

Stating that these are good tidings, he hoped that oilseed production would continue growing in the coming years. According to the government estimate, the soyabean crop is at 13.83 mt, and the rapeseed seed crop at 11.75 mt.

The trade estimate for soyabean, as announced by SOPA, is 11.9 mt, he said, adding: "But many industry players believe the soyabean crop is much lower at 10 mt as they do not see the pressure of market-arrivals even at the current high price of soyabean."


Trade estimate for soyabean, as announced by SOPA, is 11.9 mt

Crop diversification

Stressing the need for crop diversification, he said the MSP-driven wheat and rice production in Punjab and Haryana has assured a ready market and reasonable returns to the farmers. But this has created huge anomalies and demand-supply mismatch. Mountains of wheat and rice are challenging the country's storage infrastructure.

Urging the need to divert some land in Punjab from wheat/rice cycle to sunflower, maize in kharif season, and to rapeseed/mustard in rabi season, he said: "We have to ensure farmers are suitably incentivised by ensuring better returns and assured market. If we can convince farmers in these north Indian States; "Yellow Revolution" can become a reality."

In this regard, SEA would establish model farms in two districts of Punjab during rabi season to show that crop diversification to rape-mustard seed can be more remunerative than wheat.

On inflation, he said, India's high dependence on imported fuel and edible oil are the primary reason. No country can have fuel security when it depends on to the extent of 85 per cent of its need. Edible oil security is also seriously compromised, with 65 per cent dependence on imports.

Mentioning that there are no quick-fix solutions to combat imported inflation that has been fuelled by easy monetary policies and geo-political issues plaguing the world, he said high prices have resulted in demand destruction to some extent which should help in bringing some sanity back in the markets.

The message of the Prime Minister for working towards aatmanirbharta in fuel and edible oils is now being acted upon in all seriousness by the concerned ministries. The thrust on biofuels, more particularly ethanol, and implementation of National Mission on Oilseeds should go a long way in reducing India's dependence on the world, he said.

MangoPoint gets licence to export to Europe, other countries

First consignment reaches Frankfurt

OUR BUREAU
Chennai, May 23

Chennai-headquartered MangoPoint, a company focused on preserving and promoting high-quality mangoes and mango-based products, announced on Monday that it has acquired rights to export mangoes to Europe.

The company also said it has completed its first consignment in the 2022 season to Germany successfully.

MangoPoint provides a sustainable integrated value chain for mangoes with single-origin, carbide-free, chemical-free, high-quality fresh mangoes and processed mango products through sustainable farming, processing and packaging.


The mangoes have also been exported to the US

Necessary certification

MangoPoint claims that it is the first company in Tamil Nadu to acquire certifications to export fresh mangoes to Europe and other countries. The company said the certifications were approved by the Department of Horticulture, which inspected the farms for good agricultural practices in the orchard, and the National Plant Protection Organisation (NPPO) and Agricultural and Processed Food Products Export Development Authority (APEDA), which inspected the MangoPoint Integrated pack-house facility to approve the preparing, assembling and packing procedures.

"NPPO and APEDA require pack-houses to follow stringent guidelines to meet standard procedures of quality check for export trade of goods to the international market," it added. The company said, MangoPoint's integrated pack-house consists of hot water treatment to sterilise the fruit flies inside the mangoes, mandatory for export to Europe. MangoPoint also sends mangoes to Bengaluru, where they are sent for the irradiation process, mandatory for export to the US.

Bet short on MCX aluminium

COMMODITY CALL

AKHIL NALLAMUTHU
B. Research Bureau

The aluminium futures on the MCX at ₹248 bounced off a key support at ₹225 last week, in line with our expectation. However, the overall trend is still bearish and a decisive breakout of ₹260 can probably change the near-term outlook positive.

Also, note that ₹252 is a resistance and there is a good chance for the contract to resume the downward movement anywhere within the price band of ₹252-260. Should it start falling again as we forecast, it could invalidate the support at ₹225 this time and the contract could even drop towards the crucial level of ₹200. But this is a strong support where it is highly likely that aluminium futures could establish a fresh medium-term uptrend. Given that the probability of fall from the price band of ₹252-260 is high, we suggest traders can consider initiating fresh short positions.



Currently the contract is at around ₹248. Wait for it appreciate to ₹252 and then go short. Initial stop-loss can be placed at ₹268. Once the price drops below ₹225, revise the stop-loss down to ₹245. Further, tighten it to ₹230 when futures drop below ₹200. Liquidate all the shorts at ₹205. Thereafter, fresh trades can be decided based on how the contract reacts to the support at ₹200.

Activated carbon shipments glitter as coconut product exports top ₹3,000 cr

Products helped by surge in gold prices, opening up of mines

V SAJEEV KUMAR
Kochi, May 23

India's coconut and product exports exceeded the ₹3,000 crore mark in the 2021-22 fiscal — up 40 per cent — riding on the comfort of increased shipments of activated carbon. The export figure in 2020-21 was ₹2,295 crore.

Official sources said that 65 per cent of the total exports constituted activated carbon, with the US continuing to be the leading destination with ₹400 crore followed by Germany, Russia, Korea, Netherlands, Belgium, Canada and South Africa. India exported 1.25 lakh tonnes of activated carbon till February. However, the official figures on the exact quantity and value of exports of all coconut products for 2021-22 are yet to be officially announced by the Coconut Development Board.

The global market for activated carbon is likely to touch $4.50 billion in 2028 at a CAGR of 5.4%

Rising acceptance

Joshy Joseph, Director, IndCarb Activated Carbon, Palakkad, said the surge in gold prices and the opening up of gold mines worldwide has facilitated a booming business for activated carbon, a medium used for gold extraction and purification. It is also used to purify air and water due to its high absorption potential for a wide variety of molecules ranging from odorous compounds to carcinogenic impurities. The global market for activated carbon is estimated to touch $4.50 billion in 2028 at a CAGR of 5.4 per cent, with the market returning to the pre-pandemic levels. The activated carbon from India is getting more acceptance in the global markets than the products of other coconut-producing countries such as the Philippines, Indonesia and Sri Lanka, he said.

Besides, the surging business of activated carbon has helped coconut farmers to earn revenue from coconut shells, India's desiccated coconut powder, coconut oil, raw nuts, copra etc. are also having more takers in the export market, especially in West Asian countries.

India will take 4 years to become self-sufficient in bamboo: Zed Black

OUR BUREAU
Chennai, May 23

India will take at least 4-5 years to attain self-sufficiency in bamboo production to meet the needs of the domestic industry, particularly incense (*agarbatti*) sticks manufacturers, says a top official of a leading incense stick brand.

"The National Bamboo Mission was launched only a couple of years ago and it was in 2019 that the Centre encouraged domestic planting of bamboo to make up for the imports. It will take 4-5 years for bamboo plants to grow and achieve self-sufficiency," said Ankit Agrawal, Director, Mysore Deep Perfumery House (MDPH).

MDPH — which is among the top three incense stick manufacturers in the country — markets its products under the brand name Zed Black across the country. Former Indian cricket team captian MS Dhoni and Bollywood actor Hrithik Roshan are its brand ambassadors.


Ankit Agarwal, Director, MDPH

Lack of options

"Currently, 5,000-6,000 tonnes of bamboo are imported every month, while domestic production is hardly 100 tonnes. Our company's demand for bamboo is 200-300 tonnes a month. We continue to import as there are no other options," he said.

MDPH sources bamboo locally to some extent from Assam and Tripura, taking advantage of the bamboo with a paste of charcoal, joss powder (made by crushing the bark of *litsea glutinosa* tree) and sawdust mixed with water in a machine.

Backward integration

"After 2019 when the Centre announced its policy to discourage bamboo imports, we have begun backward integration to produce our own raw incense sticks," Agrawal said.

MDPH had initially sourced the raw incense sticks till 2009-10 before beginning to import bamboo from Vietnam as raw material availability became a problem. Once the Centre took steps to promote bamboo cultivation, it began to buy bamboo locally to encourage domestic production.

On December 26, 2017, the Centre declassified bamboo as a tree and changed its status to grass. It also amended the 1927 Indian Forest Act and deregulated the bamboo trade, which was earlier regulated by State's forest departments.

Modernised units in M.P.

As part of its backward integration, MDPH has been investing in setting up modern manufacturing units near Indore in Madhya Pradesh. It has come up with two new manufacturing units, one at Rampipliya and another at Kshipra village, both near Indore. The greenfield units have added an additional manufacturing space of 5.3 lakh sq ft to the firm's 7 lakh sq ft area.

The Ram Pipliya unit of 3.5 lakh sq ft is the world's largest raw *agarbatti* manufacturing unit. The Kshipra unit has a manufacturing space of 1.8 lakh sq ft. Both plants will help MDPH which employs about 4,000 people with 80 per of it being women, generate 2,000 additional employment opportunities.

Agrawal said the new units will support expansion plans of Zed Black, which is exported to over 40 countries including the US, Australia, Brazil and Chile, and will cater to changing preferences of Indian consumers.

AgroStar opens agriculture advisory centre in Pune

OUR BUREAU
Pune, May 23

AgroStar, a digital farmer network and an end-to-end solutions provider for farmers, opened an agri advisory centre and a quality assurance lab for seeds and fertilisers at its headquarters in Pune.

The agri advisory centre and quality lab were inaugurated by the State Agriculture Commissioner Dheeraj Kumar.

The statement issued by the company said the AgroStar Quality Assurance Lab (AQAL), is part of the research and development efforts and innovation to ensure farmers get the best quality inputs through its platform. The lab is equipped with advanced equipment to conduct seed and fertiliser testing as per ISTA (International Seed Testing Association) protocols and standards. It is operated by a team of highly qualified professionals, including seed technologists, seed analysts, quality control professionals and chemistry quality analysts.

AQAL will carry out tests like physical purity test, moisture test, standard germination test, maintenance of relative humidity, temperature and time to time monitoring of germination samples.

Government of Kerala
Published Tenders from 16-05-2022 to 22-05-2022
Directorate of Technical Education
Tender ID: 2022_DTE_490224_1 * THE PRINCIPAL * Purchase of CYLINDRICAL GRINDING MACHINE and its accessories * Closing Date: 15-Jun-2022 * PAC: Rs1,600000
Visit https://etenders.kerala.gov.in for more details.
Rss.No:16-22/May/2022/PRD(N)14

PPGCL
Regd Office: Shastri Bhawan, B12 & 13, Sector 4, Gautam Buddh Nagar, Noida, Uttar Pradesh-201301
Plant Adress: PO- Lohara, Tehsil-Bara, Prayagraj (Allahabad), Uttar Pradesh-212107
Phone: +91-5247-271480, CIN: U40108UP2007SGC033636
NOTICE INVITING EXPRESSION OF INTEREST
Prayagraj Power Generation Company Limited has invited expression of interest (EOI) from eligible vendors for "Transportation of Coal via direct Rail Mode and Road Cum Rail (RCR) mode from various NCL mines" to its 3 x 660 MW Coal based Thermal Power Plant located at Bara Site, Distt. Prayagraj, Uttar Pradesh, India.
TENDER REFERENCE NO.: CC-FY23-MAPPGCL-Coal Logistics-May 22
Details of pre-qualification requirements, bid security, purchasing of tender document etc., may be downloaded using the URL- https://www.tatapower.com/tenders/tenderDetails.aspx. Eligible vendors willing to participate may submit their expression of interest along with the tender fee for issue of bid document latest by 29th May 2022. Parties who have already submitted their expression of interest need not re-apply.

TATA
TATA POWER
The Tata Power Company Limited
(An Integrated Power Company)
Bohar Reservoir, Station Road, Lonavala, Maharashtra 410 401, Maharashtra, India
(Board Line: 02114-712100) CIN: L28920MH1919PLC000567
NOTICE INVITING EXPRESSION OF INTEREST
The Tata Power Company Limited hereby invites Expression of Interest (EOI) from eligible bidders for participation in following tender:
Sale of Fly Ash and evacuation, transportation and stowing of pond/hydrobin ash from Mathon Power Limited
Tender Ref: CC-FY23-MAPPL-ASH-May 22
For details of pre-qualification requirements, purchasing of tender document, bid security etc., please visit Tender section of our website (URL: https://www.tatapower.com/tenders/tenderDetails.aspx). Eligible bidders willing to participate may submit their EOI along with the tender fee by 30th June 2022, for issue of tender documents.

pricol

PRICOL LIMITED

CIN. L34200TZ2011PLC022194
Regd. Office : 109, Race Course, Coimbatore - 641 018.
Phone : + 91 422 4338000, website : www.pricol.com, e-mail: cs@pricol.com

STATEMENT OF AUDITED FINANCIAL RESULTS FOR THE QUARTER AND YEAR ENDED 31ST MARCH, 2022 (₹ in Lakhs)

PARTICULARS	Standalone				Consolidated			
	For the Three Months Ended		For the Year Ended		For the Three Months Ended		For the Year Ended	
	31-Mar-2022	31-Mar-2021	31-Mar-2022	31-Mar-2021	31-Mar-2022	31-Mar-2021	31-Mar-2022	31-Mar-2021
	Audited	Audited	Audited	Audited	Audited	Audited	Audited	Audited
1. Total Income	39,423.22	43,819.48	1,48,336.90	1,39,781.16	41,580.11	44,725.95	1,55,351.35	1,42,095.30
2. Net Profit / (Loss) before tax , Exceptional and Extraordinary Items	2,628.34	2,676.27	6,875.76	4,651.68	2,726.08	2,433.46	8,027.94	4,849.52
3. Net Profit / (Loss) before tax (after Exceptional and Extraordinary items)	2,628.34	2,676.27	6,875.76	4,651.68	2,726.08	2,433.46	8,027.94	4,849.52
4. Net Profit / (Loss) after tax from continuing operations (after Exceptional and Extraordinary items)	1,677.78	291.44	4,562.46	1,460.21	1,709.66	140.31	5,505.37	1,582.91
5. Profit / (Loss) from Discontinued Operations (Net of Tax Expense)	-	-	-	-	-	-	-	2,566.85
6. Net Profit / (Loss) after tax from Continuing and Discontinued Operations (after Exceptional and Extraordinary items)	1,677.78	291.44	4,562.46	1,460.21	1,709.66	140.31	5,505.37	4,149.76
7. Total Comprehensive Income	1,752.08	146.24	4,504.19	1,473.38	1,890.87	(62.44)	5,700.29	4,209.20
8. Cash Profit from continuing operations	3,679.55	2,345.40	12,394.90	10,568.42	3,880.77	2,214.66	13,884.19	11,061.38
9. Paid-up-Equity Share Capital (Face Value of ₹ 1/- each)	1,218.81	1,218.81	1,218.81	1,218.81	1,218.81	1,218.81	1,218.81	1,218.81
10. Reserves excluding Revaluation Reserves as per Balance Sheet of previous accounting year			55,637.16	51,132.97			56,963.43	51,263.14
11. Earnings per Equity Share for profit / (loss) from Continuing and Discontinued operations (Face Value of ₹ 1/-) in Rupees Basic / diluted	1.38	0.24	3.74	1.34	1.40	0.12	4.52	3.81

Note: The above is an extract of the detailed format of Quarterly / Year ended Financial Results filed with the Stock Exchanges under Regulation 33 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015. The full format of the financial results are available on the Stock Exchange websites www.bseindia.com, www.nseindia.com and Company's website www.pricol.com.

23rd May 2022
Coimbatore

By Order of the Board
VANITHA MOHAN
CHAIRMAN
DIN : 00002168

Kotak Bank acquires agri, healthcare equipment financing portfolio of DLL

'Acquired portfolio will be transitioned in a planned manner over next few months'

SURABHI
Mumbai, July 8

Kotak Mahindra Bank has acquired the agri and healthcare equipment financing portfolio of De Lage Landen Financial Services India (DLL India), a subsidiary of Rabobank-owned De Lage Landen International.

"The operations of DLL India's acquired portfolio will be transitioned to Kotak Mahindra Bank in a planned manner over the next few months," said the bank in a statement, adding that until the transition, the portfolio will continue to be managed by DLL India. It did not disclose the value of the transaction.

The acquisition will help Kotak gain access to over 25,000 customers with a total standard loan outstanding of around ₹582 crore, and a non-performing assets portfolio with a total loan outstanding of around ₹69 crore.

"Kotak Mahindra Bank's acquisition of DLL India's agri and healthcare equipment portfolio reiterates our continued commitment towards a strong presence in this space, and gives us access to a high-quality customer base," said D Kannan, Group President – Commercial Banking, Kotak Mahindra Bank.



The acquisition will help Kotak gain access to over 25,000 customers with a standard loan outstanding of around ₹582 cr

Specialised units

The private sector lender's commercial banking business focusses on meeting the banking and financial needs of customer segments beyond metro and urban centres, with specialised units offering financial solutions for commercial vehicles, construction equipment, tractor and agriculture sector, said the statement.

Abhishek Mudgal, Country Manager, DLL India, said: "In the last nine years of operations in India, we have established an excellent customer base in India.

"We are glad that we are transferring our outstanding portfolio and customer base in India to Kotak Mahindra Bank."

New tech add-ons to motor own damage cover can bring down premiums: Experts

G NAGA SRIDHAR
Hyderabad, July 8

The provision for technology-driven add-ons in motor Own Damage (OD) insurance can lead to better customisation of policies and lower premiums, according to industry experts.

In a significant move, the Insurance Regulatory and Development Authority of India (IRDAI) has permitted general insurers to introduce tech-enabled concepts of 'pay as you drive', 'pay how you drive', and the floater policy for vehicles belonging to the same individual. These would be provided for two-wheelers and private cars as add-ons to the basic policy of motor OD, which, according to Rakesh Jain, CEO of Reliance General Insurance, is a win-win situation created by the IRDAI.

"We, at Reliance General Insurance, introduced similar concepts of Usage and Behaviour-based motor insurance offerings through sandbox products last year. Such models are cost-effective, futuristic and endorse good driving behaviour," he said.

The OD policy coverage, determined as per an individual's tailored coverage, can be based on a customer's driving behaviour patterns, general upkeep, mileage and vehicle usage patterns to offer the best features they need.

"This will do away with the 'standard premium for all' practice and enable customers to avail a premium as per their usage, consumption and other requirements," Jain added.



Changing lifestyles

The decision of the regulator in permitting new add-ons is in line with the changing nature of work and lifestyles in recent years. "It is a welcome move by the regulator, especially at a time when the pandemic has changed the way we work and travel, these add-on covers will definitely appeal to customers who are often working from home, thus making car insurance cost effective for them. Further, this will give lower-mileage drivers more transparency and control over their auto insurance," said Udayan Joshi, President - Underwriting & Reinsurance, Liberty General Insurance.

"Liberty General Insurance has the product concept of 'pay as you drive' under the regulatory sandbox, and is 'excited' about the opportunity given by the IRDAI," he said, adding: "The introduction of add-on covers will act as a catalyst in deepening the penetration of insurance in the country."

"Concepts such as 'pay as you drive' and 'pay how you drive' in motor insurance are quite popular in other markets, although they are yet to take off in a big way in our country," said Subramanyam Brahmajosyula, Head-Underwriting and Reinsurance, SBI General Insurance.

"With the regulator taking a proactive step in encouraging insurance companies to file these add-ons, customers will stand to benefit since it will bring in an element of customisation and flexibility to motor insurance, together with the possibility of lower premiums," he added.

ManipalCigna Health eyes 30% growth

Need for health cover moving from priority to a necessity, says CEO

SURABHI
Mumbai, July 8

Standalone health insurer ManipalCigna Health Insurance continues to remain bullish about growth prospects, and believes the demand for health insurance will not dim with the easing of the Covid-19 pandemic.

"The consumer mindset has changed. Health insurance is moving from a priority to a necessity," said Prasun Sikdar, Managing Director and CEO, ManipalCigna Health Insurance.

"The hope is that given the backdrop of the Covid-19 pandemic and regulatory and government measures, the health insurance industry will continue to grow well. The insurer reported a growth of 30.53 per cent in gross premium underwritten in FY22 to ₹986.18 crore from ₹755.49 crore in FY21. Its gross premium underwritten for the first two months of the current fiscal year grew by 34.26 per cent on a year-on-year basis.


Prasun Sikdar, MD and CEO of ManipalCigna Health Insurance

Sikdar noted that the insurer has a multi-product and a multi-channel distribution model.

"We have created our processes and products to suit digital distribution. Some of the products that we have are flexible enough to ensure that it can provide a sachet kind of insurance for only eyes or dental," he said, adding that the company is working on product and technology innovation in order to partner with digital players for distribution.

over the next couple of years," he said.

Growth momentum

The insurer hopes to continue its growth momentum, and believes it can grow at 30 per cent to 31 per cent in the current fiscal as

CUB, Shriram General Insurance in corporate agency deal

Bank to distribute the insurer's products through 727 branches

OUR BUREAU
Chennai, July 8

City Union Bank (CUB) and Shriram General Insurance, on Friday, signed a corporate agency agreement, wherein the bank will distribute the latter's insurance products through its network of 727 branches across the country.

Under this agreement, Shriram General Insurance will offer personal lines of insurance products such as motor, personal accident, home and travel, along with commercial lines of insurance products such as property, marine and engineering insurance to the bank's customers.

The agreement will help deliver enhanced customer experience by leveraging technology and augmenting the services distributed by the bank, says a release. N Kamakodi, MD & CEO, City Union Bank, told newspersons: "We are of firm belief that this partnership will certainly bring the best of non-life insurance products to our customers."



(from left) S Subhasri, CFO, Shriram Capital; Anil Kumar Aggarwal, MD and CEO, Shriram General Insurance; and N Kamakodi, MD & CEO, CUB, announce the tie-up, in Chennai, on Friday BIJOY GHOSH

IRDAI directive

The Insurance Regulatory and Development Authority (IRDAI) has permitted banks to have tie-ups with three companies each for general insurance, life insurance and health insurance. The bank has now entered in to a tie-up with Shriram Insurance.

Originally, the bank had a tie-up with broking firm, Bharat Re Insurance Brokers (of Shriram Group), to deal with customers and ascertain the risks and claim settlement. However, this is not there anymore. The bank has a tie-up with LIC for life insurance and with Start Health for health insurance.

For general insurance, the bank has now joined hands with Shriram General Insurance, and soon will sign an agreement with Royal Sundaram. For life insurance, along with LIC, the bank will have two more tie-ups — Bajaj and Tata AIG. For health insurance, the bank will have tie-ups with Aditya Birla and Care Insurance.

Of these six tie-ups, four are being signed today and on Monday, and the other two before the month-end, he said.

Anil Kumar Aggarwal, MD & CEO, Shriram General Insurance, said this is a strong relationship with the bank for the future. "Through this tie-up, we will provide the best services to the customers of CUB. By leveraging technology, we will ensure digital, instant, and seamless insurance experience to the bank's urban as well as rural customers," he added.

"Whatever we have done in Shriram General Insurance for small operators, where turnaround time for the claims settlement has reduced to 24 days from one-half-years a decade back, we will replicate the same thing in CUB. It is a win-win situation for both organisations," he said. "By using technology, we want to further reduce the claims settlement to around 20 days," he added.

Buy Now Pay Later products have costs similar to credit cards: Dvara Research

'Many of them also do not have enough safeguards for consumer protection'

SURABHI
Mumbai, July 8

'Buy Now Pay Later' products, which are growing in popularity, have monetary costs similar to those of credit cards, and many of them do not have sufficient safeguards for consumer protection, according to a new research.

"Our findings suggest that customers using BNPL incur monetary costs comparable to costs of using credit cards, and are susceptible to adverse risks emerging from gaps in customer protection," said a recent report by Dvara Research.

Authored by Madhu Srinivas and Srikara Prasad, the report said customers incur different costs that materialise before and after defaulting on BNPL repayments, with APR, or annual percentage rate, between 0 per cent and 36 per cent.



"...we caveat this by saying that a more thorough examination of actual costs based on customers' usage of BNPL products and credit cards over time is warranted," it further said.

The report, titled 'The Cost of Using BNPL Products', studied 10 BNPL providers, including Ola Money Postpaid, Amazon Pay Later, PayTM Postpaid, LazyPay, Unicard, FlexMoney, Zestmoney, Slice, Simpl and Kissht.

RBI scrutiny

The findings come at a time when there is increasing popularity of BNPL products, along with greater scrutiny of digital lending practices by the Reserve Bank of India. The report also highlighted that BNPL providers' terms and conditions are misaligned with key customer protection regulations, contravening key conduct obligations.

Customers are at risk of unknowingly incurring debt, borrowing credit that is unsuitable for them, and being subject to aggressive debt collection practices, it said.

For instance, while most BNPL providers provided a Key Facts Statement (KFS), some do not do so. In some cases where KFS was provided, the KFS omitted key details such as pricing, customer obligations and penalties.

RBI slaps ₹5.72-cr penalty on Federal Bank

Also imposes ₹70 lakh fine on BoI, ₹7.60 lakh on Dhani Loans

OUR BUREAU
Mumbai, July 8

Reserve Bank of India (RBI) has imposed monetary penalties on Federal Bank (₹5.72 crore), Bank of India (₹70 lakh) and Dhani Loans and Services (₹7.60 lakh).

The central bank said it imposed monetary penalty on Federal Bank for non-compliance with the provisions of 'Reserve Bank of India (Financial Services provided by Banks) Directions, 2016,'

The RBI noted its inspection findings (with reference to the bank's financial position as on March 31, 2020) revealed, inter alia, non-compliance with the aforesaid directions to the extent the private sector bank failed to ensure that no incentive (cash or non-cash) was paid to its staff engaged in insurance broking/ corporate agency services by the insurance company. In furtherance to the same, a notice was issued to the bank, advising it to show cause as to why penalty should not be imposed on it for failure to comply with the said directions.

"After considering the bank's reply to the notice and oral submissions made in the personal hearing, the RBI came to the conclusion that the aforesaid charge of non-compliance with the aforesaid RBI directions was substantiated and warranted imposition of monetary penalty, to the extent of non-compliance with such directions," per the statement.

Bank of India

The RBI imposed monetary penalty on BoI for non-compliance with certain provisions of the 'Reserve Bank of India – (Know Your Customer) Direction, 2016' and circular instructions on 'Compliance Function in Banks.'

The central bank observed that its inspection findings (with reference to the bank's financial position as on as on March 31, 2019) revealed, inter alia, non-compliance with the aforesaid directions to the extent the bank failed to allot Unique Customer Identification Code to a large number of customers, and failed to complete the process even within extended timelines.

In furtherance to the same, a notice was issued to the public sector bank advising it to show cause as to why penalty should not be imposed on it for failure to comply with the said directions.

After considering the bank's reply to the notice and oral submissions made in the personal hearing, the RBI came to the conclusion that the charge of non-compliance with the aforesaid directions was substantiated and warranted imposition of monetary penalty, to the extent of non-compliance with such directions, according to the central bank.

Dhani Loans and Services

The central bank said it imposed monetary penalty on Dhani Loans and Services Limited, Gurugram, for non-compliance with the 'Reserve Bank of India (Know Your Customer) Directions, 2016.'

Payment aggregator licence: RBI nod for PineLabs, Stripe, 1Pay and Razorpay

OUR BUREAU
Mumbai, July 8

A number of payment players, including Razorpay, PineLabs, Stripe and 1Pay, are understood to have received in-principle approval from the RBI for payment aggregator licences.

According to sources, a few more companies are likely to get approval in the coming days.

The RBI had, in 2020, issued guidelines on regulation of payment aggregators and payment gateways, under which non-bank PAs would require the central bank's authorisation under the Payment and Settlement Systems Act, 2007.

Such entities had to apply for authorisation, but the RBI had permitted them to continue their operations till they receive communication regarding their application.

A number of companies had applied for these licences.

Forex reserves shrink to $588 b

OUR BUREAU
Mumbai, July 8

India's foreign exchange reserves shrank by a whopping $5 billion to stand at $588.314 billion in the week ended July 1, 2022.

The dip in reserves comes in the backdrop of the Reserve Bank of India's intervention in the forex market to curb depreciation of the rupee against the dollar.

The last time the reserves were around the $588 billion level was in the week ended April 30, 2021.

The dip in reserves in the reporting week came mainly on the back of foreign currency assets declining by $4.471 billion.

FCA comprises multi-currency assets that are held in multi-asset portfolios (investment in securities, deposits with other central banks & BIS, and deposits with commercial banks overseas).

Of the other three components of the reserves, two declined: gold (by $504 million) and special drawing rights ($77 million).

UBI's 'Metaverse Virtual Lounge'

OUR BUREAU
Mumbai, July 8

Union Bank of India has launched the Metaverse Virtual Lounge, 'Uni-verse', and Open Banking Sandbox environment.

Uni-verse will host the bank's product information and videos in the initial phase, according to the public sector bank's statement.

With Uni-verse, customers can roam around the lounge, get information on the bank's deposits, loans, government welfare schemes, and digital initiatives, among others, similar to the real-world scenario, said the bank.

TATA
TATA POWER
The Tata Power Company Limited
(Corporate Contracts Department)
Sahar Receiving Station, Near Hotel Leela, Andheri (E), Mumbai 400 059, Maharashtra, India
(Board Line: 022-67173180) CIN: L28920MH1919PLC000567

CORRIGENDUM

In reference to the advertisement published on 24th May'22 for inviting Expression of Interest (EOI) from eligible bidders for participation in tender for "Sale of Fly Ash and evacuation, transportation and slowing of pond/hydro ash from Mejthon Power Limited, Tender Ref. CC-FY23-W-MPL-ASH-May22,

we have issued the Revised Tender notice with revised PQR for Sale of Fly Ash (only). For Disposal mode the above-mentioned tender remains unchanged. Parties interested in sale of Fly Ash may refer revised Tender notice available at our website as mentioned below.
Revised Tender Reference No. for Sale of Fly Ash Tender - CC-FY23-W-MPL-ASH-Sale-July'22
For details of pre-qualification requirements, purchasing of tender document, bid security etc., please visit Tender section of our website (URL: https://www.tatapower.com/tenderfeed/get.aspx). Eligible bidders willing to participate may submit their EOI along with the tender fee by 12th July 2022, for issue of tender documents.
Note- Bidders submitted Tender Fee for original tender need not to submit Tender fee again.

TATA
TATA POWER
(Corporate Contracts Department)
The Tata Power Company Limited, 2nd Floor, Sahar Receiving Station
Sahar Airport Road, Andheri East, Mumbai-400059
(Board Line: 022-67173180) CIN: L28920MH1919PLC000567

NOTICE INVITING TENDER (NIT)

The Tata Power Company Limited invites tenders from eligible vendors for the the following package (Two Part Bidding).

1) Design, engineering, manufacturing, factory testing, deliver to site, unloading on site foundation, obtaining statutory approvals, installation, testing and commissioning of 2 nos of ICTs at Vikhroli R/s in Mumbai (Package Reference:CC/23/VM/35).

For detailed NIT, please visit Tender section on website https://www.tatapower.com/tenderfeed/ Bidders to submit Tender Fee and Authorization Letter up to 1500 hrs. Monday, 18th July 2022. Also, all future corrigendum (if any), to the above tenders will be informed on Tender section on website https://www.tatapower.com only.

Lambodhara Textiles Limited
CIN: L17111TZ1994PLC004928
Registered Office: 3A, B-Block, Pioneer Apartments 107-B, Avinashi Road Coimbatore - 641018
Website: www.lambodharatextiles.com ; Telephone No.(0422) 2249038;
Email: info@lambodharatextiles.com;

NOTICE

Notice is hereby given to the shareholders of the Company pursuant to Rule 6 of the Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Rules, 2016 as under:
In accordance with Section 124(6) of the Companies Act, 2013 read with amended provisions of Rule 6 of the Investor Education and Protection Fund (Accounting, Audit, Transfer and Refund) Rules, 2016, effective from September 07, 2016, all the shares in respect of which the dividend has not been claimed / paid for 7 consecutive years or more are liable to be transferred to the IEPF account. Hence, the shareholders may note that all the shares in respect of which the dividend has not been claimed / paid for 7 consecutive years since the FY 2014-15 are liable to be transferred to the Investor Education and Protection Fund Authority (IEPFA) account as per the said rules.
The Company has sent individual notices on 07.07.2022 through registered post to the concerned shareholders whose dividends are lying unclaimed / unpaid since 2014-15, advising them to claim their dividend amounts expeditiously.
The statement containing the details of name, address, folio number / demat account number and number of shares liable for transfer to IEPF account is made available in our website www.lambodharatextiles.com for necessary action by the shareholders.
The concerned shareholders, holding shares in physical form and whose shares are liable to be transferred to IEPF account, may note that the company would be issuing duplicate share certificate in lieu of original share certificate held by them for the purpose of transfer of shares to the IEPF account as per the rules and upon such issue, the original certificates which are registered in their name will stand automatically cancelled and to be deemed non-negotiable.
The shareholders are requested to contact M/s. S.K.D.C. Consultants Limited, Surya 35, Mayflower Avenue, Behind Senthil Nagar, Sowripalayam Road, Coimbatore - 641028, Registrar & Share Transfer Agent to claim their dividend(s) which is lying unclaimed / unpaid since 2014-15. In case, the Company does not receive any valid communication from the concerned shareholders within three months from the date of this notice, the Company shall transfer such shares to the IEPF account as per the rules.
The shareholders may note that they can claim back both the unclaimed dividend and the shares including all benefits accruing on such shares, if any, by making separate application to the IEPF Authority, in the prescribed Form IEPF-5, as stipulated under the said Rules and the same is available at IEPF website i.e., www.iepf.gov.in
For any further queries / clarification on the above subject matter, the shareholders may contact M/s. S.K.D.C. Consultants Limited, Registrar & Share Transfer Agent of the Company at Surya 35, Mayflower Avenue, Behind Senthil Nagar, Sowripalayam Road, Coimbatore - 641028, Phone: +91 422 4958995 / 2539835-836 | Fax: +91 422 2539837, Email: info@skdc-consultants.com.

For Lambodhara Textiles Limited
Sd/- Ramesh Shenoy Kalyanpur
Whole-Time Director cum Chief Financial Officer
DIN: 06392237

Place : Coimbatore
Date : 09.07.2022

indi trade

INDITRADE CAPITAL LIMITED
CIN: L67120KL1994PLC008265
Reg. Office: Second Floor, M E S Building, Kaloor, Kochi, Ernakulam, Kerala 682017
E-mail ID: inditrade@inditrade.com Website: www.inditrade.com
Ph: 0484 6714800

NOTICE TO THE MEMBERS OF THE COMPANY FOR THE 28TH ANNUAL GENERAL MEETING

Dear Members,

1. Notice is hereby given that the 28th Annual General Meeting ('28th AGM') of Inditrade Capital Limited ('the Company') will be held on **Tuesday, 2nd August, 2022 at 10.30 A.M.** (IST) through Video Conferencing ('VC')/Other Audio Visual Means ('OAVM') in compliance with all the applicable provisions of the Companies Act, 2013 ('the Act') and the Rules made thereunder and the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 read with the Ministry of Corporate Affairs ('MCA') General Circular dated 5th May, 2022 and SEBI Circular dated 13th May, 2022 and other relevant circulars previously issued by the MCA/SEBI, to transact the businesses set out in the Notice calling the 28th AGM.
2. In compliance with the aforesaid circulars, the Notice of the 28th AGM along with the Annual Report of the Company for the financial year 2021-22 is being sent only through electronic mode to all those **Members, whose e-mail addresses are registered with the Company's Registrar and Share Transfer Agent ('RTA') or Depository Participants (DPs). Members can attend and participate in the 28th AGM through the VC/OAVM facility ONLY.** The detailed instructions with respect to such participation and the remote electronic voting/e–voting system during the 28th AGM will be provided in the Notice convening the 28th AGM. The attendance of the Members attending the 28th AGM through VC/OAVM will be counted for the purpose of quorum under Section 103 of the Act.The Notice of the 28th AGM and the Annual Report will also be made available on the website of the Company i.e., www.inditrade.com and on the website of BSE Limited i.e., www.bseindia.com and Central Depository Services (India) Limited (CDSL) website i.e., www.evotingindia.com.
3. Members whose e-mail addresses are not registered with the RTA/DPs can register the same for obtaining login credentials for e-voting for the resolutions proposed in this Notice in the following manner:
   - **For Members holding shares in physical mode-**Please provide necessary details like Folio No., Name of the shareholder(s), scanned copy of the share certificate(s) (front and back), self-attested scanned copy of PAN card and Aadhar Card by e-mail to maya.menon@inditrade.com.
   - **For Members holding shares in Demat mode-**Please update your e-mail address and mobile no. with your respective DP at the earliest. This is mandatory while e-voting and joining virtual meetings through the Depository.

The above information is being issued for the benefit of all the Members of the Company and in compliance with the relevant circulars issued by MCA and SEBI.

By order of the Board
For **Inditrade Capital Limited**
Sd/-
Maya Menon
Company Secretary and Compliance

Place : Kochi
Date : 9th July, 2022

Kumar Rabish

From: Mondal Priya Ranjan
Sent: 07 May 2022 17:11
To: Jamal Arif
Subject: FW: Service Life(LCCA) of CT Fills & Drift Eliminator

From: SUBRATA MALAKAR <subrata.malakar@mmaqua.in>
Sent: 06 May 2022 16:18
To: Upadhyay Avijit <avijit.upadhyay@tatapower.com>
Cc: Mondal Priya Ranjan <prmondal@tatapower.com>; KRISANU BHAUMIK <krisanu.bhaumik@mmaqua.in>; RAJ KUMAR DUTTA <raj.dutta@mmaqua.in>; AMAN KUMAR <aman.kumar@mmaqua.in>; MM AQUA <hoctg@mmaqua.in>
Subject: Re: Service Life(LCCA) of CT Fills & Drift Eliminator

[EXTERNAL sender, Exercise caution..!]

Dear Sir

It refers to the trailing email. In continuation with the same please find below our confirmation.

Ideally the useful working life of MM AQUA fills are about 8 years for optimum performance. However as is the case with all fills it depends upon deterioration of fill conditions due to other factors and parameters like

1. Weight Gain of the Fills which is directly related to TSS and Bacteria count in the recirculating water. Higher the weight gain faster the deterioration, performance and life of fills.
2. Handling of fills during routine maintenance work like change of nozzles and change or rearrangement of Drift Eliminators.
3. Covering of fill areas during gearbox and fan maintenance as any oil or grease leakage to the fill will create most suitable zone for clogging.
4. Operation of Cells, if cells are closed and operated intermittently then moisture remains in the fill and clogging rate is drastically increased. So ideally the fan should be operated dry for some time before closing so that all moisture is more or less removed.
5. Broken or dislodged nozzles, the huge continuous force of the water where nozzles are fallen can damage fills.
6. Poor distribution - areas of low water distribution can cause increased rate of clogging.

So, the actual life of fill will depend on all above parameters and will vary from plant to plant.

Thanks & regards,

Subrata Malakar

MM Aqua Technologies Limited

Formerly Munters India Ltd.

Kolkata regional office | 147, Block G, New Alipore | Kolkata - 700 053 | West Bengal | India
E Mail : subrata.malakar@mmaqua.in | Tele :+91 33 3001 9000 | **Mobile: +91 90514 98537**

Web : www.mmaqua.in

From: Upadhyay Avijit <avijit.upadhyay@tatapower.com>
Sent: 06 May 2022 11:03
To: Hoctg Mmatl <hoctg@mmaqua.in>; SUBRATA MALAKAR <subrata.malakar@mmaqua.in>
Cc: Mondal Priya Ranjan <prmondal@tatapower.com>
Subject: Service Life(LCCA) of CT Fills & Drift Eliminator

CAUTION: This email originated from outside of the organization. Do not click LINKS or open attachments unless you recognize the sender and know the content is safe.

Dear Sir,
As per our phonic discussion please, share Service Life of MM Aqua Make CT Fills & Drift Eliminator.

Regards,
Avijit Kumar Upadhyay
Lead Engineer - Mechanical Maint.
Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
Tel: 9204757812 Mobile: 9204757812

Disclaimer:- Information contained and transmitted by this email is confidential and proprietary to The Tata Power Company Ltd. and is included for use only by the addressee. If you are not the intended recipient, you are notified that any dissemination or copying of this email or contents therein is strictly prohibited. If this message is not intended for you, then you are requested to delete this email immediately and notify the originator.

Kumar Rabish

From: Dhirendra Kumar <dkram@bhel.in>
Sent: 30 January 2024 14:33
To: Mondal Priya Ranjan
Cc: Choudhury Jayashree; kumarsaurabh@bhel.in; 'amresh'
Subject: FW: Request to Update TG Bearings Delivery against PO5500009762 at Maithon Power Ltd

[EXTERNAL sender, Exercise caution..!]

Dear Sir,

Please see the status of materials.

सादर/ Regards

धीरेंद्र कुमार राम/Dhirendra Kumar Ram
पा.से. - एस.एस.बी.जी., पटना / PS-SSBG, Patna
0612-2233027, 09955990955

From: Kumar Saurabh [mailto:kumarsaurabh@bhel.in]
Sent: 24 January 2024 15:27
To: dkram@bhel.in
Cc: tanay@bhel.in; 'Ashok Kumar' <ashokk@bhel.in>; amresh@bhel.in; 'nch' <nch@bhel.in>
Subject: FW: Request to Update TG Bearings Delivery against PO5500009762 at Maithon Power Ltd

Dear Sir,
Please find the PDC for below mentioned items.

Customer	PO Number	POSl	Ref. No	Check No	Description	ORD-QTY	QtyBal
MAITHAN POWER	PO :5500009762 dt 19/10/2023	70	HW-165.22	2231078/6	JOURNAL BRG 1,	1	
MAITHAN POWER	PO :5500009762 dt 19/10/2023	40	HW-165.27	2231078/4	JOURNAL BRG 4,	1	
MAITHAN POWER	PO :5500009762 dt 19/10/2023	50	HW-165.60	2231078/5	JOURNAL BRG 3	1	
MAITHAN POWER	PO :5500009762 dt 19/10/2023	20	HW-297.68	2231078/2	JOURNAL BRG 6	1	
MAITHAN POWER	PO :5500009762 dt 19/10/2023	30	HW-297.68	2231078/3	JOURNAL BRG 5	1	
MAITHAN POWER	PO :5500009762 dt 19/10/2023	10	HW-297.69	2231078/1	EXCITER BRG 7,	1	

Regards,

Kumar Saurabh
Manager/Commercial
BHEL, HERP,Varanasi
TEL -0542-2720-887/ 8874205720

From: Dhirendra Kumar [mailto:dkram@bhel.in]
Sent: 23 January 2024 17:18
To: kumarsaurabh@bhel.in
Cc: nch@bhel.in; 'amresh' <amresh@bhel.in>
Subject: FW: Request to Update TG Bearings Delivery against PO5500009762 at Maithon Power Ltd

Dear Sir,

PO no. 5500009762

Kindly share the latest status of materials.

Regards,

D K RAM
BHEL-SSBG-Patna

From: Mondal Priya Ranjan [mailto:prmondal@tatapower.com]
Sent: 23 January 2024 14:10
To: D K RAM <dkram@bhel.in>
Cc: Chatterjee Subhra <subhrac@tatapower.com>; Choudhury Jayashree <choudhuryj@tatapower.com>; Rani Sapna <sapna.rani@tatapower.com>
Subject: RE: Request to Update TG Bearings Delivery against PO5500009762

Dear Sir,
Please update the despatch plan.

Regards,
Priya Ranjan Mondal
Group Head - MMD, MPL
Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
Tel: 09204652861 Mobile: 9204652861

From: Mondal Priya Ranjan
Sent: 09 January 2024 10:37
To: D K RAM <dkram@bhel.in>
Cc: Chatterjee Subhra <subhrac@tatapower.com>; Choudhury Jayashree <choudhuryj@tatapower.com>
Subject: RE: Request to Update TG Bearings Delivery against PO5500009762

Dear Sir,
Kindly update the despatch status.

Regards,
Priya Ranjan Mondal
Group Head - MMD, MPL

Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
Tel: 09204652861 Mobile: 9204652861

From: Mondal Priya Ranjan
Sent: 30 December 2023 11:11
To: D K RAM <dkram@bhel.in>
Cc: Chatterjee Subhra <subhrac@tatapower.com>; Choudhury Jayashree <choudhuryj@tatapower.com>
Subject: Request to Update TG Bearings Delivery against PO5500009762

Dear Sir,
Request to please update about despatch details of TG Bearings ordered under PO-5500009762
As communicated earlier also, these items are required on urgent basis under our Capex project.

Regards,
Priya Ranjan Mondal
Group Head - MMD, MPL
Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
Tel: 09204652861 Mobile: 9204652861

Disclaimer:- Information contained and transmitted by this email is confidential and proprietary to The Tata Power Company Ltd. and is included for use only by the addressee. If you are not the intended recipient, you are notified that any dissemination or copying of this email or contents therein is strictly prohibited. If this message is not intended for you, then you are requested to delete this email immediately and notify the originator.
Follow us on :

इलेक्ट्रॉनिक ट्रांसमिशन संदेश- ई-मेल के लिए डिस्क्लेमर

इस इलेक्ट्रॉनिक ट्रांसमिशन संदेश में दी गई जानकारी अर्थात ई-मेल और इस इलेक्ट्रॉनिक संदेश के साथ प्रेषित कोई अटैचमेंट केवल प्रेषिती (प्रेषितियों) के उपयोग के लिए है और इसमें व्यक्ति विशेष के लिए, गोपनीय या विशेष रूप से अधिकृत जानकारी हो सकती है। यदि यह जानकारी आपके लिए नहीं है तो आपको इस ई-मेल को प्रसारित, वितरित या कॉपी न करें। यदि आपको यह संदेश गलती से मिला है, तो आपको इस संदेश को नष्ट करना चाहिए और ई-मेल द्वारा प्रेषक को सूचित कर दें।

ई-मेल ट्रांसमिशन सुरक्षित या त्रुटिरहित होने की गारंटी नहीं है, क्योंकि जानकारी ट्रांसमिशन के दौरान अवरुद्ध हो सकती है, विकृत हो सकती है, खो सकती है, नष्ट हो सकती है, देर से या अपूर्ण रूप में पहुंच सकती है, या वायरस से ग्रस्त हो सकती है। इसलिए, ई-मेल और इसकी विषय-वस्तु (निर्दिष्ट त्रुटियों के साथ या उनके बगैर) की जिम्मेवारी ई-मेल तैयार करने वाले / प्रेषक या बीएचईएल या उसके सहयोगियों की नहीं होगी। इस ई-मेल में उल्लिखित विचार या राय, यदि कोई हो, प्रेषक के ही हैं। यह आवश्यक नहीं है कि ये बीएचईएल या इसकी सहयोगी कंपनियों के विचार या राय के साथ मेल खाएं। लक्षित प्राप्तकर्ता ई-मेल या

इसकी विषय-वस्तु पर कार्रवाई करने से पहले वैकल्पिक संचार तंत्र के माध्यम से जानकारी या निहितार्थ को सत्यापित करवा सकते हैं।

चेतावनी: यद्यपि कंपनी ने यह सुनिश्चित करने के लिए कि इस ई-मेल में कोई वायरस मौजूद नहीं हो, काफी सावधानी बरती है, फिर भी प्राप्तकर्ता यह जाँच कर लें कि इस ई-मेल और इसके अटैचमेंट्स में वायरस न हों। इस ई-मेल द्वारा संक्रामित किसी वायरस के कारण होने वाली किसी क्षति के लिए ई-मेल का प्रेषक या बीएचईएल जिम्मेदार नहीं हैं।

Disclaimer for the Electronic Transmission Message- E-mail

The information contained in this Electronic Transmission Message i.e. E-Mail and any attachments to this electronic message are intended for the exclusive use of the address(s) and may contain proprietary, confidential or privileged information. If you are not intended recipient, you should not disseminate, distribute or copy this e-mail. If you have received this message in error, you should destroy this message and may please notify the sender by email.

E-mail transmission is not guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or may contain virus in transmission. The E-mail and its contents (with or without referred errors) shall therefore not attach any liability on the originator/sender of message or BHEL or its affiliates. Views or opinions, if any, presented in this e-mail are solely those of the sender and may not necessarily reflect the views or opinions of BHEL or its affiliates. Intended recipients(s) may like to verify the information or intended meaning through alternate communication mechanism before taking action on the E-mail or its contents.

WARNING: Although the company has taken reasonable precaution to ensure no viruses are present in this email, the recipient should check this email and any attachments for the presence of virus. The sender of the mail or BHEL accepts no liability for any damage caused by any virus transmitted by this email.

Mettler-Toledo GmbH
Analytical

Heuwinkelstrasse 3
8606 Nänikon, Switzerland
P.O.Box Analytical
Phone: +41-44-944-22-11

www.mt.com

Date September 08th, 2022
Reference 20220908
E-mail Erik.Gubler@mt.com

Official Retirement T50, T70, T90, V20, V30, C20, C30 and G20 Titrators

Dear customer,

Seven years after the discontinuation of our products: Excellence T50, T70, T90 and Compact G20, V20, V30, C30 and C20 in 2016 and according to our official spare parts policy, the supply of spare parts for these models will be terminated. The last order date is the 31.12.2022.

Please contact your local representative for more information about this topic, or to receive an update on our current products and solutions for your laboratories. You can also visit our website www.mt.com/Titration for more information about the new titrator models.

We take the opportunity to thank you very much for your confidence in METTLER TOLEDO products.

Yours sincerely,

Erik Gubler
Product Manager, SPG Titration

Simon Taylor
Marketing Manager, SPG Titration

Yvonne Appoldt
Head, SBU Anachem

METTLER TOLEDO

Chemical Laboratory Equipment

FY-25		FY-26		FY-27	
Instruments	Qty (EA)	Instruments	Qty (EA)	Instruments	Qty (EA)
Lube Moisture Analyser	2	Transformer Oil Dissolved gases Analyser	1	Ion Chromatograph (IC)	1
Chemical Oxygen Demand Digester	1	Biochemical Oxygen Demand Incubator	1	Thermo Gravimetric Analyser (Coal)	1
pH Meter (Portable)	1	High Temperature Furnace	1		
Conductivity Meter (Portable)	1				

MAITHON POWER LIMITED

C&I Laboratory Equipment

Detailed BOQ & BOM

Bill of Material for Calibration Lab equipment:

1.1- DESIGN, MANUFACTURING & SUPPLY OF PRESSURE TEST BENCH OF SIZE- 1 SET
1.2- AUTOMATIC PRESSURE CONTROLLER-1SET
1.3- MULTIFUNCTION CALIBRATOR WITH HART COMMUNICATION, -1SET
1.4- PRESSURE/VACUUM GENERATION1.5- HYDRAULIC DEAD WEIGHT TESTER WITH DUAL RANGE OF 1 TO 60 AND 10 TO 700 KG/CM2 -1SET

1.6- HYDRAULIC PRESSURE COMPARATOR - (MEDIUM: OIL) - RANGE: 0 TO 1200 BAR, PRESSURE TRANSMISSION MEDIUM: HYDRAULIC OIL,-1SET

1.7- HYDRAULIC PRESSURE COMPARATOR (WATER MEDIUM),
RANGE: 0 TO 1000 BAR, SPECIFICATIONS: PRESSURE TRANSMISSON MEDIUM: WATER-1SET

1.8- DIGITAL TEST PRESSURE GAUGE WITH DATA LOGGING FACILITY, RANGE: (-1
TO 400) BAR,
QTY- 02 NO'S,

1.9- FIXED DC POWER SUPPLY -1SET

1.10- VARIABLE AC POWER SUPPLY-1SET

1.11- VARIABLE DC POWER SUPPLY-1SET

1.12- SUITABLE USER-FRIENDLY SOFTWARE FOR MULTIPOINT AUTOMATIC/MANUAL
CALIBRATION TO BE PROVIDED WITH ORIGINAL LIFETIME LICENSED INSTALLATION
CDs

1.13- MASTER GAUGES OF DIFFERENT RANGES- 10 QTY

2- TEMPERATURE & ELECTRICAL TEST BENCH CONSISTS OF FOLLOWING ITEMS.

2.1- DESIGN, MANUFACTURING & SUPPLY OF TEMPERATURE & ELECTRICAL TEST
BENCH-1AET

2.2- MULTIFUNCTION CALIBRATOR WITH INBUILT HART COMMUNICATOR-1SET

2.3- DIGITAL MULTIMETER WITH 10 CHANNEL DATA LOGGING FACILITY-1SET

2.4- FUNCTION GENERATOR-1 SET

2.5- SOLDERING & DE-SOLDERING STATION- QTY- 02 SET,

2.6- DRY BLOCK TEMPERATURE CALIBRATOR OF DIFFERENT RANGES QTY- 03 SET.

2.7- STANDARD THERMOCOUPLE -RANGE: 0 TO 1300°C, QTY- 02 SET

2.8- STANDARD RTD, RANGE: -70 TO 650 °C, QTY- 02 SET

2.9- TEMPERATURE CALIBRATOR, QTY- 01 SET

2.10- LABORATORY PC-2 SET

3.1- PORTABLE MULTIFUNCTION CALIBRATOR WITH EXTERNAL SENSOR AND HAND
PUMP QTY- 01 SET

3.2- PORTABLE UNIVERSAL CALIBRATOR FOR FOLLOWING- QTY- 01 SET,

3.3- PORTABLE HART COMMUNICATOR-1 SET

3.4- PORTABLE MULTIMETER- 4 Qty

3.5- CLAMP METER-4 Nos

3.6- DECADE RESISTANCE BOX, QTY- 02 SET

A: Obsoletion letter/End f Service life from OEM

KRISHNA BELTS PVT. LTD.
Manufacturers of : Conveyor Belts, Rubber Sheets & Belt Jointing Materials

Regd. Off. & Works :
Village : Khapa Karimwar (Satnoor), Tehsil : Sausar
Dist. : Chhindwara (M.P.) - 480 108, India
Phone : 089660 00917
E-mail : krishna@beltindia.com
Website : www.krishnabelts.com
CIN : U25192MP2007PTC019904

Ref No: - KBPL/2023-24/Q/0774Rev **Date:05/01/2024**

To,
M/s Maithon Power Ltd.
(A Joint Venture Company of Tata Power & DVC)
Works: Villàge Dambhui, P.O. Barbindia,
P.S. Nirsa, District Dhanbad 828 205,
Jharkhand, India

Kind Attn: **Mr. Mukesh Kumar**
Subject: - **Budgetary offer for Supply of Conveyor Belt.**
Ref.:- **Your Mail dt.22.12.23**

Dear Sir,
With reference to the above subject, we are pleased to quote our lowest rate as under:

SI. No	DESCRIPTION	RATE (IN Rs. Per Mtr.)
1.	CONVEYOR BELT- SIZE -1400 MM WIDTH, FABRIC RATING – 1000/4, NO OF PLIES -4, TOP-5 MM, BOTTOM-3MM,FABRIC – NN, CUT EDGE, GRADE – M24,BELT THICKNESS -14.90MM+/-10% MAKE- KRISHNA	4925.00
2.	CONVEYOR BELT- SIZE -1400 MM WIDTH, FABRIC RATING – 1000/4, NO OF PLIES -4, TOP-5 MM, BOTTOM-3MM,FABRIC – NN, CUT EDGE, GRADE – FR, BELT THICKNESS -14.90MM+/-10% MAKE- KRISHNA	5050.00
3.	CONVEYOR BELT- SIZE -1400 MM WIDTH, FABRIC RATING – 630/3, NO OF PLIES -3, TOP-5 MM, BOTTOM-3MM,FABRIC – NN, CUT EDGE, GRADE – M24,BELT THICKNESS -12MM+/-10% MAKE- KRISHNA	4300.00
4.	CONVEYOR BELT- SIZE -1400 MM WIDTH, FABRIC RATING – 630/3, NO OF PLIES -3, TOP-5 MM, BOTTOM-3MM,FABRIC – NN, CUT EDGE, GRADE – FR,BELT THICKNESS -12MM+/-10% MAKE- KRISHNA	4400.00

Terms & Conditions:-
1) Delivery: - Within 20 weeks after receipt of confirmed order.
2) Rate: - F.O.R. destination.
3) GST :- Extra IGST @18%.
4) HSN Code:- 40101290
5)**GST No. :- 23AADCK1959L1ZC**
6) Payment: - Within 30 days from the date of receipt of material at your end and the submission of bill.
7) Warrantee:- 12 months from date of fitment or 18 months from the date of supply ,whichever is earlier.Any deficiency due to faulty workmanship will be rectified / replaced.
8) Belt Life :- For coal, the expected life for the belt may be minimum 5 years.
9) Transit Insurance in your scope.
10) Tolerance in length: As per IS1891 tolerance is +2% ,-0.5%.
11) Validity:-15 Days from the date of offer.

We hope you will find our offer in line with your requirement and favour us with your valued order.

Thanking you,

Yours faithfully,
For **KRISHNA BELTS PVT. LTD.**

KRISHNA BELTS PVT. LTD. K SATNOOR

05.01.24

Ashish Pandey
Website : www.krishnabelts.com
Email : krishna@beltindia.com
Mob : 8966000917/7447799208

EXIDE
Exide Industries Limited
Regional Sales Office
6A, Hatibagan Road, Entally
Kolkata - 700 014
Phone : 2286-1860 / 6193
2286-6158 / 59
Fax : 91 (033) 2289-7455

Ref.: MPL/JLP/04
Dt. 20.04.2023

Maithon Power Limited
Vill.: Dambhui, P.O.: Babindia.
Dist.:Dhanbad, Pin : 828205.

Kind Attn.: Mr. S. N. Ghosh (Lead Engg.-E/M)

Dear Sir,

Sub.: Report on Health Survey of Battery Banks.

This has reference to your E-mail dtd.8th April'23 and visit of our representative to your plant on 14th April'23 in connection to the above job.

Our Observations are as under:

(1) Battery Type : 108LMLA-T-2000HDP

Location: 220V Stn. Battery Bank-1 (U#1).
Yr. of Installation: 2009.
Condition of the Battery Bank:
(a) Majority of cells in Service have bulged.
(b) Crack on sealing compound was noticed in 80%.
(c) 03 nos. are in deep discharged condition (Sl. No.39,45 & 60) and Cell Voltages are low in 14 nos. under Float Condition(Sl.No.22,26,37,53,54,57,58,63, 67, 68,81,83,86 & 93)
Recommendation: Battery Bank is completing its Service Life. You may plan for replacement of the battery bank with a new battery bank.

(2) Battery Type : 108LMLA-T-2000HDP

Location: 220V Stn. Battery Bank-2 (U#1).
Yr. of Installation: 2009.
Condition of the Battery Bank:
(a) Majority of cells in Service have bulged.
(b) Crack on sealing compound was noticed in 80%.
(c) Cell No.34 is lagging and Voltage of 11 nos. are low under Float Condition (Sl. No.: 1,5,19,20,22,41,43,48,54,65,80).
Recommendation: Battery Bank is completing its Service Life. You may plan for replacement of the battery bank with a new battery bank.

…….contd.

(3) Battery Type : 108LMLA-T-2000HDP
Location: 220V Stn.Battery Bank-1(U#2)
Yr. of Installation: 2009.

Condition of the Battery Bank:

(a) Majority of cells in Service have bulged.
(b) Crack on sealing compound was noticed in 80%.
(c) Cell No.40 is lagging and Cell Voltages under Float condition are inconsistent and Voltage of 06 nos. are low under Float Condition (Sl. No.: 22, 39,49,50,53 & 64).

Recommendation: Battery Bank is completing its Service Life. You may plan for replacement of the battery bank with a new battery bank.

(4) Battery Type : 108LMLA-T-2000HDP
Location: 220V Stn. Battery Bank-2 (U#2).
Yr. of Installation: 2009.
Condition of the Battery Bank:

(a) Majority of cells in Service have bulged.
(b) Crack on sealing compound was noticed in 80%.
(c) Crack noticed on the container of Cell No.54.
(d) Cell No.84 & +93 are in deep discharged state due to internal Short circuit.
(e) 17 nos. are lagging by voltage(Sl. No.: 20,34,35,38,44,45,52,53,60,61,62,65,67,74 76,104& 108)
(f) Sp. Gr. is low in 20 Nos.(7,11,20,34,35,38,44,45,52,53,60,61,62,65,67,74,76,90, 104 & 106)

Recommendation: Battery Bank is completing its Service Life. Present condition of the Battery Bank is not satisfactory. You may plan for replacement of the battery bank with a new battery bank.

A record of the Voltage and Specific Gravity of all Cells in Service measured and recorded during Survey is attached for your ready reference.

Yours faithfully
For Exide Industries Limited

J. L. Pradhan
Zonal Service In charge –Indl. (P&P-East)

9.6 LIFE EXPECTANCY OF VACUUM INTERRUPTER :

The vacuum interrupters used may not need replacement for the expected service life of circuit breaker. However, the vacuum interrupter may require replacement on applications with high frequency of operations. The life expectancy (Number of make-break operation) of interrupters is a function of breaking current. It is generally as high as 20,000 for switching at rated current and 100 for switching rated at max fault current. As it is not feasible to ascertain the fault current switched, the guideline for site staff to change the vacuum interrupter is provided by contact erosion mark. The permissible contact erosion is 3 mm for all interrupters and the interrupter must be changed after the erosion mark has reached the limit.

9.7 INSPECTION OF CONTACT EROSION :

A contact wear erosion mark (Red line/Stray mark) is painted on the stem of vacuum interrupter. The base of this mark is 3 mm outside the guide bush in breaker closed condition and this gap will gradually diminish with successive switching. The contact wear is still within permissible limit as long as this mark can be seen when the breaker contacts are closed.

9.8 CHANGE OF VACUUM INTERRUPTER :

Refer Fig.13. To change the vacuum interrupter following procedure shall be adopted.

1. Open and isolate the circuit breaker.
2. Disconnect AC/DC supply to motor and coils.
3. Discharge closing spring using manual push button (Green) and then trip the breaker using manual push button (Red).
4. Dismantle terminal calmp (77).
5. Disengage pin (78) from eyebolt after removing circlip.
6. Open top bolt (79) available in top pole head.
7. Do not change position of eye bolt of the interrupter..
8. Now dismantle vacuum interrupter.
9. Place old and new vacuum interrupter on flat surface and insert eyebolt in new interrupter matching the center. Now rotate the eye bolt of new interrupter till center of eye-bolt of both interrupter matches so that total distance "x" is maintained as original (14).

Maintenance - Lubrication

1 - Maintenance

The arc chutes and arcing contacts ensure :
*• 1500 closing cut-out operations at In**
*• 3 closing/cut-out operations at maximum short-circuit current**
*• 10 closing cut-out operations at 10 In**
All other components are designed to last as long as the breaker's normal service life (20,000 operations for the electrically-operated or manual operated breaker).
** In one of these cases : Remove the arc chutes and change the arcing contacts.*
Visual monitoring (every year) :
• cleanliness of the circuit breaker.
• cleanliness of grease (if the apparatus is exposed to dust)

2 - Revision

Inspection is to be performed every 3000 operations or 3 years (we recommend the intervention of the specialists in the service and verification for this revision).

A - Arc Chute

• wipe the insulating cover

B - Poles

• Fixed and Withdrawable Breakers

- remove dust from isolating parts
- check the gap on arcing contacts with the circuit-breaker closed.
• repeat the adjustment of fixed arcing contacts if the gap is greater than 1,5 mm.
• replace the arc barriers and the spark arresters if they are worn by more than 1 mm
• clean the surfaces of main contacts with fine-grain emery paper and wipe carefully.

• Removable Breakers

Clean the following parts with a cloth slightly dampened with carbon tetrachloride :
- the cluster contacts
- the studs for the cradle
Grease lightly

Poles Tightening :

The set of poles is maintained under pressure by six rams located on each flange of the circuit-breaker. Check the tightening torque.

C - Disconnection of Secondary Wiring

Clean the fixed and movable contacts with a cloth slightly dampened with carbon tetrachloride.
Check for contact pressure.
Grease lightly.

D - Overcurrent and Voltmetric Release

No maintenance.
In case of failure, replace the release.

3 - Lubrication

A - Components to be Lubricated
• all metal/metal friction surfaces must be kept greased.
• wipe off excess grease.
• grease characteristics : High Speed Grease 475HS mfd. by OKS Industries, Bangalore, India.

B - Components not to be lubricated
• current-threshold and voltmetric release.

Jamal Arif

From: Santi Pada Sinha <ssinha@josts.in>
Sent: 21 May 2024 15:16
To: Kumar Niraj
Subject: Re: frequent problem with test kit

[EXTERNAL sender, Exercise caution..!]

Sir,
The said model is obsolete at our OEM M/s Megger end....some spares parts are available with us for minor service support...
--
Further any clarification please feel free to contact us.
With Best Regards
SANTI PADA SINHA - Senior Service Manager
NABL Accredited Calibration Laboratory **&**
Megger Authorized Service Centre
Josts Engineering Company Limited
19, British Indian Street, Kolkata - 700 069. India
Phone: +91-33 22429510.Mob: +91-9836611552
E-mail: ssinha@josts.in. Website: www.josts.com
MSME No: **MH33B0218734**

On Tue, May 21, 2024 at 3:06 PM Kumar Niraj <nirajkumar@tatapower.com> wrote:

> Dear Sir,
>
> We have Megger make 3 Phase current injection kit having model no MPRT8430. This kit is with since 2012. Now This testing kit is creating problem. Kindly suggest us weather we should carry with this kit. Is this kit is repairable if any major/minor problem occurred. Is spare parts readily available.
>
> Kindly share your opinion with us.
>
> Regards,
>
> Niraj Kumar
>
> Lead Engineer - Elect. Testing
>
> Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
>
> Mobile: 9006138188

Disclaimer:- Information contained and transmitted by this email is confidential and proprietary to The Tata Power Company Ltd. and is included for use only by the addressee. If you are not the intended recipient, you are notified that any dissemination or copying of this email or contents therein is strictly prohibited. If this message is not intended for you, then you are requested to delete this email immediately and notify the originator.

Jamal Arif

From: Deshmukh Prashant
Sent: 22 May 2024 14:16
To: Jamal Arif
Cc: Kumar Sanjay; Kumar Niraj
Subject: FW: High repair cost of tan delta Kit .

Follow Up Flag: Follow up
Flag Status: Flagged

Please find below reply of authorised vendor of Doble for tan delta kit.

Regards,
Prashant Vasantrao Deshmukh
Group Head - Electrical Maintenance
Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
Tel: 0000 Mobile: 9227295499



From: ANANT MISHRA <anant@pinkcitytechnologies.com>
Sent: Wednesday, May 22, 2024 2:14 PM
To: Kumar Niraj <nirajkumar@tatapower.com>
Cc: Deshmukh Prashant <pvdeshmukh@tatapower.com>; 'pink techno' <info@pinkcitytechnologies.com>; ANADI MISHRA <anadi@pinkcitytechnologies.com>
Subject: Re: High repair cost of tan delta Kit .

[EXTERNAL sender, Exercise caution..!]

Dear Sir,

With reference to your mail, we all know the importance of the Tan Delta Test of Transformer. As you have informed that your Doble, USA make Tan Delta Test Kit Model: M4100 is around 9 years old and is being used extensively then we would like to inform you that Doble make equipment life is 9-10 years. Aging effect occurs in every Testing and Measuring equipment and after this, problems start appearing in them. The repair cost of Doble, USA make equipment are also on higher side because the new spare parts are imported from USA and it also takes a lot of time. So, we recommend you to purchase the new Tan Delta Kit to avoid this problem in future.
We can also offer you with buy back condition to purchase the new Tan Delta Test Kit of Doble make.

STAY SAFE, STAY HEALTHY

With Best Regards,
Anant Mishra
Pinkcity Technologies Pvt Ltd.,
SE-10, Military Lane, Opp. Heerapura Power House, Ajmer Road, Jaipur-302021
Cell: +91 9468963966/9309077717
Web: www.pinkcitytechnologies.com

Jamal Arif

From: Santi Pada Sinha <ssinha@josts.in>
Sent: 22 May 2024 15:37
To: Kumar Niraj
Cc: Deshmukh Prashant
Subject: Re: Aging of Yokogawa recorder DL750P

[EXTERNAL sender, Exercise caution..!]

Sir,
kindly the said model is no longer with OEM M/s Yokogawa end...so repair is mostly not possible...
--
Further any clarification please feel free to contact us.
With Best Regards
SANTI PADA SINHA - Senior Service Manager
NABL Accredited Calibration Laboratory **&**
Megger Authorized Service Centre
Josts Engineering Company Limited
19, British Indian Street, Kolkata - 700 069. India
Phone: +91-33 22429510.Mob: +91-9836611552
E-mail: ssinha@josts.in. Website: www.josts.com
MSME No: MH33B0218734

On Wed, May 22, 2024 at 3:21 PM Kumar Niraj <nirajkumar@tatapower.com> wrote:

> Dear Sir,
>
> We have Yokogawa make recorder for waveform recording. This kit is with since 2011.Now this kit is has issue like noises are high in waveform, during recording signals got lost. Some of its channel are not working.
>
> Kindly suggest Is this kit is repairable if any major/minor problem occurred. Is spare parts readily available.
>
> Kindly share your opinion with us
>
> Regards,
>
> Niraj Kumar
>
> Lead Engineer - Elect. Testing
>
> Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
>
> Mobile: 9006138188

Disclaimer:- Information contained and transmitted by this email is confidential and proprietary to The Tata Power Company Ltd. and is included for use only by the addressee. If you are not the intended recipient, you are notified that any dissemination or copying of this email or contents therein is strictly prohibited. If this message is not intended for you, then you are requested to delete this email immediately and notify the originator.

Sl No.	*Type of Extinguisher*	*Test Interval* Year	*Test Pressure* kg/cm^2	*Pressure Maintained for* min
viii)	Dry powder (stored pressure) (IS 13849)	3	35	2.5
ix)	Carbon dioxide IS 2878	5	250	2.5
x)	Clean agent (IS 15683)	3	35	2.5
xi)	Dry powder (gas cartridge) (IS 2171, IS 10658 and IS 11833)	3	35	2.5

NOTE — Extinguisher's should be hydraulically tested with cap.

ANNEX F

(*Clauses* 12.2.1)

LIFE OF FIRE EXTINGUISHERS

Sl No.	*Type of Extinguisher*	*Life Time,* Year
i)	Water type	10
ii)	Foam type	10
iii)	Powder type	10
iv)	Carbon dioxide	15
v)	Clean agent	10

NOTES

1 Life of extinguishers shall be considered from date of manufacture of extinguishers.

2 In case of failure in hydraulic pressure testing, extinguisher shall be rejected immediately before the life time given above.

Product End-of-Life Notice

End-of-Sale and End-of-Life Announcement for the Cisco Catalyst 2960-S Series and 2960-SF Series Switches

EOL10043 - Amended

Cisco announces the end-of-sale and end-of-life Cisco Catalyst 2960-S Series and 2960-SF Series Switches. The last day to order the affected product(s) is November 6, 2015. Customers with active service contracts will continue to receive support from the Cisco Technical Assistance Center (TAC) as shown in Table 1 of the EoL bulletin. Table 1 describes the end-of-life milestones, definitions, and dates for the affected product(s). Table 2 lists the product part numbers affected by this announcement. For customers with active and paid service and support contracts, support will be available under the terms and conditions of customers' service contract.

Cisco will increase prices for these products following the End-of-Life announcement.

Table 1. End-of-Life Milestones and Dates for the Cisco Catalyst 2960-S Series and 2960-SF Series Switches

Milestone	Definition	Date
End-of-Life Announcement Date	The date the document that announces the end of sale and end of life of a product is distributed to the general public.	November 6, 2014
End-of-Sale Date	The last date to order the product through Cisco point-of-sale mechanisms. The product is no longer for sale after this date.	November 6, 2015
Last Ship Date: HW	The last-possible ship date that can be requested of Cisco and/or its contract manufacturers. Actual ship date is dependent on lead time.	February 4, 2016
End of SW Maintenance Releases Date: HW	The last date that Cisco Engineering may release any final software maintenance releases or bug fixes. After this date, Cisco Engineering will no longer develop, repair, maintain, or test the product software.	November 5, 2016
End of Vulnerability/Security Support Date: HW	The last date that Cisco Engineering may release a planned maintenance release or scheduled software remedy for a security vulnerability issue.	November 5, 2018
End of Routine Failure Analysis Date: HW	The last-possible date a routine failure analysis may be performed to determine the cause of hardware product failure or defect.	November 5, 2016
End of New Service Attachment Date: HW	For equipment and software that is not covered by a service-and-support contract, this is the last date to order a new service-and-support contract or add the equipment and/or software to an existing service-and-support contract.	November 5, 2016
End of Service Contract Renewal Date: HW	The last date to extend or renew a service contract for the product.	February 4, 2020
Last Date of Support: HW	The last date to receive applicable service and support for the product as entitled by active service contracts or by warranty terms and conditions. After this date, all support services for the product are unavailable, and the product becomes obsolete.	November 30, 2020

HW = Hardware OS SW = Operating System Software App. SW = Application Software

© 2015 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

Table 2. Product Part Numbers Affected by This Announcement

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
C2960S-F-STACK	Catalyst 2960S Flexstack Stack Module (FE)	C2960X-STACK	Catalyst 2960-X FlexStack Plus Stacking Module	-
C2960S-F-STACK=	Catalyst 2960S Flexstack Stack Module (FE)	C2960X-STACK=	Catalyst 2960-X FlexStack Plus Stacking Module optional	-
C2960S-STACK	Catalyst 2960S FlexStack Stack Module optional for LAN Base	C2960X-STACK	Catalyst 2960-X FlexStack Plus Stacking Module	-
C2960S-STACK=	Catalyst 2960S Flexstack Stack Module	C2960X-STACK=	Catalyst 2960-X FlexStack Plus Stacking Module optional	-
WS-C2960S-24PD-L	Catalyst 2960S 24 GigE PoE 370W, 2 x 10G SFP+ LAN Base	WS-C2960X-24PD-L	Catalyst 2960-X 24 GigE PoE 370W, 2 x 10G SFP+, LAN Base	-
WS-C2960S-24PS-L	Catalyst 2960S 24 GigE PoE 370W, 4 x SFP LAN Base	WS-C2960X-24PS-L	Catalyst 2960-X 24 GigE PoE 370W, 4 x 1G SFP, LAN Base	-
WS-C2960S-24TD-L	Catalyst 2960S 24 GigE, 2 x 10G SFP+ LAN Base	WS-C2960X-24TD-L	Catalyst 2960-X 24 GigE, 2 x 10G SFP+, LAN Base	-
WS-C2960S-24TS-L	Catalyst 2960S 24 GigE, 4 x SFP LAN Base	WS-C2960X-24TS-L	Catalyst 2960-X 24 GigE, 4 x 1G SFP, LAN Base	-
WS-C2960S-24TS-S	Catalyst 2960S 24 GigE, 2 x SFP LAN Lite	WS-C2960X-24TS-LL	Catalyst 2960-X 24 GigE, 2 x 1G SFP, LAN Lite	-
WS-C2960S-48FPD-L	Catalyst 2960S 48 GigE PoE 740W, 2 x 10G SFP+ LAN Base	WS-C2960X-48FPD-L	Catalyst 2960-X 48 GigE PoE 740W, 2 x 10G SFP+, LAN Base	-
WS-C2960S-48FPS-L	Catalyst 2960S 48 GigE PoE 740W, 4 x SFP LAN Base	WS-C2960X-48FPS-L	Catalyst 2960-X 48 GigE PoE 740W, 4 x 1G SFP, LAN Base	-
WS-C2960S-48LPD-L	Catalyst 2960S 48 GigE PoE 370W, 2 x 10G SFP+ LAN Base	WS-C2960X-48LPD-L	Catalyst 2960-X 48 GigE PoE 370W, 2 x 10G SFP+ LAN Base	-
WS-C2960S-48LPS-L	Catalyst 2960S 48 GigE PoE 370W, 4 x SFP LAN Base	WS-C2960X-48LPS-L	Catalyst 2960-X 48 GigE PoE 370W, 4 x 1G SFP, LAN Base	-
WS-C2960S-48TD-L	Catalyst 2960S 48 GigE, 2 x 10G SFP+ LAN Base	WS-C2960X-48TD-L	Catalyst 2960-X 48 GigE, 2 x 10G SFP+, LAN Base	-
WS-C2960S-48TS-J1	Catalyst 2960-S 48TS-L for Japan Post	WS-C2960X-48TS-L	Catalyst 2960-X 48 GigE, 4 x 1G SFP, LAN Base	-
WS-C2960S-48TS-L	Catalyst 2960S 48 GigE, 4 x SFP LAN Base	WS-C2960X-48TS-L	Catalyst 2960-X 48 GigE, 4 x 1G SFP, LAN Base	-
WS-C2960S-48TS-S	Catalyst 2960S 48 GigE, 2 x SFP LAN Lite	WS-C2960X-48TS-LL	Catalyst 2960-X 48 GigE, 2 x 1G SFP, LAN Lite	-
WS-C2960S-F24PS-L	Catalyst 2960-SF 24 FE, PoE 370W, 2 x SFP, LAN Base	WS-C2960X-24PS-L	Catalyst 2960-X 24 GigE PoE 370W, 4 x 1G SFP, LAN Base	-
WS-C2960S-F24TS-L	Catalyst 2960-SF 24 FE, 2 x SFP, LAN Base	WS-C2960X-24TS-L	Catalyst 2960-X 24 GigE, 4 x 1G SFP, LAN Base	-
WS-C2960S-F24TS-S	Catalyst 2960-SF 24 FE, 2 x SFP, LAN Lite	WS-C2960X-24TS-LL	Catalyst 2960-X 24 GigE, 2 x 1G SFP, LAN Lite	-
WS-C2960S-F48FPS-L	Catalyst 2960-SF 48 FE, PoE 740W, 4 x SFP, LAN Base	WS-C2960X-48FPS-L	Catalyst 2960-X 48 GigE PoE 740W, 4 x 1G SFP, LAN Base	-
WS-C2960S-F48LPS-L	Catalyst 2960-SF 48 FE, PoE 370W, 4 x SFP, LAN Base	WS-C2960X-48LPS-L	Catalyst 2960-X 48 GigE PoE 370W, 4 x 1G SFP, LAN Base	-

© 2015 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

End-of-Sale Product Part Number	Product Description	Replacement Product Part Number	Replacement Product Description	Additional Information
WS-C2960S-F48TS-L	Catalyst 2960-SF 48 FE, 4 x SFP, LAN Base	WS-C2960X-48TS-L	Catalyst 2960-X 48 GigE, 4 x 1G SFP, LAN Base	-
WS-C2960S-F48TS-S	Catalyst 2960-SF 48 FE, 2 x SFP, LAN Lite	WS-C2960X-48TS-LL	Catalyst 2960-X 48 GigE, 2 x 1G SFP, LAN Lite	-

Product Migration Options

The Cisco Catalyst 2960-X Series provides a direct replacement for each Catalyst 2960-S Series Gigabit Ethernet model, at the same price. The Catalyst 2960-X provides better architecture, features, and performance than the 2960-S, doubling the feature set.

Customers for the Catalyst 2960-SF Fast Ethernet switches should also consider moving to the 2960-X switches, which provide the features of the Catalyst 2960-SF and more, including PoE Plus (PoE+), improved IPv6 performance, and optional StackWise stacking. The 2960-X PoE models have a premium of approximately 20 to 25 percent over the 2960-SF Series.

For more information about the Cisco Catalyst 2960-X Series Switches, visit http://www.cisco.com/c/en/us/products/switches/catalyst-2960-x-series-switches/index.html. Additional migration information and selling resources are available on the Catalyst Sales Enablement page, http://wwwin.cisco.com/tech/products/cat2k/.

Customers may be able to use the Cisco Technology Migration Program (TMP) where applicable to trade-in eligible products and receive credit toward the purchase of new Cisco equipment. For more information about Cisco TMP, customers should work with their Cisco Partner or Cisco account team. Cisco Partners can find additional TMP information on Partner Central at http://www.cisco.com/web/partners/incentives_and_promotions/tmp.html.

Customers may be able to continue to purchase Cisco Catalyst 2960-S Series and 2960-SF Series Switches the Cisco Certified Refurbished Equipment program. Refurbished units may be available in limited supply for sale in certain countries on a first-come, first-served basis until the Last Date of Support has been reached. For information about the Cisco Certified Refurbished Equipment program, go to: http://www.cisco.com/go/eos.

Service prices for Cisco products are subject to change after the product End of Sale date.

The Cisco Takeback and Recycle program helps businesses dispose properly of surplus products that have reached their end of useful life. The program is open to all business users of Cisco equipment and its associated brands and subsidiaries. For more information, go to: http://www.cisco.com/web/about/ac227/ac228/ac231/about_cisco_takeback_recycling.html.

For More Information

For more Information Cisco Catalyst 2960-X Series, visit http://www.cisco.com/c/en/us/products/switches/catalyst-2960-x-series-switches/index.html, or contact your local account representative.

For more information about the Cisco End-of-Life Policy, go to: http://www.cisco.com/en/US/products/products_end-of-life_policy.html.

For more information about the Cisco Product Warranties, go to: http://www.cisco.com/en/US/products/prod_warranties_listing.html.

© 2015 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

To subscribe to receive end-of-life/end-of-sale information, go to:
http://www.cisco.com/cisco/support/notifications.html.

Subscribe for RSS Notifications for End-of-Life and End-of-Sale Notices

To subscribe to the End-of-Life and End-of-Sale RSS Feed, insert the following URL into your RSS application:
http://www.cisco.com/web/feeds/products/end_of_life_rss.xml.

Any authorized translation issued by Cisco Systems or affiliates of this end-of-life Product Bulletin is intended to help customers understand the content described in the English version. This translation is the result of a commercially reasonable effort; however, if there are discrepancies between the English version and the translated document, please refer to the English version, which is considered authoritative.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Printed in USA C51-733348-02 05/15

© 2015 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

CEA (Cyber Security in Power Sector) Guidelines, 2021

1.2 Government of India has set up the Indian Computer Emergency Response Team (CERT-In) for Early Warning and Response to cyber security incidents and to have collaboration at National and International level for information sharing on mitigation of cyber threats. CERT-In regularly issues advisories on safeguarding computer systems and publishes Security Guidelines which are widely circulated for compliances. All Central Government Ministries/ Departments and State/Union Territory Governments have been advised to conduct cyber security audit of their entire Cyber Infrastructure including websites at regular interval through CERT-In empanelled Auditors so as to identify gaps and appropriate corrective actions to be taken in cyber security practices. CERT-In extends supports to enable Responsible Entity in conducting cyber security mock drills and in assessment of their preparation to withstand cyber-attacks. The Responsible Entity must submit Reports of Cyber Audit of cyber security controls, architecture, vulnerability management, network security and periodic cyber security drills to sectoral CERT as well as CERT-In. Team of experts shall review these reports and shortcomings if any in the compliances shall be flagged by them. CERT-In on regular basis also conducts workshops and training programs to enhance Cyber awareness of all Stakeholders.

1.4 All Responsible Entities, Service Providers, Equipment Suppliers/Vendors and Consultants engaged in Power Sector are equally responsible for ensuring cyber security of the Indian Power Supply System. They are to act timely upon each threat intelligence, advisories and other inputs received from authenticated sources, for continuous improvement in their cyber security posture.

Article 7 Phasing out of Legacy System

a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.

b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors.

c) The CISO shall ensure that till equipments/systems nearing end life or left without support from OEM are not replaced, their cyber security is hardened and ensured through additional controls provisioned in consultation with the OEM or alternate Supplier(s)*.

*e.g. Use of CDAC developed AppSamvid and whitelisting of applications installed may be explored across all legacy systems.

d) The Responsible Entity shall document in their Cyber Security Policy a Standard Operating Procedure for safe and secure disposal of outlived or legacy devices.

Grant Thornton
An instinct for growth™

TATA POWER (MPL)

OT Assessment Report



Risk Rating Criteria

The risk rating is used to signify the level of risk due to gaps noted during the audit and is based on a qualitative criterion defined as follows:

Category of finding	Implication
Critical	High risk, requires immediate Senior Management attention.
Major	High risk, requires Senior Management attention.
Medium	Medium risk, requires corrective action.
Low	Low risk, with opportunities for improvement.

Project Timeline and Team

OT assessment timeline for Unit 1 as follows:

Assessment Start Date	Assessment End Date
24-01-2023	28-01-2023

OT assessment timeline for Unit 2 as follows:

Assessment Start Date	Assessment End Date
01-08-2023	03-08-2023

Following team member was involved in this assessment:

GT Security Team	Contact Information
Ujjwal Ranjan	M: +91 7739756835 E: ujjwal.ranjan@in.gt.com

Executive Summary

In this report, we provide an overview of current visibility and insight into your OT environment. We analyzed the network behavior of assets, provided asset visibility and machine learning. The amount of information obtainable is directly related to the amount of information within the traffic capture files. Using our hybrid threat detection, we were able to scan and provide real-time alerting for your OT environment using packet and Yara rules. Starting with asset visibility will begin the process of moving up the maturity curve in our OT environment. Analyzing the alerts can help clean up the environment and ensure assets are communicating and functioning in a proper secure manner. Visibility into the network and understanding how assets communicate will help provide a foundation for network segmentation.

This report contains the outcome of vulnerability assessment and pen testing performed at Maithon Power Limited.

Activities performed to conduct VAPT in OT environment at MPL are mentioned below:

1. Performed passive monitoring of network 16 and network 17 including backup switches.
2. Performed internal pen testing & external pen testing.
3. Carried out physical assessment of all the available workstations.

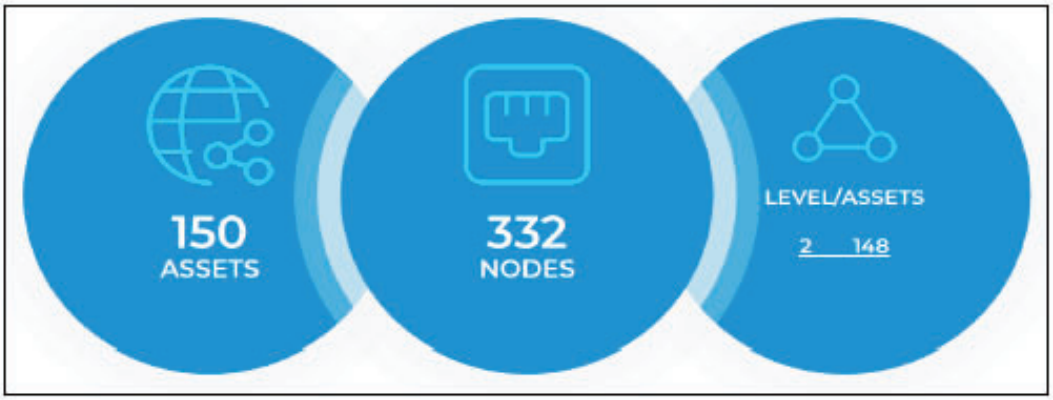
Unit 1

Asset Inventory

Discovered asset summary.

Summary of Network 16 is mentioned below.

Total number of assets discovered in network switch 16 including backup switch are 150.



Physical Assessment Observations

Observation Summary

Sl.No	Major Area	Description of Finding/Observation	Impact	Risk Rating	Recommendation
1	**Obsolete OS (Windows7 & Windows server 2008 R2)**	It was observed that the DCS is running on outdated OS that are Windows 7 and Windows server 2008 R2	An obsolete OS is no longer supported by the manufacturer, meaning that it no longer receives security updates, leaving it vulnerable to security breaches and attacks.	**Critical**	It is recommended to regularly update your operating system to avoid these issues and ensure optimal performance and security of the device. Immediate upgrade of OS is required since current control system are running on obsolete OS.
2	**Antivirus definition updates**	It was observed that most of the workstations and servers have similar status of Antivirus, where AV is installed however latest definition of AV is not updated. Note: **"Support of current antivirus installed in DCS workstations/servers is not available".**	Below are potential impacts of not having an antivirus: **Malware infections**: Without an antivirus program, the device is vulnerable to malware infections, which can cause data loss, system crashes, and other problems. Malware can also steal personal information, such as login	**Critical**	It is strongly recommended to upgrade the OS of DCS workstation/servers so that Antivirus support is available in the form latest AV definitions. It is also recommended to have a centralized AV manager so that AV definition can be updated regularly from it.

6	**Windows Patches updates**	It was observed that the systems which include workstation server, EWS, OWS are not updated with latest OS updates	Below are some potential impacts of not installing Windows patches: **Security vulnerabilities**: Not installing Windows patches can leave the device vulnerable to security threats, such as viruses, malware, and other types of attacks. This can result in data loss, system crashes, and other problems. **Reduced performance**: Over time, not installing Windows patches can result in reduced performance of the device. This can include slower load times for programs and applications, and overall sluggishness of the system. **Compatibility issues**: As software and hardware continue to advance, not installing Windows patches can lead to compatibility issues between the device and newer programs or devices. This can result in error messages or other problems when attempting to run certain software or hardware.	**High**	Create a policy and procedure inline to the OEM that OEM has to provide the validate patches as per patch management life cycle for OEM managed critical systems/ devices. Patch Manager needs to be integrated with DCS network so that workstations/server can be updated from centralized location and can be mapped with the OS update cycle .It is strongly recommended that you regularly install Windows patches and updates to ensure the device is protected from security threats, runs smoothly, and remains compatible with newer software and hardware.

Recommendations

- All unwanted ports & services running on the systems should be disabled. During this process, it is always good to check the effect on running SCADA system performance (with the help of SCADA vendor). System availability is more important in OT environment.
- Unused ports of network/OT devices such as switch should be disabled.
- Device control and application control policy for OT environment should be implemented.
- Upgradation of system OS should be conducted, and the systems should be on latest OS.
- Upgradation of Network Device Firmware should be carried out are regular intervals and should be on latest Firmware.
- Antivirus definitions and OS patch update rule should be defined and implemented.
- Monitor and implement security controls for the communication involving DCS systems (System PC and PLC) which are having the data flow between DCS systems and third-party sources / devices for security checks (with the support of vendor). This will add another layer of security in third party communication involving TCP/IP, OPC, Modbus, etc between DCS systems and third-party sources / devices.



ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
(A Government of India Undertaking)
ELECTRONICS DIVISION
P.B.No 2606, Mysore Road, Bangalore - 560 026

GRAM : BHARATELEC
FAX : 080 – 26989211
PHONE : 080 – 26998432
MOBILE : 9611250077
E-MAIL : pavankumarh@bhel.in

REF:CE:SM/CE/804/CE-MKTG /HPK/TATAPOWER DTD: 23/05/2022

As you are very much aware, HMI plays a crucial role in the control and monitoring of DCS in power plants and empowers the plant operators and engineers with critical data for better control, to make informed decisions, and thereby improved and reliable operation of the plant.

Microsoft has discontinued the product support for XP/Windows 7 operating system and disabled automatic security updates as no more security updates/virus definitions are available for that version. Hence the HMIs-max STATIONs are prone to vulnerabilities that can tamper with the operation of the plant.

The HMI systems presently in service at the site are quite old and outlived their service life. Some of these machines are slow in response and may hang quite frequently. Spares and services support for the old machines are restricted due to component obsolescence. The Workstations presently available in the market are with the latest Windows OS and these current machines are not one-to-one interchangeable with the existing old machines presently in use at these projects.

Our suggestion as advised by our field experts and engineering is highly recommended to upgrade the HMI-maxSTATIONs with the latest available hardware, and software with security features.

Yours faithfully,

(H Pavan Kumar)
DGM/ CE-MKTG

From: Surodh Dey <sdey@tatapower.com>
Sent: Saturday, March 2, 2024 11:28 AM
To: 'D K RAM' <dkram@bhel.in>; 'Amresh Kumar(Sr Dy GM/SSBGSEC/PS-SSBG)' <amresh@bhel.in> Cc: Singh P K <princekumarsingh@tatapower.com>; Garg Mayank <mayank.garg@tatapower.com> Subject: FW: Priced offer for DCS Module at Maithon Power Ltd.

Sir,

Pl give us proper obsolescence letter of DPU4F, and its alternative solution.

Regards, Surodh Dey
Head - C&I And IT
Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India Tel: 0657-2277265 Direct: 0657-6511547 Mobile: 9234550721



From: Singh P K <princekumarsingh@tatapower.com>
Sent: Friday, March 1, 2024 5:03 PM
To: Surodh Dey <sdey@tatapower.com>
Cc: Maithon - IMD <Maithon-IMD@tatapower.com>
Subject: FW: Priced offer for DCS Module at Maithon Power Ltd.

Dear Sir,

Please advice .

Regards, Prince Kumar Singh Group Head – C&I Maintenance, MPL
Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India Tel: 06540278002 Mobile: 9263632054



From: Dhirendra Kumar <dkram@bhel.in>
Sent: Friday, March 1, 2024 4:24 PM
To: Singh P K <princekumarsingh@tatapower.com>
Cc: amresh@bhel.in
Subject: FW: Priced offer for DCS Module at Maithon Power Ltd.

You don't often get email from dkram@bhel.in. Learn why this is important
[EXTERNAL sender, Exercise caution..!]

Dear Sir,

Please see the trailing email and kindly confirm.

सादर/ Regards

धीर कुमार राम/Dhirendra Kumar Ram पा.से. -
एस.एस.बी.जी., पटना / PS-SSBG, Patna
0612-2233027, 09955990955

From: K Pradeep Kumar [mailto:pradeepkumark@bhel.in]
Sent: 01 March 2024 16:00
To: 'Dhirendra Kumar' <dkram@bhel.in>
Cc: spoornima@bhel.in; amresh@bhel.in
Subject: RE: Priced offer for DCS Module at Maithon Power Ltd.

Dear Shri Dhirendra,

Dear Sir,

With reference to your trailing email, we would like to convey that we are unable to manufacture the DPU-4F modules due to non-availability of components.

We can offer DPU-MR instead which will have to be replaced in pairs (i.e. both Primary & secondary). Kindly confirm with customer so that we can submit the offer.

Regards.

K. PRADEEP KUMAR
Senior Deputy General Manager
CE Marketing
Bharat Heavy Electricals Limited
Electronics Division, Bengaluru 560026
Ph. (O) 080-26998245 (M)+91 9449869700
E-mail : pradeepkumark@bhel.in

Follow us on:

From: Dhirendra Kumar [mailto:dkram@bhel.in]
Sent: 01 March 2024 15:12
To: pradeepkumark@bhel.in
Cc: spoornima@bhel.in; amresh@bhel.in
Subject: FW: Priced offer for DCS Module at Maithon Power Ltd.

Dear Sir,

Please see the trailing email and kindly submit the budgetary offer for DCS Module at Maithon Power Ltd.

सादर/ Regards

धीर कु मार राम/Dhirendra Kumar Ram
पा.से. - एस.एस.बी.जी., पटना / PS-SSBG, Patna
0612-2233027, 09955990955

SHINKAWA

SHINKAWA Electric Co., Ltd.
Shinkojimachi Building 3F, 4-3-3 Koji-machi, Chiyoda-ku, Tokyo 102-0083 Japan
TEL +81-3-3263-4417 FAX +81-3-3262-2171

24 Aug. 2015

End of Sale Announcement for AP-10 Series Products

Dear Valued Partners,

Please be informed that we have decided to discontinue AP-10 series products.

This was due to the short supply or obsoleting many of the parts used with the products by sub-venders as the products have been in the market for a long time since around 1990.

The products/parts in question are as below;

1) AP-10A (Sampling card)
2) AP-10H (Housing)
3) AP-10Y (Junction box)

- AP-10B (Alarm contact input card) & AP-10C (Process data card) had already been obsolete for some time now.

We will stop taking orders for these on 31 Jan. 2016. EOS will be informed separately.

As a replacement, better functions and performances are available with DAQpod and VM-7B. Please start promoting and proposing DAQpod and VM-7B with analysis functions as from now on.

Should you have any questions, please let us know.

Yours faithfully,

Tom Fujii
General Manager,
Sensor Technology Department,
Shinkawa Electric Co., Ltd.

SHINKAWA Electric Co., Ltd.
Shinkojimachi Building 3F, 4-3-3 Koji-machi, Chiyoda-ku, Tokyo 102-0083 Japan
TEL +81-3-3263-4417 FAX +81-3-3262-2171

Ref. : SEC: 23-14
Date : 12.01.2024

Shinkawa RV-100 Series Discontinued

Dear Valued Customers,

Shinkawa RV-100 software is obsolete since January 2016 & upgrade available option is RV-200 software with new licenses & compatible specifications / windows version for Server.
RV 200 software is compatible with Daqpod series / VM-5 series & VM-7B series.

Hiro Ogasawara
Regional Manager,
ST International Sales Department
SHINKAWA Electric Co., Ltd.
Shinkojimachi Building 3F
4-3-3 Koji-machi Chiyoda-ku
Tokyo 102-0083 Japan

Emerson Automation Solutions
Intelligent Platforms Pvt. Ltd.,
(Formerly known as GE Intelligent Platforms Pvt. Ltd.,)
CIN: U72200KA1997PTC022158
Building No.8, Ground Floor
Velankani Tech Park, No.43
Electronic City Phase I,
Hosur Road, Bangalore-560100
Karnataka, India
www.emersonprocess.co.in
T +91 80 42515300-04
F +91 80 42515305-06

Genius LAN/Product Status/20210512 12th May 2021

Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC),
Works: Village Dambhui, P.O. Barbindia, P.S. Nirsa,
District Dhanbad 828 205, Jharkhand, India

.
Kind attn : **Mr. Prince Kumar Singh- Group Head-C&I Maintenance**
Subject : **Discontinuance notice for Genius Bus Controller and Path forward**

Thank you for the continued patronage over so many years. We understand that your esteemed organization has been using Emerson's (Formerly GE IP) automation technologies and solutions for various critical processes/applications.

GENIUS was the first intelligent, rugged, distributed I/O system for PLC systems. It was introduced in 1985 and was the first with extensive diagnostics and easy setup over a proprietary network. It quickly gained global acceptance in applications such as Oil & Gas, Metal, Power, Mining, Water, etc. Over the years we evolved our I/O offering bringing forward many of the GENIUS capabilities and marrying it with the latest technology and providing advanced functionality in more cost-efficient form factors. Controlling the I/O, the GENIUS Bus Controllers became the standard. Due to technological advances and obsolescence of various components, we declared Genius Bus Controller product family as mature on 1st January 2014. Genius Bus Controller parts are not available for sale anymore as this product has been moved to discontinued stage on 1st October 2017.

Our goal in evolving our technology is protect your investment – whether it is existing wiring, your application logic, etc. Emerson's Intelligent Platforms provides excellent upgrade path for your application to modern technology. We can convert your control, GENIUS LAN, and Genius I/O to multicore high-performance platform with an open protocol **Profinet** over high speed ethernet communication. All local and remote genius LAN can be migrated to open protocol Profinet. We can convert applications ranging from the simple to the highly complex. Minimum downtime, minimum effort, minimum cost – we provide the easiest upgrade path available!
Key Benefits of Migration to **Profinet**:

1. Proven, tested control with advanced security built-in
2. Open standard I/O connectivity with PROFINET over high-speed Ethernet
3. High performance and flexible high availability
4. Programming and data connections are easily transferred into new system
5. Advanced functionality through use of Proficy Machine Edition programming and configuration tools
6. System can be updated in just a few hours and in steps, minimizing downtime
7. High availability systems often can change over without stopping

We strongly recommend you upgrade Genius LAN to open protocol **Profinet** over high speed ethernet communication.

For and on behalf of M/s. Emerson Automation Solutions Intelligent Platforms Pvt. Ltd.,





Neelesh Dabadghao
Associate Director – Sales
9822225221
Neelesh.Dabadghao@Emerson.com



lot No. 42P, Tupudana Industrial Area, Hatia, Ranchi – 834003 (Jharkhand), hone: 0651-2531215
E-mail: emcons@emcons.co.in; emcons123@yahoo.co.in

M/s Maithon Power Limited,
P.O.-Maithon Dam
Dist. - Dhanbad – 828205
Jharkhand

Ref: EM/MPL/F71/23-24/1028
Date: 01.01.2024

Kind Attn : **Mr. Prince Kumar Singh.**
Sub : **Offer for Upgradation of EWS & OWS Terminal for ZLD Plant.**
Ref : **Your email dtd. 23.12.2023.**

Dear Sir,

With reference to the above, we would like to inform you that existing HMI Software FT View installed in ZLD Plant area are obsolete owing to the obsolesces of 32 bit Windows 7 OS and needs to be upgraded to the latest & compatible Windows 11 Prof OS. In view of the above, we are pleased to enclose our offer for Upgradation of EWS & OWS Terminal for ZLD Plant.

We hope that you would find our offer in line with your requirement & request you to favour us with your valued order. If you require any further clarification / confirmation please feel free to contact us.

Thanking you & assuring you of our best attention & services at all times, we remain.

Yours faithfully
For EMCONS

(Keshav)
Encl: As above.

GOLD
System Integrator
A ROCKWELL AUTOMATION PARTNER

ANNEXURE P/56

SUKAN ENGINEERING PVT. LTD.

ISO 9001:2015 Certified Company

B-503, Satellite Gazebo, Guru Hargovindji Road,
Chakala, Andheri (E), Mumbai-400 099
+91-22-4268 8688 info@sukan.co.in
www.sukan.co.in

OEM Comments

Ref:SK/TESI/MPL/2024:001
Date: 15/04/2024

To,
Maithon Power Ltd.
Dhanbad, 828 205, Jharkhand

Dear Sir,

This has reference to our recent visit to your plant for maintenance of electrolysis modules of hydrogen generation plant. On detailed inspection it has been observed that these modules are beyond repair as they have already completed their useful life.

The typical life of our electrolysis modules is about 7 years and the modules installed at MPL have already completed more than 12 years life. We recommend to replace the modules to sustain the operations and ensure the availability of Hydrogen plant.

Thanking you,
Yours Sincerely
FOR **SUKAN ENGINEERING PVT. LTD.**

Jaimin Popat
Director

SUKAN ENGINEERING PVT. LTD. MUMBAI

Date : 10/08/2022

IMI Norgren Herion Private Limited
B-30A, Sector-85
Noida-201305
Uttar Pradesh
India
Tel: + (0)120 683 7800
Fax: + (0)120 683 7899
www.norgren.com
CIN No: U29119DL1995PTC074916

TO WHOMSOEVER IT MAY CONCERN

This is to mention that IMI Norgren Heroin make Solenoid valves are installed in BHEL Make Turbine for its governing system, as these solenoid valves are most reliable products from IMI Norgren Heroin. These Solenoid valves have long service life without any failure.

It has been observed that these solenoid valves perform very well throughout the years without any failure for at least five years of continuation operation in power the plants where these valves are installed. Norgren provides suitable guarantee/warranty certificate along with its products as 12 months from the date of commissioning or 18 month from the date of dispatch, whichever expires earlier.

However, This is strongly recommended that the IMI Norgren Heroin make Steam Turbine governing solenoid valves should be replaced after service of 5 years to safeguard your plant in terms of its operation.

Breakthrough Engineering

For IMI NORGREN HERION PVT LTD

10/08/2022

Surendra Raut
Sr Manager- Sales (Energy)
Email : surendra.raut@imi-precision.com
Mob :+91 9831042604

Incorporating

BIMBA
BUSCHJOST
FAS
HERION
KLOEHN™
MAXSEAL

IMI

C/O MALHOTRA RAJESH & ASSOCIATES
506, MERCANTILE HOUSE, 15 KASTURBA GANDHI MARG DELHI Central Delhi DL 110001 INDIA

ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
(A Government of India Undertaking)
ELECTRONICS DIVISION
P.B.No 2606, Mysore Road, Bangalore - 560 026

GRAM : BHARATELEC
FAX : 080 – 26989211
PHONE : 080 – 26998432
MOBILE : 9611250077
E-MAIL : pavankumarh@bhel.in

REF:CE:SM/CE/804/CE-MKTG /HPK/TATAPOWER DTD: 23/05/2022

As you are very much aware, HMI plays a crucial role in the control and monitoring of DCS in power plants and empowers the plant operators and engineers with critical data for better control, to make informed decisions, and thereby improved and reliable operation of the plant.

Microsoft has discontinued the product support for XP/Windows 7 operating system and disabled automatic security updates as no more security updates/virus definitions are available for that version. Hence the HMIs-max STATIONs are prone to vulnerabilities that can tamper with the operation of the plant.

The HMI systems presently in service at the site are quite old and outlived their service life. Some of these machines are slow in response and may hang quite frequently. Spares and services support for the old machines are restricted due to component obsolescence. The Workstations presently available in the market are with the latest Windows OS and these current machines are not one-to-one interchangeable with the existing old machines presently in use at these projects.

Our suggestion as advised by our field experts and engineering is highly recommended to upgrade the HMI-maxSTATIONs with the latest available hardware, and software with security features.

Yours faithfully,

(H Pavan Kumar)
DGM/ CE-MKTG

CEA (Cyber Security in Power Sector) Guidelines, 2021

1.2 Government of India has set up the Indian Computer Emergency Response Team (CERT-In) for Early Warning and Response to cyber security incidents and to have collaboration at National and International level for information sharing on mitigation of cyber threats. CERT-In regularly issues advisories on safeguarding computer systems and publishes Security Guidelines which are widely circulated for compliances. All Central Government Ministries/ Departments and State/Union Territory Governments have been advised to conduct cyber security audit of their entire Cyber Infrastructure including websites at regular interval through CERT-In empanelled Auditors so as to identify gaps and appropriate corrective actions to be taken in cyber security practices. CERT-In extends supports to enable Responsible Entity in conducting cyber security mock drills and in assessment of their preparation to withstand cyber-attacks. The Responsible Entity must submit Reports of Cyber Audit of cyber security controls, architecture, vulnerability management, network security and periodic cyber security drills to sectoral CERT as well as CERT-In. Team of experts shall review these reports and shortcomings if any in the compliances shall be flagged by them. CERT-In on regular basis also conducts workshops and training programs to enhance Cyber awareness of all Stakeholders.

1.4 All Responsible Entities, Service Providers, Equipment Suppliers/Vendors and Consultants engaged in Power Sector are equally responsible for ensuring cyber security of the Indian Power Supply System. They are to act timely upon each threat intelligence, advisories and other inputs received from authenticated sources, for continuous improvement in their cyber security posture.

Article 7 Phasing out of Legacy System

a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.

b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors.

c) The CISO shall ensure that till equipments/systems nearing end life or left without support from OEM are not replaced, their cyber security is hardened and ensured through additional controls provisioned in consultation with the OEM or alternate Supplier(s)*.

*e.g. Use of CDAC developed AppSamvid and whitelisting of applications installed may be explored across all legacy systems.

d) The Responsible Entity shall document in their Cyber Security Policy a Standard Operating Procedure for safe and secure disposal of outlived or legacy devices.



Grant Thornton
An instinct for growth™

TATA POWER (MPL)

OT Assessment Report



Risk Rating Criteria

The risk rating is used to signify the level of risk due to gaps noted during the audit and is based on a qualitative criterion defined as follows:

Category of finding	Implication
Critical	High risk, requires immediate Senior Management attention.
Major	High risk, requires Senior Management attention.
Medium	Medium risk, requires corrective action.
Low	Low risk, with opportunities for improvement.

Project Timeline and Team

OT assessment timeline for Unit 1 as follows:

Assessment Start Date	Assessment End Date
24-01-2023	28-01-2023

OT assessment timeline for Unit 2 as follows:

Assessment Start Date	Assessment End Date
01-08-2023	03-08-2023

Following team member was involved in this assessment:

GT Security Team	Contact Information
Ujjwal Ranjan	M: +91 7739756835 E: ujjwal.ranjan@in.gt.com

Executive Summary

In this report, we provide an overview of current visibility and insight into your OT environment. We analyzed the network behavior of assets, provided asset visibility and machine learning. The amount of information obtainable is directly related to the amount of information within the traffic capture files. Using our hybrid threat detection, we were able to scan and provide real-time alerting for your OT environment using packet and Yara rules. Starting with asset visibility will begin the process of moving up the maturity curve in our OT environment. Analyzing the alerts can help clean up the environment and ensure assets are communicating and functioning in a proper secure manner. Visibility into the network and understanding how assets communicate will help provide a foundation for network segmentation.

This report contains the outcome of vulnerability assessment and pen testing performed at Maithon Power Limited.

Activities performed to conduct VAPT in OT environment at MPL are mentioned below:

1. Performed passive monitoring of network 16 and network 17 including backup switches.
2. Performed internal pen testing & external pen testing.
3. Carried out physical assessment of all the available workstations.

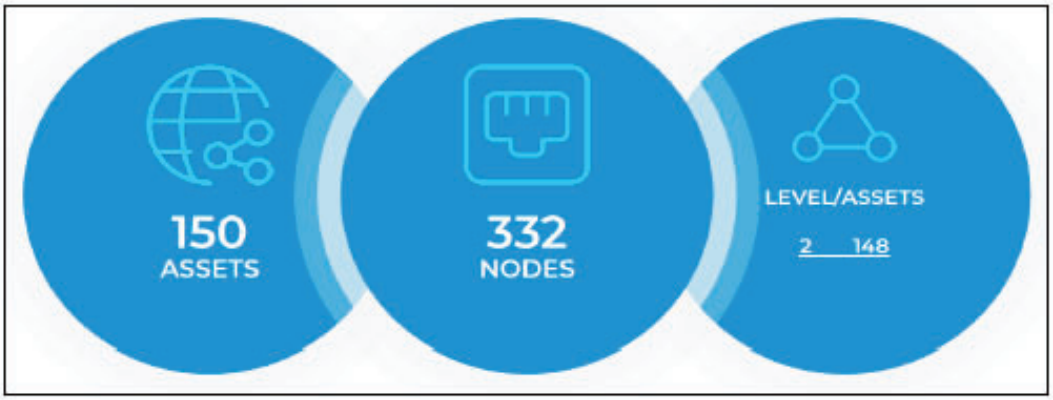
Unit 1

Asset Inventory

Discovered asset summary.

Summary of Network 16 is mentioned below.

Total number of assets discovered in network switch 16 including backup switch are 150.



Physical Assessment Observations

Observation Summary

Sl.No	Major Area	Description of Finding/Observation	Impact	Risk Rating	Recommendation
1	**Obsolete OS (Windows7 & Windows server 2008 R2)**	It was observed that the DCS is running on outdated OS that are Windows 7 and Windows server 2008 R2	An obsolete OS is no longer supported by the manufacturer, meaning that it no longer receives security updates, leaving it vulnerable to security breaches and attacks.	**Critical**	It is recommended to regularly update your operating system to avoid these issues and ensure optimal performance and security of the device. Immediate upgrade of OS is required since current control system are running on obsolete OS.
2	**Antivirus definition updates**	It was observed that most of the workstations and servers have similar status of Antivirus, where AV is installed however latest definition of AV is not updated. Note: **"Support of current antivirus installed in DCS workstations/servers is not available".**	Below are potential impacts of not having an antivirus: **Malware infections**: Without an antivirus program, the device is vulnerable to malware infections, which can cause data loss, system crashes, and other problems. Malware can also steal personal information, such as login	**Critical**	It is strongly recommended to upgrade the OS of DCS workstation/servers so that Antivirus support is available in the form latest AV definitions. It is also recommended to have a centralized AV manager so that AV definition can be updated regularly from it.

6	**Windows Patches updates**	It was observed that the systems which include workstation server, EWS, OWS are not updated with latest OS updates	Below are some potential impacts of not installing Windows patches: **Security vulnerabilities**: Not installing Windows patches can leave the device vulnerable to security threats, such as viruses, malware, and other types of attacks. This can result in data loss, system crashes, and other problems. **Reduced performance**: Over time, not installing Windows patches can result in reduced performance of the device. This can include slower load times for programs and applications, and overall sluggishness of the system. **Compatibility issues**: As software and hardware continue to advance, not installing Windows patches can lead to compatibility issues between the device and newer programs or devices. This can result in error messages or other problems when attempting to run certain software or hardware.	**High**	Create a policy and procedure inline to the OEM that OEM has to provide the validate patches as per patch management life cycle for OEM managed critical systems/ devices. Patch Manager needs to be integrated with DCS network so that workstations/server can be updated from centralized location and can be mapped with the OS update cycle .It is strongly recommended that you regularly install Windows patches and updates to ensure the device is protected from security threats, runs smoothly, and remains compatible with newer software and hardware.

Recommendations

- All unwanted ports & services running on the systems should be disabled. During this process, it is always good to check the effect on running SCADA system performance (with the help of SCADA vendor). System availability is more important in OT environment.
- Unused ports of network/OT devices such as switch should be disabled.
- Device control and application control policy for OT environment should be implemented.
- Upgradation of system OS should be conducted, and the systems should be on latest OS.
- Upgradation of Network Device Firmware should be carried out are regular intervals and should be on latest Firmware.
- Antivirus definitions and OS patch update rule should be defined and implemented.
- Monitor and implement security controls for the communication involving DCS systems (System PC and PLC) which are having the data flow between DCS systems and third-party sources / devices for security checks (with the support of vendor). This will add another layer of security in third party communication involving TCP/IP, OPC, Modbus, etc between DCS systems and third-party sources / devices.



Kumar Rabish

From: Koushik Pal <koushik.pal@hitachienergy.com>
Sent: 06 May 2024 12:23
To: Kumar Vivek
Cc: Banerjee R D; Deshmukh Prashant; Kumar Sanjay; Somnath Chatterjee; Kumar Niraj; Samir Biswas; Nivash R; Shubham Kumar Jha
Subject: RE: Budgetary Offer for Upgradation of switchyard SCADA at Maithon Power, Jharkhand (Our Ref.: OPP-24-7061901)
Attachments: cyber security implementation details.pdf; MicroSCADA X Brochure.pdf; MicroSCADA upgrade features_upto 10x.pdf

[EXTERNAL sender, Exercise caution..!]

Dear Sir,

As discussed, option 2 is not feasible in present scenario due to cyber security guidelines and software/hardware obsolescence.
Although pls find below few points needs to be considered in support of SAS upgradation requirements.

1. The existing IT hardware (Servers, OWS/EWS) will not perform with new Windows Server 2022/ Micro-SCADA X as it is not as per minimum hardware requirement of Micro-SCADA X platform. So, this hardware needs to be changed / replaced with new Hardware with enhanced CPU & RAM capacity.
2. Service support for old IT hardware also not available right now.
3. Existing OS don't have support from OEM (Microsoft) for security patches and Windows system related updates. Hence this need to be upgraded to latest platform.
4. Antivirus also need to be upgraded with new platform as existing one does not have support of the latest OS.
5. Further, the new OS, Micro-SCADA have many updated features/benefit and complaint to new Cyber Security requirements, refer enclosed documents.

Further, the new OS, Micro-SCADA have many updated features/benefit and complaint to new Cyber Security requirements, refer enclosed documents.

Regards,

Hitachi Energy

KOUSHIK PAL
General Sale & Marketing Professional- PGGA

13TH FLOOR, BIPL, BLOCK EP & GP, SECTOR V, SALT LAKE CITY
KOLKATA 700091, WEST BENGAL, INDIA
Mobile: 6366788821
E-mail: koushik.pal@hitachienergy.com
www.hitachienergy.com

ANNEXURE P/60A

From:

DURGESH SHARMA
M/S MAITHON POWER LIMITED
TATA POWER CO LTD, PO: RAHARGORA, JAMSHEDPUR-831016
MOBL No.: 9031035179

To:

Director (Rail Movement)/Railway Board/Kolkata

CCL/CORE/ELC/10-2024/1370-1411

Dear Sir,

Sub: BLOCK RAKE PROGRAMME FOR PREFERENTIAL RAKE ALLOTMENT AND MOVEMENT UNDER PRIORITY-C OF RAILWAY'S PREFERENTIAL TRAFFIC ORDER.

Following programme (PROG ID-P/MHP/CCL/C/OCT2024/1) for coal loading may please be approved for preferential loading in block rakes each month / for the month of ";OCT-2024 and forward to the allotment office for necessary action.

Name of the Consumer	Customer's Priority Class	Destination	Coal field	Colliery Depot & Pilot Name	No. of rake BOXN/BOBRN (BOXN/BOBRN) Wagons	Type of coal	Grade of coal	Particulars of sponsorship / Remarks (if any)
(MHP) M/S MAITHON POWER LIMITED/	CORE/ELC	MMMT	DHKP		42Rakes@59 BOBRN/BOXN	PHC	0-0-_	FSA/
I/We understand that issuance of consent on the programme by CIL, CMO does not entitle me to claim dispatch of coal in part or in full					I/We understand that acceptance of programme by the railways or issue of sanctions or the validity period by itself does not entitle any claim to allotment/supply of wagons.			

This Programme is Valid Upto: 31-10-2024

Yours faithfully

DURGESH SHARMA
(MHP) M/S MAITHON POWER LIMITED

Consenting Authority
Name/Designation: B LAL/MGR
Endorsed With Remarks: ok

(CCL) M/S CENTRAL COAL FIELD LTD.
No.:-CMP/DHN/CORE(ELC)/JH/CCL/DHKP/PHC/10-2024/1 Dated:03-10-2024
In case of Block rake, Serial No.....date of loading .....
Above programme is approved for preferential loading under priority class
Sanctioned With Remarks: SANCTIONED

Name/Designation: J.D.CHAUDHURI/OS
For: Director(Rail Movement), Railway Board, Kolkata

LIABILITY FOR OWNERSHIP OF COAL TRANSPORTED AND TRANSPORTATION OF THE SAME BY RAILWAY WAGON AGAINST THE

SANCTIONED PROGRAMME LIES WITH THE CONSUMER/SPONSOR OF THE COAL SUBJECT TO FULFILLING ALL THE COMMERCIAL CRITERIA AND NOT WITH EDRM OFFICE.
THIS IS A SYSTEM GENERATED STATEMENT AND DOES NOT REQUIRE ANY SIGNATURE.

ANNEXURE P/60B

F. No. 23011/85/2022-CPD
Government of India
Ministry of Coal

Shastri Bhawan, New Delhi,
Dated: 25.10.2024

OFFICE MEMORANDUM

Subject: - Minutes of 862nd meeting of the Sub-Group (IPP's) constituted by Infrastructure Constraints Review Committee to look into the issues of critical power houses.

The undersigned is directed to forward herewith a copy of the minutes of 862nd meeting of the Sub-Group (IPP's) held on 25.10.2024 for reviewing the position of critical thermal power stations for information and necessary action.

Encl. as above

25/10/24

(Sudarshan Bhagat)
Deputy Secretary

To

1. Sh. Piyush Singh, JS (Thermal), M/o Power
2. Sh. Avinash Kumar Mishra, ED(Coal), M/o Railways (Railway Board), Rail Bhawan, New Delhi.
3. Sh. Rajesh Asati, DS, Ministry of Shipping, Transport Bhawan, New Delhi.
4. Sh. Manoj Kumar Upadhyay, SRO (Power & Energy), NITI Aayog, Yojana Bhavan, New Delhi.
5. Shri Nitin Prakash, Director, CEA
6. Director (Marketing), CIL, Coal Bhawan, Newtown, Rajarhat, Kolkata-700156.
7. R.O, SCCL, 526, Hawa Singh Block, Khel Gaon, New Delhi.
8. Sh. Bhimsen, CM, CIL, Scope Minar, Laxmi Nagar, New Delhi.
9. General Manager (S&M), CIL, Newtown, Rajarhat, Kolkata-700156.
10. CMDs of ECL/BCCL/CCL/NCL/SECL/MCL/WCL
11. CMD/MD's of concerned IPP's

Copy to:
(i) PSO to Secy. Coal
(ii) PS to AS (VT)
(iii) PS to JS (CPD)
(iv) PS to ED (CTC)
(v) PS to DS (CPD)

Copy to: Cabinet Secretariat (Under Secretary, CA-3)

Minutes of Sub-group (IPP's) Meeting Held on 25.10.2024

The meeting of the Sub-Group constituted by the Infrastructure Constraints Review Committee was held on 25.10.2024 at 12:00 noon in hybrid mode. It was chaired by Joint Secretary (CPD), Ministry of Coal and attended by officials of MoC, MoP, Railway Board, CEA & IPPs, as well as CIL Kolkata/Subsidiaries HQ/CIL Delhi.

Supply of coal to power sector (IPPs) was reviewed and discussed in order to augment it further to the IPPs having lesser coal stocks. Subgroup decisions on coal supply to Plants are as under:-

List of participants is at **Annexure.**

S. No.	Name of Genco/ Power Plant	Coal Company	Supply Plan / Supply as per Subgroup Decision Dated: 18.10.2024		Supply Plan as per Subgroup decision 25.10.2024	Remarks
			Plan	Actual Supply		
1	**Mahatma Gandhi/ Jhajjar TPS**	BCCL	0.6 Rake	1.0 Rake	0.6 Rake	
		CCL	2.0 Rake	2.0 Rake	2.0 Rake	
		NCL	0.5 Rakes	0.5 Rake	0.75 Rakes	
		Total	**3.1 Rakes**	**3.5 Rakes**	**3.35 Rakes**	
2	**Nabha Power**	CCL	0.5 Rake (under Flexi utilization)	0.5 Rake	0.5 Rake (under Flexi utilization)	Value paid rakes in CCL and BCCL are 15 and 6 rakes respectively.
		BCCL	0.5 Rake (under Flexi utilization)	0.3 Rake	0.5 Rake (under Flexi utilization)	
		NCL	2.0 Rakes	1.3 Rakes	2.0 Rakes	
		SECL	2.0 Rakes	0.5 Rakes	2.0 Rakes	
		Total	**5.0 Rakes**	**2.6 Rakes**	**5.0 Rakes**	
3	**Talwandi Sabo**	CCL	2.5 Rake (under Flexi utilization)	1.0 Rakes	2.5 Rake (under Flexi utilization)	22 value paid rakes are pending in CCL. TPP to make efforts to unload at least 10 rakes/day.
		NCL	0.5 Rake	0.0 Rake	0.5 Rake	
		SECL	4.0 Rakes	2.8 Rakes	4.0 Rakes	
		BCCL	1.5 Rakes (under Flexi utilization)	1.7 Rakes	1.5 Rakes (under Flexi utilization)	
		Total	**8.5 Rakes**	**5.5 Rakes**	**8.5 Rakes**	
4		NCL	2.5 Rakes	2.0 Rakes	2.5 Rakes	

	Adani Power Limited Kawai TPP	SECL	2.0 Rakes	0.7 Rake	2.0 Rakes	Unit is under shutdown till 27th Oct.
		Total	**4.5 Rakes**	**2.7 Rakes**	**4.5 Rakes**	
5	**Bajaj Group**	NCL	0.75 Rake	0.8 Rake	0.75 Rake	
6	**Lalitpur**	CCL	2.5 Rake	1.5 Rake	2.5 Rake	
		NCL	2.0 Rake	1.7 Rake	2.0 Rake	
		SECL	0.8 Rake	1.2 Rake	0.8 Rake	
		Total	**5.3 Rake**	**4.4 Rake**	**5.3 Rake**	
7	**Prayagraj TPP**	NCL	3.75 Rakes	4.0 Rakes	4.0 Rakes	
8	**Rosa TPP**	CCL	3.5 Rakes	3.5 Rakes	3.5 Rakes	101 value paid rakes are pending in CCL.
9	**Balco TPS**	SECL	2.5 Rake	1.5 Rake	2.5 Rake	SECL to ensure supply as per the Sub Group plan.
10	**Akaltara**	SECL	5.0 Rake	2.0 Rakes	5.0 Rake	106 value paid rakes are pending in SECL.
		MCL	3.0 Rake	1.8 Rake	3.0 Rake	SECL to give at least 3 rakes/day.
		NCL	0.5 Rake	0.5 Rake	0.5 Rake	
		Total	**8.5 Rake**	**4.3 Rake**	**8.5 Rake**	
11	**DB Power/ Barardhara TPS**	SECL	3.0 Rake	2.3 Rake	3.0 Rake	SECL to supply rakes in ratio of 70:30 for Unit-I FSA & Unit-II FSA.
12	**Binjkote**	SECL	0.3 Rake	0.0 Rake	0.3 Rake	SECL to supply rakes as per the plan.
		MCL	0.5 Rake	0.7 Rake	0.5 Rake	
		Total	**0.8 Rake**	**0.7 Rake**	**0.8 Rake**	
13	**Pathadi TPS**	SECL	1.0 Rake	0.8 Rake	1.0 Rake	
14	**Unchpinda**	SECL	1.5 Rake	1.3 Rake	2.0 Rake	Value paid rakes in SECL and MCL are 30 and 6 rakes respectively.
		MCL	2.5 Rake	1.5 Rake	2.5 Rake	
		Total	**4.0 Rake**	**2.8 Rake**	**4.5 Rake**	
15	**Sabarmati**	SECL	2.0 Rake	1.2 Rakes	2.0 Rake	
16	**Anuppur (MB Power)**	SECL	4.0 Rake	1.7 Rakes	4.0 Rake	SECL to supply rakes as per the plan.
		MCL	0.2 Rakes	0.0 Rakes	0.2 Rakes	
		Total	**4.2 Rakes**	**1.7 Rakes**	**4.2 Rakes**	
17	**Hiranmaye TPS**	MCL	2.0 Rakes	0.8 Rake	2.0 Rakes	6 value paid rakes are pending. MCL to supply rakes as per the plan.
18	**Hinduja/**	MCL	4.0 Rakes	3.5 Rakes	4.0 Rakes	

	Vizag TPS					
19	**Bina**	CCL	0.2 Rake	0.0 Rake	0.2 Rake	
		NCL	0.5 Rake	0.3 Rake	0.5 Rake	
		Total	**0.7 Rake**	**0.3 Rake**	**0.7 Rake**	
20	**Seioni /Jhabua**	SECL	1.0 Rake	0.2 Rake	1.0 Rake	SECL to prioritize coal supply to the plant.
		NCL	0.1 Rake	0.2 Rake	0.1 Rake	
		MCL	1.0 Rake	0.5 Rake	1.0 Rake	
		Total	**2.1 Rake**	**0.9 Rake**	**2.1 Rake**	
21	**Amravati**	SECL	5.0 Rakes	2.3 Rakes	5.0 Rakes	
22	**Dahanu**	SECL	3.0 Rake	1.5 Rake	3.0 Rake	SECL informed plant is not submitting rail program in K-Rewa where they can supply 1 rake/day to the plant. Requested to Plant to submit rail program in K-Rewa.
23	**Dhariwal TPS**	SECL	1.5 Rakes	0.8 Rake	1.5 Rakes	
		WCL	0.4 Rake	0.5 Rake	0.4 Rake	
		Total	**1.9 Rakes**	**1.3 Rake**	**1.9 Rakes**	
24	**GMR Warora**	SECL	1.5 Rake	0.8 Rake	1.5 Rake	
25	**Adani Tirora**	SECL	7.0 Rakes	5.3 Rake	7.0 Rakes	
		WCL	3.0 Rakes	2.2 Rakes	3.0 Rakes	
		MCL	1.0 Rake	0.7 Rake	1.0 Rake	
		Total	**11.0 Rakes**	**8.2 Rake**	**11.0 Rakes**	
26	**Painampuram TPP (Sembcorp)**	MCL	8.0 Rake	4.3 Rakes	8.0 Rake	
27	**Tata Power Jojobera**	CCL (For a week)	0.25 Rake (For a week)	0.7 Rake	0.25 Rake (For a week)	
28	**MahadevPd./ Adhunik Power**	CCL	2.0 Rake	1.3 Rakes	2.0 Rake	Power plant is required to furnish the rail program for unloading point for its own siding instead of GSS.
		MCL	0.5 Rake B (III)	0.5 Rake	0.5 Rake B (III)	
		Total	**2.5 Rake**	**1.8 Rake**	**2.5 Rake**	
29	**GMR Kamalanga**	MCL	4.0 Rakes	3.3 Rakes	4.0 Rakes	

30	**Sterlite Energy/ Vedanta**	MCL	2.5 Rake	1.2 Rakes	2.5 Rake	Unit under shutdown till 30th Oct. Plant requested for reducing coal supply
31	**CESC(Budge Budge)**	ECL	1.0 Rake	1.2 Rakes	1.0 Rake	
		BCCL	1.0 Rake	0.3 Rake	1.0 Rake	
		Total	**2.0 Rake**	**1.5 Rakes**	**2.0 Rake**	
32	**Haldia**	MCL	1.5 Rakes	2.2 Rakes	1.5 Rakes	
33	**Raipur Energen/ Raikheda**	MCL	0.5 Rakes	4.0 Rakes	0.5 Rakes	
		CCL	0.0 Rake	0.0 Rake	0.0 Rake	
		SECL	0.2 Rake	0.0 Rake	0.2 Rake	
		Total	**0.7 Rake**	**4.0 Rake**	**0.7 Rake**	
34	**Dishergarh TPP**	CCL	0.2 Rake	0.0 Rake	0.2 Rake	
35	**Maithon RB TPP**	CCL	0.5 Rake	0.3 Rake	0.5 Rake	
		BCCL	0.5 Rake	0.5 Rake	0.5 Rake	
		Total	**1.0 Rake**	**0.8 Rake**	**1.0 Rake**	
36	**Anpara C TPS**	NCL	0.25 Rake	0.0 Rake	0.25 Rake	Plant to take coal via MGR mode as per the agreement with UPRVUNL.
37	**Tamnar TPS**	Plan to lift coal as per the requirements.				

- All TPPs to take necessary actions to optimize unloading time so as to reduce the rake turnaround time (TAT). The reduced TAT is necessary for supply of optimum number of rakes.
- All the TPPs are advised not to regulate intake of coal in Q3 and Q4

ANNEXURE

Ministry of Coal

1. Shri Sanjeev Kumar Kassi, Joint Secretary CPD
2. Shri Ramakant Singh ED CTC
3. Shri Sudarshan Bhagat Deputy Secretary CPD

Ministry of Power/CEA

1. Shri Piyush Singh Joint Secretary (Thermal)
2. Shri Nitin Prakash Director (FM)

Ministry of Railways

1. Shri Pulkit Singhal Director (Coal)

Representatives of Power Plants

1. Shri Vernon Morasis Dhariwal/Haldia
2. Shri Jitesh Pal Adani Power Tirora, Kawai, Mahan, Raipur Energen, Pathadi
3. Shri Bikram Satapathy Hiranmaye TPS
4. Shri Tarun Prayagraj
5. Shri Mohit Seioni TPS
6. Shri Aniruddha Painapuram TPS
7. Shri Brij Kishore Balco TPS
8. Shri Bijay KSK Akaltara
9. Shri Gautam Wazir Amravati TPS
10. Shri Lalit Joshi Anuppur/MB Power
11. Shri Ankit Gupta Talwandi Sabo
12. Shri Saurabh Patel, Nabha Power
13. Shri Durga Roy, Unchpinda TPP
14. Shri Ankit Vaidya, Sabarmati TPP
15. Shri Naresh, Dahanu TPP
16. Shri Rajendra Chandge, Vedanta
17. Shri Raj, Rosa TPP
18. Shri P K Pradhan, Hinduja TPP
19. Shri Mohit, GMR Warora
20. Shri Subrata Mandal, CESC Budge Budge

Coal India Limited

1. General Manager (M&S) CIL
2. GM/HoD (M&S)- ECL, BCCL, CCL, NCL, WCL, SECL, MCL

No. 11/86/2017-Th.II
Government of India
Ministry of Power
.....

Shram Shakti Bhawan, Rafi Marg,
New Delhi, dated the 8th October, 2021

To,

1. Principal Secretary/Secretary in charge of Energy/Power Departments, All States/UTs
2. Chairman, CEA
3. CMDs of all CGSs

Subject: Revised Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants

Sir/Madam,

The undersigned is directed to refer to this Ministry's "Policy for Biomass Utlisation for Power Generation through Co-firing in Pulverised Coal Fired Boilers" issued in November, 2017

2. In order to further promote use of biomass pellets in coal based thermal power plants, the above Policy is further modified. A copy of "Revised Policy for Biomass Utlisation for Power Generation through Co-firing in Coal based Power Plants" is enclosed for information and necessary action please.

Yours faithfully

Encls: As Above

Kumar Saurabh
Deputy Director(Thermal)
Ministry of Power

Copy to:
(i) PS to Hon'ble Minister,
(ii) PS to Hon'ble MoS for Power,
(iii) Sr. PPS to Secretary(Power),
(iv) PPS to AS(SKGR), PPS to AS&FA, PPS to AS(VKD)
(v) All Joint Secretaries/EA/Chief Engineer, Ministry of Power
(vi) Incharge, NIC, Ministry of Power - with a request to upload this document on the website of MoP.

REVISED POLICY OF MINISTRY OF POWER FOR BIOMASS UTILIZATION FOR POWER GENERATION THROUGH CO-FIRING IN COAL BASED POWER PLANTS

1. The current availability of biomass in India is estimated at about 750 million metric tonnes per year. The estimated surplus biomass availability is at about 230 million metric tonnes per annum covering agricultural residues.

2. Ministry of Power (MoP) vide its policy dated 17-11-2017 on biomass utilization for power generation had advised that all fluidized bed and pulverized coal units (coal based thermal power plants) except those having ball and tube mill, of power generation utilities, public or private, located in India, to use 5-10% blend of biomass pellets made, primarily, of agro residue along with coal after assessing the technical feasibility, viz. safety aspect etc.

3. In order to further promote use of biomass pellets in coal based thermal power plants, the above Policy is further modified. The modifications in the above Policy are as under:

(i). All coal based thermal power plants of power generation utilities with **bowl mill**, shall on annual basis mandatorily use 5 percent blend of biomass pellets made, primarily, of agro residue along with coal with effect from one year of the date of issue of this guideline. The obligation shall increase to 7 percent with effect from two years after the date of issue of this order and thereafter.

(ii). All coal based thermal power plants of power generation utilities with **ball & race mill**, shall on annual basis mandatorily use 5 % blend of biomass pellets (torrefied only) made, primarily, of agro residue along with coal. This is to be complied within one year starting from this order. Two years from the date of issue of this order and thereafter the obligation will increase to 7 percent.

(iii). All coal based thermal power plants of power generation utilities with **ball & tube mills**, shall on annual basis mandatorily use 5 % blend of torrefied biomass pellets with volatile content below 22%, primarily made of agro residue along with coal. This is to be complied within one year.

(iv). Generating Utilities having certain units under Reserve Shutdown or not being despatched due to MOD (Merit Order Despatch) consideration would ensure to increase the percentage of co-firing up to 10 % in their other operating units/ plants (5 % in plants having ball and tube mills).

(v). Any power plants seeking exemptions / relaxation from co-firing may be considered on case to case basis, based on recommendations of CEA. A Committee headed by Chief Engineer (TE&TD), CEA, including representatives from NTPC, BHEL, CPRI, Ministry of Agriculture and Mission

Directorate shall examine the request of power plants for their exemption/relaxation from mandatory co-firing of biomass, as mentioned at para (i) to (iv) above.

(vi). The policy for co-firing of biomass would be in force for 25 years or till the useful life of the thermal power plant whichever is earlier. The minimum percentage of biomass for co-firing will be reviewed from time to time.

(vii) The minimum contract period for procurement of biomass pellets by generating utilities shall be for 7 years so as to avoid delay in awarding contracts by generating companies every year and also to build up long term supply chain. There may be provision of firm price of biomass pellets for the first year of the contract and yearly rate variation from second year onwards where rates can vary as per terms and conditions of the contract. In order to enable its implementation, a model RfP and contract shall be issued by MOP by 15.11.2021 for adhering to by all generating utilities. However, the ongoing process of contracting for biomass co-firing by generating utilities shall not be affected till issue of Model Contract.

(viii). Provisions related to tariff determination and scheduling shall be as given below:

a. For projects set up under Section 62 of the Electricity Act 2003, the increase in cost due to co-firing of biomass pellets shall be pass through in Energy Charge Rate (ECR).
b. For projects set up under Section 63 of the Electricity Act 2003, the increase in ECR due to biomass co-firing can be claimed under Change in Law provisions.
c. Such additional impact on ECR shall not be considered in deciding Merit Order Despatch (MOD) of the power plant.
d. Obligated Entities such as Discoms can meet their Renewable Purchase Obligations (RPO) by buying such generation of co-firing.

*****

ANNEXURE P/60D

ELECON
GEARING THE FUTURE

TÜVRheinland CERT ISO 9001

D09/B20023/57 November 11, 2020

Budgetary Proposal

To,
M/s. Maithon Power Ltd.

Kind Attn. : Mr. Manish Kumar (Head – CHP)

Dear Sir,

Sub. : Requirement of Stacker cum reclaimer with the same specifications and parameters as per our earlier supplied machine no. HM-451

We refer to your subject enquiry and are pleased to submit herewith our *Budgetary Proposal* for subject machine for your kind perusal.

We hope the offer will meet with your requirement of the equipment; should you require any clarification, please feel free to contact us.

Thanking you, In the meantime, we remain,

Yours faithfully,
For Elecon Engineering Co. Ltd. (MHE Divison)

Elecon Engineering Co. Ltd. Vallabh Vidyanagar

Nirav A. Vasavada
(Proposals & Marketing)

BUDGETARY PROPOSAL FOR Stacker cum Reclaimer FOR M/s. Maithon Power Ltd.

Client	M/s. Maithon Power Ltd.
Project	Requirement of Stacker cum reclaimer in line with earlier supplied M/c.

INDEX

Sr. No.	Title	Page No.
1	Price schedule	3
2	Design Basis	9
3	Scope Matrix	11
4	Technical Specifications with separate attachment	13
5	List Of Exclusions	16
6	Comments / Observations / Deviations	17
7	Sub Vendor List	18
8	List of Spares	Attachment
9	Reference list	Attachment

PRICE SCHEDULE

Client	M/s. Maithon Power Ltd.
Project	Requirement of Stacker cum reclaimer in line with earlier supplied M/c.

BUDGETARY PRICE SCHEDULE			
Price for Design, Engineering, Manufacturing & Supply of Stacker cum reclaimer (1 no.) on **Ex-works V. V. Nagar basis** & Supervision of Erection, Testing and Commissioning as per the Scope & Specifications mentioned here with.			
Sr. No.	**Description**	**Qty.**	**Total Ex-works Price, Rs.**
1.0	**Supply of Equipment:**		
1.1	Stacker cum reclaimer 1500 TPH (Stacking) and 1150 TPH (Reclaiming) (As per attached past order machine parameters)	1 No.	**24,10,00,000/-** (Rs. Twenty Four Crore Ten lakhs only/-)
2.0	Supervision of Erection Testing & Commissioning of Reclaimer (Excluding to & fro travel charges, local lodging and boarding charges and local conveyance charges)	**Lot**	**Rs. 18,000/-** **Per man per day**
3.0	Transportation to site, site un-loading, loading, storage including storage insurance, erection, testing and commissioning of equipment		**By PURCHASER**
4.0	All kind of taxes / duties and levies		**EXTRA AT ACTUAL**

COMMERCIAL TERMS & CONDITIONS

Our commercial offer is subject to following terms & condition mentioned herewith. Any other clause of the purchase enquiry or order printed or otherwise shall not be acceptable to us unless agreed before order finalization.

1. PRICE BASIS

The Prices quoted above are on **Ex-works V. V. Nagar** inclusive of Packing and forwarding charges wherever applicable. Transportation from our works including transit insurance to be arranged by Purchaser.

Un-loading at site, loading, site storage and insurance, site handling, erection, testing and commissioning should be in the scope of Purchaser and to be taken care by Purchaser.

2. TAXES & DUTIES

All Taxes / Duties such as GST / Octroi / Customers clearance charges / Terminal Tax as applicable, for items to be supplied shall be paid extra at actual by Purchaser.

3. TERMS OF PAYMENT

20 % : of the Contract Price for main package shall be paid as advance

80 % : Payment on pro-rata supply basis, based on dispatch documents and 100% taxes & duties through LC

Payments except the advance payment shall be secured with a suitable **Letter of credit** opened in favor of M/s Elecon Engineering Co Ltd, within 30 days of acceptance of Purchase Order. All usance charges for the LC shall be borne by PURCHASER.

4. WARRANTY PERIOD

Warranty period for our supplied equipment shall be 12 Months from the last major dispatch.

5. DELIVERY PERIOD / DISPATCH SCHEDULE:

Delivery period shall be mutually discussed and agreed before Order finalization. If delivery is delayed due to reasons beyond reasonable control of Elecon Engineering Co Ltd, the purchaser shall grant suitable extension in delivery period.

Seller will proceed with the execution of Contract/Purchase order as per the agreed delivery schedule. For reasons whatsoever if the Purchaser decides to postpone supply of such material, Purchaser shall compensate the manufacturer at the rate of 5% of the order value per month effective from the date of such postponement. The supply schedule will subsequently be revised based on mutual discussions and agreement, to facilitate restitution of the balance work. Furthermore, the Purchaser shall pay the amount thus accruing to the Seller before recommencing dispatches.

We shall only accept the order in the event of the said condition appearing in your Purchase Order ad verbatim.

6. SUPERVISION OF ERECTION, TESTING & COMMISSIONING

We strongly recommend Erection, Testing and Commissioning of the offered equipment under close supervision of our engineers for smooth and trouble free operation of the equipment after commissioning and warranty liability of equipment.

7. INSPECTION

We have considered inspection of various components based on our standard QAP. Cost of any third party inspection, if required shall be borne by you. Imported components shall be accepted on base on manufacturer's inspection at their shop. TC shall be furnished for these components as per our QAP during inspection visit of Purchaser, if desired.

8. FORCE MAJEURE

Any event including but not limited to an act of God, fire, epidemics, pandemics, natural calamities, riots, civil commotion or unrest, terrorism, war ,strikes or lockouts; expropriation or other governmental actions; any change in applicable law or regulations including change in market rules, currency restrictions, devaluations or fluctuations; market conditions affecting the execution or settlement of transaction or the value of assets; and breakdown, failure or malfunction of any telecommunication and information technology systems beyond the control of any party which restricts or prohibits the performance of the obligations of such party contemplated by Purchase order.

M/s Elecon engineering company limited shall not be held liable for any loss or damage or failure to perform its obligation hereunder, of for any delay in complying with any duty or obligations, under or pursuant to purchase order arising as direct or indirect results of any Force Majeure Event.

9. WHOLENESS OF ORDER

Our offer has been formulated on the quantity specified in the enquiry/recommendations. Should there be any deviation from the quantity offered either plus or minus, our offer will be subject to confirmation/revision.

10.CANCELLATION / ALTERNATION

In the event of cancellation of the Purchase Order, Purchaser shall pay to the Seller cost incurred in engineering, procurement and manufacture of items till the date of event including cost of raw material procured, semi-finished goods and other losses that the Seller may incur Plus overhead charges @20% of the cost. The Purchaser shall pay to manufacturer the total amount after due adjustment of advance amount.

11.ARBITRATION

Any dispute or difference arising between the parties in connection with the contract order shall be referred to arbitration in accordance with the provisions of the Indian Arbitration Act 1996 or any statutory modifications or re-enactment thereof. The arbitration will be given to Engineering Association of India and Gujarat Chamber of Commerce.

12.JURISDICTION

Contract will be subject to Indian Arbitration law / act.

13.VALIDITY

Our offer will remain valid for a period of **30 days** from the date of submission of this offer. Thereafter the same will be subject to our confirmation in writing.

14.EFFECTIVE DATE OF ORDER

Effective date of Order shall be from the date of receipt of Advance payment or from the date of G A Drawing approval or from the date of opening of full value of LC, whichever is later.

15. All other commercial terms / conditions shall be mutually discussed and agreed before Order finalization.

[A]	DESIGN BASIS:

1.0 Project Information:

- Tenderer : Elecon Engineering Company Ltd.
  Post box no. 33,
  Vallabh Vidyanagar – 388 120
  Gujarat State (India)
- Purchaser : Maithon Power Ltd.
- Location : Dhanbad

2.0 Material Characteristics:

The Equipment offered by us shall be designed to handle Material having following specification:

- Material : Crushed coal
- Bulk density : 0.8 T/M^3
- Lump size : < 25 mm

3.0 Codes of Practices:

- ISO-5049/1-1994: Mobile equipment for continuous handling of bulk materials. Part: 1; Rules for design of steel structures.
- FEM Section II - 1997: Rules for the design of mobile equipment for continuous handling of bulk materials.
- CEMA Version 5 - 1997: Belt Conveyors for Bulk Materials.
- STABILITY FACTORS:

	Stability Factor
Load Combination I	1.5
Load Combination II	1.3
Load Combination III	1.2

4.0 ELECTRICAL:

Data Considered :

- **For HT Power Supply: HT/LT** +/- 10%, 50 Hz +/- 5%, combined Voltage & Frequency variation of +/-10% 3 phase, 3 wire earthed system.
- **For LT Power Supply:** 415 V +/- 10%, 50 Hz +/- 5 % combined Voltage & Frequency variation of +/- 10%, 3 phase, 3 Wire AC earthed system for L. T. Motors.
- Control supply –:110V, Single phase, 50 Hz A.C.
- Space heater supply for motors 30 KW & above 240 V Single phase, 50 Hz, A.C.
- Fault level: 50 KA at 415 V.
  40 KA at 6.6 KV for 3 sec.
- Lighting supply 240V, 1Ph, 50Hz AC system

Site Conditions :

- Ambient Temperature : 50 Deg. C
- Relative Humidity : 100 % (Approx.)

5.0 BASIS OF OFFER FOR ELECTRICAL:

- Purchaser shall provide HT / LT supply up to Reclaimer LT/HT junction box installed on ground at the center feed point of machines.

- The length of cable shall be based on considering power feed point at centre of travel length of machines.

- PLC shall be pre-programmed as per application requirement.

[B]	SCOPE MATRIX:			
			ELECON	PURCHASER
[B.1]	MECHANICAL:			
1.0	**Stacker cum reclaimer (1No)**	:	√	X

Consisting of

- Rail Travel Mechanism
  - Drive bogies
  - Non Drive Bogies
  - Drives (Motor, Gearbox, Coupling)
  - Rail Clamps
  - Arms & Structures
- Under Carriage
- Upper Carriage
- Slewing Mechanism
  - Slewing ring with teeth
  - Drives (motor, gearbox & coupling)
  - Slewing Shaft & Pinion
- Pylon/Mast & Suspension
- Counter weight Boom
- Boom Conveyor
  - Drives (motor, gearbox & coupling)
  - Idlers & Pulleys
  - Belt, Chutes & Skirt Plates
  - Structure
- Bucket wheel mechanism
  - Electro-mechanical Drive
  - Buckets & Bucket Wheel Shaft
  - Plummer Block with Bearing
  - Chutes & Skirt Plates
  - Structure

			ELECON	PURCHASER
	• Walkways & platforms • Air-conditioned E-house & O-cabin • Cable Reeling Drum Power • Cable Reeling Drum Control			
2.0	Concrete Counter weight	:	X	√
3.0	Rail & rail fixing accessories	:	X	√
4.0	Painting as per manufacturer's standard	:	√	X
5.0	Transportation up to site including transit insurance	:	X	√
6.0	Supervision of Erection, commissioning & Testing	:	√	X
7.0	Erection, commissioning & Testing	:	X	√
[B.2]	**On-Board Electrical and C & I:** Elecon Standard Electricals on the machine along with power and cable supply up to the Junction box at the centre of travel of the machine **(rest of the electrical supply by purchaser)**	:	√	X

[C]	TECHNICAL SPECIFICATION FOR BUCKET WHEEL RECLAIMER:

Please find attached sheet as per part order.

[D]	LIST OF EXCLUSIONS:

- Any kind of civil work, i.e., rail & rails foundation, stockyard foundation, RCC counter weight, boom resting pad etc.
- Any kind of dismantling, strengthening work for existing facility.
- Yard conveyor & Rail and fixtures for rail.
- Dust suppression / dust extraction system for stockyard area & on machine.
- Any kind of other spares except mentioned in above scope.
- Development of storage yard / stockpile area.
- Fire fighting and fire detection system on machine as well as other area.
- Obtaining statutory approvals. However, we shall provide all the necessary information for the same and provide assistance whenever required.
- Drinking & service water arrangements & piping.
- All kind of earthing as well as erection of material including rail.
- Any approval from local authority / body etc for electrical installation.
- Illumination of open stockpile area and yard conveyor.
- Any flame proof electrical equipment.
- Rail to rail earthing, earthing along the rail, stockpile earthing and connection with purchasers earthing grid for machines.
- Interconnection between various our offered equipment and total plant facilities including electrical and instrumentation for the same.
- Spare feeders of any type and rating in LT MCC, spare feeders in VVVF panels and in other local panels located in e house of the yard machine due to space restriction.
- APFC panels / capacitor bank for power factor correction panel.
- HT power supply arrangement up to the power junction box / HT isolator fuse box located at center of travel of the yard machine. Cable for control communication from center point junction box.

[E]	COMMENTS / OBSERVATIONS / DEVIATIONS:

- Any kind of dismantling work, erection and testing work to be carried out by Purchaser.
- The accuracy of belt weigher for boom conveyor will be + / - 1 %.
- Walkway on both the sides of boom conveyor will be with width of 600 mm
- Slewing bearing will be external type with separate segmental toothed rim manufactured by Elecon. Elecon toothed rims are fitted at various locations in PSUs and are working satisfactorily in conjunction with slew bearing.

[F]	SUB VENDOR LIST:		
	Item Description		**Vendors**
	• Gear Box	:	ELECON
	• Bearings (Idlers & Pulleys)	:	SKF / FAG / NTN / KOYO / NKE / LYC / NSK / ABC / TIMKEN
	• Flexible/Geared Coupling	:	ELECON
	• Fluid Coupling	:	ELECON
	• Idlers & Pulleys	:	ELECON
	• Belting	:	PHOENIX INDIA / SEMPERTRANS NIRLON / ORIENTAL RUBBER / NORTHLAND RUBBER / HINDUSTAN RUBBER
	• Hydraulic Cylinder & System	:	EATON HYDRAULICS / REXROTH / PARKER / ELECON HYDRAULICS
	• Slewing Bearing	:	ROTHE ERDE / LIEBHERR / SKF / IMO / GALPERTI
	• Segmental Toothed Rim	:	ELECON
	• External Scrapers	:	ELECON / HOSCH / SPILLBAN
	• Internal Scrapers	:	ELECON
	• Hold Back	:	ELECON PERIPHERAL LTD
	• Electro Hydraulic Thruster Brakes	:	ELECON PERIPHERAL LTD / ELECTROMAG / GALVI
	• Cable Reeling Drum	:	ELECON

- Belt Weigher : ELECON
- Thrusters : BUBENZER / ELECTROMAG / ELECON PERIPHERAL LTD.
- HT Switchgear : ABB / Crompton / KEC / Areva / Jyoti / Siemens /Megavin./ A bond strend /Panikkar
- HT Motor : CGL / KEC/ BHEL / Marathon / Siemens / ABB / Bharat Bijlee / L & T/ Jyoti
- LT Motor for main equipment : Bharat Bijlee / KEC / Siemens,/ Crompton / Marathon / ABB / L & T
- LT Motor for Aux. system or Equipment like sump pump / vent. fans / cranes / hoist etc. / DS : Reputed make as per Mfg. Std. & requirements.
- Load Break Switch : Siemens/ L&T / Schneider / ABS/ Panickker
- PMCC/MCC non draw out Panel : Siemens / GE Power / Schenider / L & T / ABB / C & S/ system house of them/Elecon Peripherals Ltd.
- Mimic & relay control panels / control desk / Aux. Panels : Siemens / GE Power / Schenider / L & T / ABB / C & S/ system house of them/Elecon Peripherals Ltd.
- Local Starter Panel / Main lighting Distribution / sub lighting distribution board/ Local Control PB stations : Siemens / GE Power / Schenider / L & T / ABB / C & S/ system house of them/Elecon Peripherals Ltd.

- Local control panel : Eimco elecon electricals/ Pricise Automation/ Pyrotech / Hi-mak/ switching circuits/ Enpro / Elpro / Syspro automation /Elecon Peripherals Ltd.
- Lighting fixtures : Philips / Bajaj / Crompton Greaves / SAMSON Wipro / GE
- LT Power cables : UCL / RPG / CCI / NICCO / Incab / Fort Gloster / POLYCAB / KEI / Delton / Cords / Torrent / Havells / Finolex / Prestige / AVOCAB / Equiv
- LT Control cables / LT Lighting cables : UCL / RPG / CCI / NICCO / Incab / Fort Gloster / POLYCAB / KEI / Cords / Delton / Torrent / Havells / Finolex / AVOCAB / Prestige / Equiv
- Flex. Cables Trailing cables : UCL / Nicco / Sun / Polycab / Equiv.
- Instrumentation cables : UCL / Asian / CCI/ NICCO / POLYCAB / KEI / Delton / Cords / Finolex / Incab / Havells / AVOCAB / Hylite / Equiv.
- PLC system : Siemens / RA / GE Fanuc / ABB / Schenider / Emotron /Mitshubisi /Elecon Peripherals Ltd.
- Lighting wire : Finolex / Hylite / L&T / Polycab / KEI / Havells / Anchor / Prestige / AVOCAB / Equiv.
- Pull cord ,belts way switches : AG – Bombay / Industrial components – Calcutta / PG Electronics / Parametrics /Jayshree/ Pyrotech / Proto control / Equiv
- Zero speed switches : PG Electronics / AG Engg /

Telemechanic / IFM – Germany / Balluff – Germany / Parametrics / Pyrotech / Proto-control /Jayshree or Equiv.

- Cable trays : Indiana Engg / Steelite / Diamond Metals / Mettalmems / GM Engg / Jamna metals / Vatco / Industrial perforation / Dolphin / MJ Engg / Kanade Udyog / Equiv.
- Control / lighting and small Transformers : Gujarat Plug in devices / Automatic Electric / Kappa / Gujarat Transformers / Sagon / Ind coil/ Schilcher / Atlanta/Equiv.
- Dry type Transformer : Kirloskar / ECE / Gujarat Plug- in / Voltamp / Crompton / Intra vidyut
- V.V.V.F Drive/ Thyristor panel : Siemens / KEC / ABB / GE Fanuc / RA/ EMOTRON/Denfoss / Schneider or any authorized system house / Equiv. /Elecon Peripherals Ltd.
- Contactors/ Overload relays : Siemens / L&T / Telemechenique / ABB / Allen Bradly / GE / Schneider / Equiv.
- Protection relays (Numerical) : Alstom / ABB / Siemens / Allen Bradly / Easun Rerolle / Equiv.
- CT & PT : AE / Pragati / G & M / Jyoti / Kappa / Prayog / Indcoil / Silkaans / Bharat Enginers / Equiv.
- Ammeter / Voltmeter : AE / IMP / MECO / Equiv.
- Instrument scanner : Jyoti / ADI / PEACON / Equiv.

• Indicating lamps, Push buttons, Auxiliary Contactor	:	Siemens / L&T / Teknic / ABB / Telemechanique / Schneider / GE / Vaishnov / BCH / Equiv.
• Terminals	:	Elmex / Vinpar / Technoplast / Wago / Phoenix / Connect well / Equiv.
• LT circuit breaker	:	L&T / CGL / Siemens / ABB / Alstom / Schneider / C&S / Equiv.
• Moulded case circuit breaker	:	L&T / ABB / AB / Siemens / Alstom / Schneider /CGL/ Equiv.
• Cable glands	:	Braco / Comet / Vin-Mech / Equiv. /cosmos
• Receptacles, Plug and socket Units	:	Crompton / Dynamic controls / A. Bonds strands / Micro Industries / BCH / Equiv.
• Cable lugs	:	Dowell / Comet / Braco
• Switches, fuses, HRC fuse	:	Siemens / L&T / Alstom / ABB/ AB/ Kaycee / Schneider / GE
• MCB /ACB/MCCB	:	MDS / Lucas / Indo Kopp / CGL / Siemens / ABB / Telemechanique / Schneider / GE
• ELCB	:	Areva/Siemens/ Indokopp
• Fabrication, assembly, testing of Panels	:	Power Gear/ Popular Power / Eimco Elecon Electricals / Servotech / Equiv.
• Cable jointing kit	:	Raychem / MECP / Birla 3-M / Equiv.
• Junction boxes, Local control Stations,	:	Power Gear/ Popular Power / Eimco Elecon Electricals / Servotech / Equiv.

- Timers : Siemens / L&T / BCH / Alstom / ABB / Allen Bradly / Schneider / Equiv.
- Limit switches : AG / PG / Siemens / Telemechanique / Jay Balajee / Proto Controls / Paramatrics / Equiv.
- Level switches : EIP / Nivo / Toshniwal / Proto controls / Equiv.
- Battery Charger : HBL / Amaraja / Chabbi / Caldyne / Equiv
- UPS : Hirel / DB Power / Emerson / Siemens / Tata Libert / APC / Equiv
- Resistance Box : Electromag / Stromcraft / Ohm-mark.
- Selector Switches. : Kaydee/Salzer.
- Energy Chain : Igus / Kabelschlepp

Note:
1) Vendors for any other items not mentioned above, will be ELECON Approved Make.
2) Choice of Vendors from above list shall be retained by ELECON only.

From: Dey, Ankush <ankush.dey@tkil.com>
Sent: 27 January 2025 14:30
To: Dixit Piyush <piyush.dixit@tatapower.com>
Cc: Sinha, Rajnish <rajnish.sinha@tkil.com>; Sao Nilima <nilimasao@tatapower.com>; Singh Rupesh <singhrk@tatapower.com>; Derla R <ravindraderla@tatapower.com>
Subject: RE: Request for Budgetary Offer for Yard Conveyor with Stacker Reclaimer
Importance: High

Some people who received this message don't often get email from ankush.dey@tkil.com. Learn why this is important

[EXTERNAL sender, Exercise caution..!]

Dear Sir,

This is in reference to your trailing email, regarding revised budgetary offer of TKIL Stacker cum reclaimer along with Yard conveyor package.

We are pleased to submit our revised Non-binding budgetary quote as below

Sr. No.	Description	Qty.	Total Price (In Cr, INR)
1	Design, Manufacture, Inspection, Assembly, Painting, and Supply and erection & commissioning of complete Stacker cum Reclaimer with Yard Conveyor on EPC basis as per the major scope of supply as below 1. Stacker cum Reclaimer (1500 TPH)- 1 No 2. Yard conv (1500 TPH, 825m C-C) & Drive house 2- 1 set 3. BFD – 1 no & FG – 1 no (in JNT 8) 4. Piping throughout the Yard Conv. for firefighting & Sprinkling system along with header in each 30 meter interval, Quick release Coupling(QRC), Sprinkler gun etc. 5. All related Civil, E&I, erection jobs.	1 Set.	**81.50**

Please note following:

1. Validity of our offer – 30 days
2. Our Budgetary quote are based on attached commercial terms and conditions. However, Final offer shall be submitted based on further discussion and subject to our Board approval.
3. All applicable taxes extra at actual.
4. Our supply price is excluding mandatory spares, recommended spares and insurance spares. However commissioning spare is included.
5. Pump House along with Pumps is excluded from our scope of supply. Client to provide water supply at JNT 8 at adequate pressure(approx. 7 kg) for the firefighting & Yard Sprinkling system.

Thanking you and assuring you of our best attention at all times.

Thanks & Regards
Ankush Dey
Mob: 7003832828

From: Derla R <ravindraderla@tatapower.com>
Sent: 16 January 2025 11:26
To: Dey, Ankush <ankush.dey@tkil.com>
Cc: Sinha, Rajnish <rajnish.sinha@tkil.com>; Sao Nilima <nilimasao@tatapower.com>; Singh Rupesh <singhrk@tatapower.com>; Dixit Piyush <piyush.dixit@tatapower.com>
Subject: RE: Request for Budgetary Offer for Yard Conveyor with Stacker Reclaimer

Dear Ankush,

I hope this email finds you well.

This refers to our discussion during your site visit on 15.01.2025, where we elaborated on the need to include a fire-fighting system and dust suppression systems for the proposed coal yard in your budgetary offer. We kindly request you to submit a comprehensive budgetary proposal incorporating these systems, as it will greatly assist us in securing management approval for the entire project.

Additionally, we request you to arrange for a budgetary offer for a ground hopper with a 1000 TPH conveying system. This system is intended to discharge road-mode coal to BCN 3A/B during emergency situations, such as significant delays in rake unloading due to issues like oversized lumps or sticky coal, as experienced in the recent past.

Your prompt response will be highly appreciated.

Regards,
Ravindra Derla
Group Head - CHP
Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Village Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
Tel: 9972945356 Mobile: 9099995743

From: Dey, Ankush <ankush.dey@tkil.com>
Sent: 10 January 2025 17:52

झारखण्ड राज्य प्रदूषण नियंत्रण पर्षद

Jharkhand State Pollution Control Board

नगर प्रशासन भवन, एच0ई0सी0, धुर्वा, राँची

दूरभाष : 2400851, 2400852, 2400979 फैक्स : 0651– 2400850 / 138,

Web: www.jspcb.nic.in (new) www.jspcb.org(old)

E-mail: ranchijspcb@gmail.com

पत्रांक Rlswm/37/2023 दिनांक.....

प्रेषक,

वाई० के० दास
सदस्य सचिव

सेवा में,

अपर मुख्य सचिव,
पंचायती राज विभाग,
झारखण्ड सरकार, राँची

सचिव
नगर विकास एवं आवास विभाग
झारखण्ड सरकार, राँची

विषयः– **स्वच्छ भारत मिशन 2.0 कार्यक्रम के अन्तर्गत ठोस एवं प्लास्टिक अपशिष्ट प्रबंधन नियमावली–2016 के क्रियान्वयन में राज्य के सभी Bulk Garbage generator को चिन्हीत कर अपशिष्ट प्रबंधन हेतू CSIR-CMERI दुर्गापुर द्वारा विकसित उर्पयुक्त (appropriate) तकनीक को लागू कराने के संबंध में।**

महाशय,

उपरोक्त विषयक विदित है कि, ठोस एवं प्लास्टिक अपशिष्ट प्रबंधन नियमावली–2016 के क्रियान्वयन में माननीय राष्ट्रीय हरित प्राधिकरण (NGT), नई दिल्ली के वाद संख्या 606 / 2018 में पारित आदेश आदेश के आलोक में,

1. सभी नगर निकायों अन्तर्गत Bulk Garbage generator को चिन्हीत किया जाना है।
2. वैसे सभी Bulk Garbage generator को अपने परिसीमा के अन्दर प्रतिदिन उत्पन्न अपशिष्टों का प्रसंस्करण कर Waste to wealth का निर्माण कराया जाना है।
3. इस कार्य से उत्पन्न होने वाले करीब 30% अपशिष्टों का सीधा निस्तारण होगा, जिससे नगर निकाय को उससे उत्पन्न अपशिष्टों का भार कम हो जाएगा।
4. Bulk Garbage generator के रूप में चिन्हीत शहरों में बड़े होटल,हॉस्टल, टाऊनशीप, होल–सेल सब्जी मंडी एवं मंदिर आदि जहाँ से 50–100 Kg प्रतिदिन अपशिष्ट उत्सर्जीत करते हैं।
5. डोर–टू–डोर कचरा संग्रहण गाड़ी द्वारा संग्रहित सूखे एवं गीले कचरे को भी Waste to wealth का निर्माण कराया जाना है।

उपरोक्त कार्य हेतु विज्ञान एवं प्राद्यौगिकी मंत्रालय, भारत सरकार के संस्था CSIR-CMERI दुर्गापुर के द्वारा 07 (अनुलग्नक 01 में वर्णित) प्रकार के तकनीक को अनुसाधन कर विकसित किया गया है, जो कि Zero waste तकनीक पर अधारित है, जिससे सभी अपशिष्टों का प्रसंस्करण किया जा सकता है, एवं इसके सतत् रख–रखाव के लिए उनके द्वारा प्रशिक्षण का भी व्यवस्था किया गया है।

अतः अनुरोध है कि सभी निकायों में इस तकनीक का प्रयोग कर झारखण्ड के हर शहर को Garbage free city बनाने के लिए अग्रतर कार्य किया जा सकता है। साथ ही किसी भी सुझाव के लिए संस्था CSIR-CMERI दुर्गापुर के वरिष्ठ वैज्ञानिक डा0 अमित गांगुली एवं वैज्ञानिक डा0 पार्था दास को दुरभाष संख्याः–9434214863 / 8967995858 से संपर्क सुझाव लिया जा सकता है।

विश्वासभाजन

ह०/–

(वाई० के० दास)
सदस्य सचिव

826/DKC/OONF/MC

ज्ञापांकः– B-726 दिनांकः– 13/03/2024

प्रतिलिपि :– निदेशक CSIR-CMERI दुर्गापुर को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

(वाई० के० दास)
सदस्य सचिव

रजिस्ट्री सं० डी० एल०-33004/99 REGD. NO. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

असाधारण
EXTRAORDINARY
भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)
प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 861] नई दिल्ली, शुक्रवार, अप्रैल 8, 2016/चैत्र 19, 1938
No. 861] NEW DELHI, FRIDAY, APRIL 8, 2016/CHAITRA 19, 1938

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 8 अप्रैल, 2016

का.आ. 1357(अ).—ठोस अपशिष्ट प्रबंधन नियम, 2015 का प्ररुप भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना सं. सा.का.नि.451 (अ) तारीख 3 जून, 2015 को भारत के राजपत्र भाग II, खंड-3, उप खंड (i) में उसी तारीख को प्रकाशित किए गए थे, जिसमें उनसे प्रभावित होने वाले संभावित व्यक्तियों से नगरीय ठोस अपशिष्ट (प्रबंधन और हथालन) नियम 2000 को अधिक्रांत करते हुए उक्त अधिसूचना के द्वारा ठोस अपशिष्ट प्रबंधन नियम, 2015 के प्रकाशन की तारीख से साठ दिनों की अवधि की समाप्ति से पूर्व आक्षेप और सुझाव आमंत्रित किए थे।

उक्त राजपत्र की प्रतियां जनता को तारीख 3 जून, 2015 को उपलब्ध कराई गईं थीं;

निर्धारित अवधि के भीतर उक्त प्रारूप नियमों पर प्राप्त आपत्तियों तथा टिप्पणियों पर केन्द्र सरकार द्वारा सम्यक रूप से विचार किया गया था;

पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3, 6 और 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए और नगरीय ठोस अपशिष्ट (प्रबंधन और हथालन) नियम, 2000, उन बातों के सिवाय अधिक्रांत करते हुए जिन्हें ऐसे अधिक्रमणों से पहले किया गया है या किए जाने का लोप किया गया है, केन्द्रीय सरकार ठोस अपशिष्टों का प्रबंधन करने के लिए निम्नलिखित नियम बनाती है अर्थात् :

1. संक्षिप्त नाम और प्रारंभ.–

(1) इन नियमों का संक्षिप्त नाम ठोस अपशिष्ट प्रबंधन नियम, 2016 है।

(2) ये राजपत्र में इनके प्रकाशन की तारीख से प्रवृत्त होंगे ।

नगरपालिकाओं की कुल संख्या:

प्रस्तुत की गई कार्य योजना की संख्या:

प्ररुप-VI

[नियम 25 देखें]

दुर्घटना का प्रतिवेदन

1.	दुर्घटना की तारीख और समय	:	
2.	दुर्घटना के लिए कारकों का अनुक्रम	:	
3.	दुर्घटना में शामिल अपशिष्ट	:	
4.	मानव स्वास्थ्य और पर्यावरण पर दुर्घटनाओं के प्रभावों का मूल्यांकन	:	
5.	किए गए आपातकालीन उपाय	:	
6.	दुर्घटनाओं के प्रभावों को कम करने के लिए उठाए गए कदम	:	
7.	ऐसी किसी दुर्घटना की पुनरावृत्ति को रोकने के लिए उठाए गए कदम	:	
तारीख		हस्ताक्षर	
स्थान		पदनाम	

[फा. सं.18-3/2004-एचएसएमडी]

विश्वनाथ सिन्हा, संयुक्त सचिव

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 8th April, 2016

S.O. 1357(E).—Whereas the draft of the Solid Waste Management Rules, 2015 were published under the notification of the Government of India in the Ministry of Environment, Forest and Climate Change number G.S.R. 451 (E), dated the 3rd June, 2015 in the Gazette of India, part II, Section3, sub- section (i) of the same date inviting objections or suggestions from the persons likely to be affected thereby, before the expiry of the period of sixty days from the publication of the said notification on the Solid Waste Management Rules, 2015 in supersession of the Municipal Solid Waste (Management and Handling) Rules, 2000;

And whereas, copies of the said Gazette were made available to the public on the 3rd June, 2015;

And whereas, the objections or comments received within the stipulated period were duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sections 3, 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986) and in supersession of the Municipal Solid Waste (Management and Handling) Rules, 2000, except as respect things done or omitted to be done before such supersession, the Central Government hereby makes the following rules for management of Solid Waste, namely:-

1. **Short title and commencement.-**

(1) These rules may be called the Solid Waste Management Rules, 2016.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. **Application.-** These rules shall apply to every urban local body, outgrowths in urban agglomerations, census towns as declared by the Registrar General and Census Commissioner of India, notified areas, notified industrial townships, areas under the control of Indian Railways, airports, airbases, Ports and harbours, defence establishments, special economic zones, State and Central government organisations, places of pilgrims, religious and historical importance as may be notified by respective State government from time to time and to every domestic, institutional, commercial and any other non residential solid waste generator situated in the areas except industrial waste, hazardous waste, hazardous chemicals, bio medical wastes, e-waste, lead acid batteries and radio-active waste, that are covered under separate rules framed under the Environment (Protection) Act, 1986**.**

3. **Definitions –**(1) In these rules, unless the context otherwise requires,- (1) **"aerobic composting"** means a controlled process involving microbial decomposition of organic matter in the presence of oxygen;

2. **"anaerobic digestion"** means a controlled process involving microbial decomposition of organic matter in absence of oxygen;

3. **"authorisation"** means the permission given by the State Pollution Control Board or Pollution Control Committee, as the case may be, to the operator of a facility or urban local suthority, or any other agency responsible for processing and disposal of solid waste;

4. **"biodegradable waste "** means any organic material that can be degraded by micro-organisms into simpler stable compounds;

5. **"bio-methanation"** means a process which entails enzymatic decomposition of the organic matter by microbial action to produce methane rich biogas;

6. **"brand owner"** means a person or company who sells any commodity under a registered brand label.

7. "**buffer zone**" means zone of no development to be maintained around solid waste processing and disposal facility, exceeding 5 TPD of installed capacity. This will be maintained within total and area allotted for the solid waste processing and disposal facility.

8. **"bulk waste generator"** means and includes buildings occupied by the Central government departments or undertakings, State government departments or undertakings, local bodies, public sector undertakings or private companies, hospitals, nursing homes, schools, colleges, universities, other educational institutions, hostels, hotels, commercial establishments, markets, places of worship, stadia and sports complexes having an average waste generation rate exceeding 100kg per day**;**

9. **"bye-laws"** means regulatory framework notified by local body, census town and notified area townships for facilitating the implementation of these rules effectively in their jurisdiction**.**

10. **"census town"** means an urban area as defined by the Registrar General and Census Commissioner of India;

11. **"combustible waste"** means non-biodegradable, non-recyclable, non-reusable, non hazardous solid waste having minimum calorific value exceeding 1500 kcal/kg and excluding chlorinated materials like plastic, wood pulp, etc**;**

12. "**composting"** means a controlled process involving microbial decomposition of organic matter;

13. "**contractor**" means a person or firm that undertakes a contract to provide materials or labour to perform a service or do a job for service providing authority;

14. **"co-processing"** means use of non-biodegradable and non recyclable solid waste having calorific value exceeding 1500k/cal as raw material or as a source of energy or both to replace or supplement the natural mineral resources and fossil fuels in industrial processes;

15. **"decentralised processing"** means establishment of dispersed facilities for maximizing the processing of bio-degradable waste and recovery of recyclables closest to the source of generation so as to minimize transportation of waste for processing or disposal;

16. "**disposal"** means the final and safe disposal of post processed residual solid waste and inert street sweepings and silt from surface drains on land as specified in Schedule I to prevent contamination of ground water, surface water, ambient air and attraction of animals or birds;

17. **"domestic hazardous waste"** means discarded paint drums, pesticide cans, CFL bulbs, tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc., generated at the household level;

18. **"door to door collection" m**eans collection of solid waste from the door step of households, shops, commercial establishments , offices , institutional or any other non residential premises and includes collection of such waste from entry gate or a designated location on the ground floor in a housing society , multi storied building or apartments , large residential, commercial or institutional complex or premises;**.**

19. **"dry waste"** means waste other than bio-degradable waste and inert street sweepings and includes recyclable and non recyclable waste, combustible waste and sanitary napkin and diapers, etc;

20. **"dump sites"** means a land utilised by local body for disposal of solid waste without following the principles of sanitary land filling;

21. **"extended producer responsibility" (EPR)** means responsibility of any producer of packaging products such as plastic, tin, glass and corrugated boxes, etc., for environmentally sound management, till end-of-life of the packaging products;

22. **"facility"** means any establishment wherein the solid waste management processes namely segregation, recovery, storage, collection, recycling, processing, treatment or safe disposal are carried out;

23. **"fine" means** penalty imposed on waste generators or operators of waste processing and disposal facilities under the bye-laws for non-compliance of the directions contained in these rules and/or bye- laws

24. **"Form"** means a F8orm appended to these rules;

25. **"handling"** includes all activities relating to sorting, segregation, material recovery, collection, secondary storage, shredding, baling, crushing, loading, unloading, transportation, processing and disposal of solid wastes;

26. **"inerts"** means wastes which are not bio-degradable, recyclable or combustible street sweeping or dust and silt removed from the surface drains;

27. **"incineration"** means an engineered process involving burning or combustion of solid waste to thermally degrade waste materials at high temperatures;

28. **"informal waste collector"** includes individuals, associations or waste traders who are involved in sorting, sale and purchase of recyclable materials;

29. "**leachate"** means the liquid that seeps through solid waste or other medium and has extracts of dissolved or suspended material from it;

30. **" local body"** for the purpose of these rules means and includes the municipal corporation, nagar nigam, municipal council, nagarpalika, nagar Palikaparishad, municipal board, nagar panchayat and town panchayat, census towns, notified areas and notified industrial townships with whatever name they are called in different States and union territories in India;

31. "**materials recovery facility" (MRF)** means a facility where non-compostable solid waste can be temporarily stored by the local body or any other entity mentioned in rule 2 or any person or agency authorised by any of them to facilitate segregation, sorting and recovery of recyclables from various components of waste by authorised informal sector of waste pickers, informal recyclers or any other work force engaged by the local body or entity mentioned in rule 2for the purpose before the waste is delivered or taken up for its processing or disposal;

32. **"non-biodegradable waste"** means any waste that cannot be degraded by micro organisms into simpler stable compounds;

33. **"operator of a facility"** means a person or entity, who owns or operates a facility for handling solid waste which includes the local body and any other entity or agency appointed by the local body;

34. **primary collection"** means collecting, lifting and removal of segregated solid waste from source of its generation including households, shops, offices and any other non-residential premises or from any collection points or any other location specified by the local body;

35. "**processing"** means any scientific process by which segregated solid waste is handled for the purpose of reuse, recycling or transformation into new products**;**

36. **"recycling**" means the process of transforming segregated non-biodegradable solid waste into new material or product or as raw material for producing new products which may or may not be similar to the original products;

37. **"redevelopment"** means rebuilding of old residential or commercial buildings at the same site, where the existing buildings and other infrastructures have become dilapidated;

38. **"refused derived fuel**"(RDF) means fuel derived from combustible waste fraction of solid waste like plastic, wood, pulp or organic waste, other than chlorinated materials, in the form of pellets or fluff produced by drying, shredding, dehydrating and compacting of solid waste ;

39. "**residual solid waste"** means and includes the waste and rejects from the solid waste processing facilities which are not suitable for recycling or further processing;

40. **"sanitary land filling "** means the final and safe disposal of residual solid waste and inert wastes on land in a facility designed with protective measures against pollution of ground water, surface water and fugitive air dust, wind-blown litter, bad odour, fire hazard, animal menace, bird menace, pests or rodents, greenhouse gas emissions, persistent organic pollutants slope instability and erosion;

41. **"sanitary waste"** means wastes comprising of used diapers, sanitary towels or napkins, tampons, condoms, incontinence sheets and any other similar waste;

42. **"Schedule"** means the Schedule appended to these rules;

43. "**secondary storage**" means the temporary containment of solid waste after collection at secondary waste storage depots or MRFs or bins for onward transportation of the waste to the processing or disposal facility;

44. **"segregation"** means sorting and separate storage of various components of solid waste namely biodegradable wastes including agriculture and dairy waste, non biodegradable wastes including recyclable waste, non-recyclable combustible waste, sanitary waste and non recyclable inert waste, domestic hazardous wastes, and construction and demolition wastes;

45. **"service provider"** means an authority providing public utility services like water, sewerage, electricity, telephone, roads, drainage, etc;

46. **"solid waste"** means and includes solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste and other non residential wastes, street sweepings, silt removed or collected from the surface drains, horticulture waste, agriculture and dairy waste, treated bio-medical waste excluding industrial waste, bio-medical waste and e-waste, battery waste, radio-active waste generated in the area under the local authorities and other entities mentioned in rule 2;

47. **"sorting"** means separating various components and categories of recyclables such as paper, plastic, card-boards, metal, glass, etc., from mixed waste as may be appropriate to facilitate recycling;

48. **"stabilising"** means the biological decomposition of biodegradable wastes to a stable state where it generates no leachate or offensive odours and is fit for application to farm land ,soil erosion control and soil remediation;

49. **"street vendor"** means any person engaged in vending of articles, goods, wares, food items or merchandise of everyday use or offering services to the general public, in a street, lane, side walk, footpath, pavement, public park or any other public place or private area, from a temporary built up structure or by moving from place to place and includes hawker, peddler, squatter and all other synonymous terms which may be local or region specific; and the words "street vending" with their grammatical variations and cognate expressions, shall be construed accordingly;

50. **"tipping fee"** means a fee or support price determined by the local authorities or any state agency authorised by the State government to be paid to the concessionaire or operator of waste processing facility or for disposal of residual solid waste at the landfill;

51. **"transfer station"** means a facility created to receive solid waste from collection areas and transport in bulk in covered vehicles or containers to waste processing and, or, disposal facilities;

52. **"transportation"** means conveyance of solid waste, either treated, partly treated or untreated from a location to another location in an environmentally sound manner through specially designed and covered transport system so as to prevent the foul odour, littering and unsightly conditions;

53. **"treatment"** means the method, technique or process designed to modify physical, chemical or biological characteristics or composition of any waste so as to reduce its volume and potential to cause harm;

54. **"user fee"** means a fee imposed by the local body and any entity mentioned in rule 2 on the waste generator to cover full or part cost of providing solid waste collection, transportation, processing and disposal services.

55. "**vermi composting"** means the process of conversion of bio-degradable waste into compost using earth worms;

56. "**waste generator**" means and includes every person or group of persons, every residential premises and non residential establishments including Indian Railways, defense establishments, which generate solid waste;

57. **"waste hierarchy"** means the priority order in which the solid waste is to should be managed by giving

emphasis to prevention, reduction, reuse, recycling, recovery and disposal, with prevention being the most preferred option and the disposal at the landfill being the least;

58. **"waste picker"** means a person or groups of persons informally engaged in collection and recovery of reusable and recyclable solid waste from the source of waste generation the streets, bins, material recovery facilities, processing and waste disposal facilities for sale to recyclers directly or through intermediaries to earn their livelihood.

(2) Words and expressions used herein but not defined, but defined in the Environment (Protection) Act, 1986, the Water (Prevention and Control of Pollution) Act, 1974, Water (Prevention and Control of Pollution) Cess Act, 1977 and the Air (prevention and Control of Pollution) Act, 1981 shall have the same meaning as assigned to them in the respective Acts.

4 Duties of waste generators.- (1) Every waste generator shall,-

(a) segregate and store the waste generated by them in three separate streams namely bio-degradable, non bio-degradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorised waste pickers or waste collectors as per the direction or notification by the local authorities from time to time;

(b) wrap securely the used sanitary waste like diapers, sanitary pads etc., in the pouches provided by the manufacturers or brand owners of these products or in a suitable wrapping material as instructed by the local authorities and shall place the same in the bin meant for dry waste or non- bio-degradable waste;

(c) store separately construction and demolition waste, as and when generated, in his own premises and shall dispose off as per the Construction and Demolition Waste Management Rules, 2016; and

(d) store horticulture waste and garden waste generated from his premises separately in his own premises and dispose of as per the directions of the local body from time to time.

(2) No waste generator shall throw**,** burn or burry the solid waste generated by him, on streets, open public spaces outside his premises or in the drain or water bodies.

(3) All waste generators shall pay such user fee for solid waste management, as specified in the bye-laws of the local bodies.

(4) No person shall organise an event or gathering of more than one hundred persons at any unlicensed place without intimating the local body, at least three working days in advance and such person or the organiser of such event shall ensure segregation of waste at source and handing over of segregated waste to waste collector or agency as specified by the local body.

(5) Every street vendor shall keep suitable containers for storage of waste generated during the course of his activity such as food waste, disposable plates, cups, cans, wrappers, coconut shells, leftover food, vegetables, fruits, etc., and shall deposit such waste at waste storage depot or container or vehicle as notified by the local body**.**

(6) All resident welfare and market associations shall, within one year from the date of notification of these rules and in partnership with the local body ensure segregation of waste at source by the generators as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorised recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body.

(7) All gated communities and institutions with more than 5,000 sqm area shall, within one year from the date of notification of these rules and in partnership with the local body, ensure segregation of waste at source by the generators as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorizsd recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body.

(8) All hotels and restaurants shall, within one year from the date of notification of these rules and in partnership with the local body ensure segregation of waste at source as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorised recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body.

5. Duties of Ministry of Environment, Forest and Climate Change.- (1) The Ministry of Environment, Forest and Climate Change shall be responsible for over all monitoring the implementation of these rules in the country. It shall constitute a Central Monitoring Committee under the Chairmanship of Secretary, Ministry of Environment, Forest and Climate Change comprising officer not below the rank of Joint Secretary or Advisor from the following namely,-

1) Ministry of Urban Development

2) Ministry of Rural Development

3) Ministry of Chemicals and Fertilizers

4) Ministry of Agriculture

5) Central Pollution Control Board

6) Three State Pollution Control Boards or Pollution Control Committees by rotation

7) Urban Development Departments of three State Governments by rotation

8) Rural Development Departments from two State Governments by rotation

9) Three Urban Local bodies by rotation

10) Two census towns by rotation

11) FICCI, CII

12) Two subject experts

2. This Central Monitoring Committee shall meet at least once in a year to monitor and review the implementation of these rules. The Ministry of Environment, Forest and Climate Change may co-opt other experts, if needed. The Committee shall be renewed every three years.

6. Duties of Ministry of Urban Development.- (1) The Ministry of Urban Development shall coordinate with State Governments and Union territory Administrations to,-

(a) take periodic review of the measures taken by the states and local bodies for improving solid waste management practices and execution of solid waste management projects funded by the Ministry and external agencies at least once in a year and give advice on taking corrective measures;

(b) formulate national policy and strategy on solid waste management including policy on waste to energy in consultation with stakeholders within six months from the date of notification of these rules;

(c) facilitate States and Union Territories in formulation of state policy and strategy on solid management based on national solid waste management policy and national urban sanitation policy;

(d) promote research and development in solid waste management sector and disseminate information to States and local bodies;

(e) undertake training and capacity building of local bodies and other stakeholders;and

(f) provide technical guidelines and project finance to states, Union territories and local bodies on solid waste management to facilitate meeting timelines and standards.

7. Duties of Department of Fertilisers, Ministry of Chemicals and Fertilisers.- (1) The Department of Fertilisers through appropriate mechanisms shall,-

(a) provide market development assistance on city compost; and

(b) ensure promotion of co-marketing of compost with chemical fertilisers in the ratio of 3 to 4 bags: 6 to 7 bags by the fertiliser companies to the extent compost is made availablefor marketing to the companies.

8. Duties of Ministry of Agriculture, Government of India.- The Ministry of Agriculture through appropriate mechanisms shall,-

(a) provide flexibility in Fertiliser Control Order for manufacturing and sale of compost;

(b) propagate utlisation of compost on farm land;

(c) set up laboratories to test quality of compost produced by local authorities or their authorised agencies; and

(d) issue suitable guidelines for maintaining the quality of compost and ratio of use of compost visa-a-vis chemical fertilizers while applying compost to farmland.

9. Duties of the Ministry of Power.-The Ministry of Power through appropriate mechanisms shall,-

(a) decide tariff or charges for the power generated from the waste to energy plants based on solid waste.

(b) compulsory purchase power generated from such waste to energy plants by distribution company.

10. Duties of Ministry of New and Renewable Energy Sources- The Ministry of New and Renewable Energy Sources through appropriate mechanisms shall,-

(a) facilitate infrastructure creation for waste to energy plants; and

(b) provide appropriate subsidy or incentives for such waste to energy plants.

11. Duties of the Secretary–in-charge, Urban Development in the States and Union territories.- (1) The Secretary, Urban Development Department in the State or Union territory through the Commissioner or Director of Municipal Administration or Director of local bodies shall,-

(a) prepare a state policy and solid waste management strategy for the state or the union territory in consultation with stakeholders including representative of waste pickers**,** self help group and similar groups working in the field of waste management consistent with these rules, national policy on solid waste management and national urban sanitation policy of the ministry of urban development, in a period not later than one year from the date of notification of these rules;

(b) while preparing State policy and strategy on solid waste management, lay emphasis on waste reduction, reuse, recycling, recovery and optimum utilisation of various components of solid waste to ensure minimisation of waste going to the landfill and minimise impact of solid waste on human health and environment;

(c) state policies and strategies should acknowledge the primary role played by the informal sector of waste pickers, waste collectors and recycling industry in reducing waste and provide broad guidelines regarding integration of waste picker or informal waste collectors in the waste management system.

(d) ensure implementation of provisions of these rules by all local authorities;

(e) direct the town planning department of the State to ensure that master plan of every city in the State or Union territory provisions for setting up of solid waste processing and disposal facilities except for the cities who are members of common waste processing facility or regional sanitary landfill for a group of cities; and

(f) ensure identification and allocation of suitable land to the local bodies within one year for setting up of processing and disposal facilities for solid wastes and incorporate them in the master plans (land use plan) of the State or as the case may be, cities through metropolitan and district planning committees or town and country planning department;

(h) direct the town planning department of the State and local bodies to ensure that a separate space for segregation, storage, decentralised processing of solid waste is demarcated in the development plan for group housing or commercial, institutional or any other non-residential complex exceeding 200 dwelling or having a plot area exceeding 5,000 square meters;

(i) direct the developers of Special Economic Zone, Industrial Estate, Industrial Park to earmark at least five percent of the total area of the plot or minimum five plots or sheds for recovery and recycling facility.

(j) facilitate establishment of common regional sanitary land fill for a group of cities and towns falling within a distance of 50 km (or more) from the regional facility on a cost sharing basis and ensure professional management of such sanitary landfills;

(k) arrange for capacity building of local bodies in managing solid waste, segregation and transportation or processing of such waste at source;

(l) notify buffer zone for the solid waste processing and disposal facilities of more than five tons per day in consultation with the State Pollution Control Board; and

(m) start a scheme on registration of waste pickers and waste dealers.

12. Duties of District Magistrate or District Collector or Deputy Commissioner.- The District Magistrate or District Collector or as the case may be , the Deputy Commissioner shall, -

(a) facilitate identification and allocation of suitable land as per clause (f) of rules 11 for setting up solid waste processing and disposal facilities to local authorities in his district in close coordination with the Secretary-in-charge of State Urban Development Department within one year from the date of notification of these rules;

(b) review the performance of local bodies, at least once in a quarter on waste segregation, processing, treatment and disposal and take corrective measures in consultation with the Commissioner or Director of Municipal Administration or Director of local bodies and secretary-in-charge of the State Urban Development.

13. Duties of the Secretary–in-charge of Village Panchayats or Rural Development Department in the State and Union territory.- (1) The Secretary–in-charge of Village Panchayats or Rural Development Department in the State and Union territory shall have the same duties as the Secretary–in-charge, Urban Development in the States and Union territories, for the areas which are covered under these rules and are under their jurisdictions.

14. Duties of Central Pollution Control Board.-The Central Pollution Control Board shall, -

(a) co-ordinate with the State Pollution Control Boards and the Pollution Control Committees for implementation of these rules and adherence to the prescribed standards by local authorities;

(b) formulate the standards for ground water, ambient air, noise pollution, leachate in respect of all solid waste processing and disposal facilities;

(c) review environmental standards and norms prescribed for solid waste processing facilities or treatment technologies and update them as and when required;

(d) review through State Pollution Control Boards or Pollution Control Committees, at least once in a year, the implementation of prescribed environmental standards for solid waste processing facilities or treatment technologies and compile the data monitored by them;

(e) review the proposals of State Pollution Control Boards or Pollution Control Committees on use of any new technologies for processing, recycling and treatment of solid waste and prescribe performance standards, emission norms for the same within 6 months;

(f) monitor through State Pollution Control Boards or Pollution Control Committees the implementation of these rules by local bodies;

(g) prepare an annual report on implementation of these rules on the basis of reports received from State Pollution Control Boards and Committees and submit to the Ministry of Environment, Forest and Climate Change and the report shall also be put in public domain;

(h) publish guidelines for maintaining buffer zone restricting any residential, commercial or any other construction activity from the outer boundary of the waste processing and disposal facilities for different sizes of facilities handling more than five tons per day of solid waste;

(i) publish guidelines, from time to time, on environmental aspects of processing and disposal of solid waste to enable local bodies to comply with the provisions of these rules; and

(j) provide guidance to States or Union territories on inter-state movement of waste.

15. Duties and responsibilities of local authorities and village Panchayats of census towns and urban agglomerations.- The local authorities and Panchayats shall,-

(a) prepare a solid waste management plan as per state policy and strategy on solid waste management within six months from the date of notification of state policy and strategy and submit a copy to respective departments of State Government or Union territory Administration or agency authorised by the State Government or Union territory Administration;

(b) arrange for door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non residential premises. From multi-storage buildings, large commercial complexes, malls, housing complexes, etc., this may be collected from the entry gate or any other designated location;

(c) establish a system to recognise organisations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorised waste-pickers and waste collectors to facilitate their participation in solid waste management including door to door collection of waste;

(d) facilitate formation of Self Help Groups, provide identity cards and thereafter encourage integration in solid waste management including door to door collection of waste;

(e) frame bye-laws incorporating the provisions of these rules within one year from the date of notification of these rules and ensure timely implementation;

(f) prescribe from time to time user fee as deemed appropriate and collect the fee from the waste generators on its own or through authorised agency;

(g) direct waste generators not to litter i.e throw or dispose of any waste such as paper, water bottles, liquor bottles, soft drink canes, tetra packs, fruit peel, wrappers, etc., or burn or burry waste on streets, open public spaces, drains, waste bodies and to segregate the waste at source as prescribed under these rules and hand over the segregated waste to authorised the waste pickers or waste collectors authorised by the local body;

(h) setup material recovery facilities or secondary storage facilities with sufficient space for sorting of recyclable materials to enable informal or authorised waste pickers and waste collectors to separate recyclables from the waste and provide easy access to waste pickers and recyclers for collection of segregated recyclable waste such as paper, plastic, metal, glass, textile from the source of generation or from material recovery facilities; Bins for storage of bio-degradable wastes shall be painted green, those for storage of recyclable wastes shall be printed white and those for storage of other wastes shall be printed black;

(i) establish waste deposition centres for domestic hazardous waste and give direction for waste generators to deposit domestic hazardous wastes at this centre for its safe disposal. Such facility shall be established in a city or town in a manner that one centre is set up for the area of twenty square kilometers or part thereof and notify the timings of receiving domestic hazardous waste at such centres;

(j) ensure safe storage and transportation of the domestic hazardous waste to the hazardous waste disposal facility or as may be directed by the State Pollution Control Board or the Pollution Control Committee;

(k) direct street sweepers not to burn tree leaves collected from street sweeping and store them separately and handover to the waste collectors or agency authorised by local body;

(l) provide training on solid waste management to waste-pickers and waste collectors;

(m) collect waste from vegetable, fruit, flower, meat, poultry and fish market on day to day basis and promote setting up of decentralised compost plant or bio-methanation plant at suitable locations in the markets or in the vicinity of markets ensuring hygienic conditions;

(n) collect separately waste from sweeping of streets, lanes and by-lanes daily, or on alternate days or twice a week depending on the density of population, commercial activity and local situation;

(o) set up covered secondary storage facility for temporary storage of street sweepings and silt removed from surface drains in cases where direct collection of such waste into transport vehicles is not convenient. Waste so collected shall be collected and disposed of at regular intervals as decided by the local body;

(p) collect horticulture, parks and garden waste separately and process in the parks and gardens, as far as possible;

(q) transport segregated bio-degradable waste to the processing facilities like compost plant, bio-methanation plant or any such facility. Preference shall be given for on site processing of such waste;

(r) transport non-bio-degradable waste to the respective processing facility or material recovery facilities or secondary storage facility;

(s) transport construction and demolition waste as per the provisions of the Construction and Demolition Waste management Rules, 2016;

(t) involve communities in waste management and promotion of home composting, bio-gas generation, decentralised processing of waste at community level subject to control of odour and maintenance of hygienic conditions around the facility;

(u) phase out the use of chemical fertilizer in two years and use compost in all parks, gardens maintained by the local body and wherever possible in other places under its jurisdiction. Incentives may be provided to recycling initiatives by informal waste recycling sector.

(v) facilitate construction, operation and maintenance of solid waste processing facilities and associated infrastructure on their own or with private sector participation or through any agency for optimum utilisation of various components of solid waste adopting suitable technology including the following technologies and adhering to the guidelines issued by the Ministry of Urban Development from time to time and standards prescribed by the Central Pollution Control Board. Preference shall be given to decentralised processing to minimize transportation cost and environmental impacts such as-

a) bio-methanation, microbial composting, vermi-composting, anaerobic digestion or any other appropriate processing for bio-stabilisation of biodegradable wastes;

b) waste to energy processes including refused derived fuel for combustible fraction of waste or supply as feedstock to solid waste based power plants or cement kilns;

(w) undertake on their own or through any other agency construction, operation and maintenance of sanitary landfill and associated infrastructure as per Schedule 1 for disposal of residual wastes in a manner prescribed under these rules;

(x) make adequate provision of funds for capital investments as well as operation and maintenance of solid waste management services in the annual budget ensuring that funds for discretionary functions of the local body have been allocated only after meeting the requirement of necessary funds for solid waste management and other obligatory functions of the local body as per these rules;

(y) make an application in Form-I for grant of authorisation for setting up waste processing, treatment or disposal facility, if the volume of waste is exceeding five metric tones per day including sanitary landfills from the State Pollution Control Board or the Pollution Control Committee, as the case may be;

(z) submit application for renewal of authorisation at least sixty days before the expiry of the validity of authorisation;

(za) prepare and submit annual report in Form IV on or before the 30th April of the succeeding year to the Commissioner or Director, Municipal Administration or designated Officer;

(zb) the annual report shall then be sent to the Secretary -in-Charge of the State Urban Development Department or village panchayat or rural development department and to the respective State Pollution Control Board or Pollution Control Committee by the 31st May of every year;

(zc) educate workers including contract workers and supervisors for door to door collection of segregated waste and transporting the unmixed waste during primary and secondary transportation to processing or disposal facility;

(zd) ensure that the operator of a facility provides personal protection equipment including uniform, fluorescent jacket, hand gloves, raincoats, appropriate foot wear and masks to all workers handling solid waste and the same are used by the workforce;

(ze) ensure that provisions for setting up of centers for collection, segregation and storage of segregated wastes, are incorporated in building plan while granting approval of building plan of a group housing society or market complex; and

(zf) frame bye-laws and prescribe criteria for levying of spot fine for persons who litters or fails to comply with the provisions of these rules and delegate powers to officers or local bodies to levy spot fines as per the bye laws framed; and

(zg) create public awareness through information, education and communication campaign and educate the waste generators on the following; namely:-

(i) not to litter;

(ii) minimise generation of waste;

(iii) reuse the waste to the extent possible;

(iv) practice segregation of waste into bio–degradable, non-biodegradable (recyclable and combustible), sanitary waste and domestic hazardous wastes at source;

(v) practice home composting, vermi-composting, bio-gas generation or community level composting;

(vi) wrap securely used sanitary waste as and when generated in the pouches provided by the brand owners or a suitable wrapping as prescribed by the local body and place the same in the bin meant for non-biodegradable waste;

(vii) storage of segregated waste at source in different bins;

(viii) handover segregated waste to waste pickers, waste collectors, recyclers or waste collection agencies; and

(ix) pay monthly user fee or charges to waste collectors or local bodies or any other person authorised by the local body for sustainability of solid waste management.

(zh) stop land filling or dumping of mixed waste soon after the timeline as specified in rule 23 for setting up and operationalisation of sanitary landfill is over;

(zi) allow only the non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill and the sanitary landfill sites shall meet the specifications as given in Schedule–I, however, every effort shall be made to recycle or reuse the rejects to achieve the desired objective of zero waste going to landfill;

(zj) investigate and analyse all old open dumpsites and existing operational dumpsites for their potential of bio-mining and bio-remediation and wheresoever feasible, take necessary actions to bio-mine or bio-remediate the sites;

(zk) in absence of the potential of bio-mining and bio-remediation of dumpsite, it shall be scientifically capped as per landfill capping norms to prevent further damage to the environment.

16. Duties of State Pollution Control Board or Pollution Control Committee.- (1) The State Pollution Control Board or Pollution Control Committee shall,-

(a) enforce these rules in their State through local bodies in their respective jurisdiction and review implementation of these rules at least twice a year in close coordination with concerned Directorate of Municipal Administration or Secretary-in-charge of State Urban Development Department;

(b) monitor environmental standards and adherence to conditions as specified under the Schedule I and Schedule II for waste processing and disposal sites;

(c) examine the proposal for authorisation and make such inquiries as deemed fit, after the receipt of the application for the same in Form I from the local body or any other agency authorised by the local body;

(d) while examining the proposal for authorisation, the requirement of consents under respective enactments and views of other agencies like the State Urban Development Department, the Town and Country Planning Department, District Planning Committee or Metropolitan Area Planning Committee, as may be applicable, Airport or Airbase Authority, the Ground Water Board, Railways, power distribution companies, highway department and other relevant agencies shall be taken into consideration and they shall be given four weeks time to give their views, if any;

(e) issue authorisation within a period of sixty days in Form II to the local body or an operator of a facility or any other agency authorised by local body stipulating compliance criteria and environmental standards as specified in Schedules I and II including other conditions, as may be necessary;

(f) synchronise the validity of said authorisation with the validity of the consents;

(g) suspend or cancel the authorization issued under clause (a) any time, if the local body or operator of the facility fails to operate the facility as per the conditions stipulated:

provided that no such authorization shall be suspended or cancelled without giving notice to the local body or operator, as the case may be; and

(h) on receipt of application for renewal, renew the authorisation for next five years, after examining every application on merit and subject to the condition that the operator of the facility has fulfilled all the provisions of the rules, standards or conditions specified in the authorisation, consents or environment clearance.

(2) The State Pollution Control Board or Pollution Control Committee shall, after giving reasonable opportunity of being heard to the applicant and for reasons thereof to be recorded in writing, refuse to grant or renew an authorisation.

(3) In case of new technologies, where no standards have been prescribed by the Central Pollution Control Board, State Pollution Control Board or Pollution Control Committee, as the case may be, shall approach Central Pollution Control Board for getting standards specified.

(4) The State Pollution Control Board or the Pollution Control Committee, as the case may be, shall monitor the compliance of the standards as prescribed or laid down and treatment technology as approved and the conditions stipulated in the authorisation and the standards specified in Schedules I and II under these rules as and when deemed appropriate but not less than once in a year.

(5) The State Pollution Control Board or the Pollution Control Committee may give directions to local bodies for safe handling and disposal of domestic hazardous waste deposited by the waste generators at hazardous waste deposition facilities.

(6) The State Pollution Control Board or the Pollution Control Committee shall regulate Inter-State movement of waste.

17. Duty of manufacturers or brand owners of disposable products and sanitary napkins and diapers.- (1) All manufacturers of disposable products such as tin, glass, plastics packaging, etc., or brand owners who introduce such products in the market shall provide necessary financial assistance to local authorities for establishment of waste management system.

(2) All such brand owners who sell or market their products in such packaging material which are non-biodegradable shall put in place a system to collect back the packaging waste generated due to their production.

(3) Manufacturers or brand owners or marketing companies of sanitary napkins and diapers shall explore the possibility of using all recyclable materials in their products or they shall provide a pouch or wrapper for disposal of each napkin or diapers along with the packet of their sanitary products.

(4) All such manufacturers, brand owners or marketing companies shall educate the masses for wrapping and disposal of their products.

18. Duties of the industrial units located within one hundred km from the refused derived fuel and waste to energy plants based on solid waste- All industrial units using fuel and located within one hundred km from a solid waste based refused derived fuel plant shall make arrangements within six months from the date of notification of these rules to replace at least five percent of their fuel requirement by refused derived fuel so produced.

19. Criteria for Duties regarding setting-up solid waste processing and treatment facility.- (1) The department in- charge of the allocation of land assignment shall be responsible for providing suitable land for setting up of the solid waste processing and treatment facilities and notify such sites by the State Government or Union territory Administration.

(2) The operator of the facility shall design and set up the facility as per the technical guidelines issued by the Central Pollution Control Board in this regard from time to time and the manual on solid waste management prepared by the Ministry of Urban Development.

(3) The operator of the facility shall obtain necessary approvals from the State Pollution Control Board or Pollution Control Committee.

(4) The State Pollution Control Board or Pollution Control Committee shall monitor the environment standards of the operation of the solid waste processing and treatment facilities.

(5) The operator of the facility shall be responsible for the safe and environmentally sound operations of the solid waste processing and or treatment facilities as per the guidelines issued by the Central Pollution Control Board from time to time and the Manual on Municipal Solid Waste Management published by the Ministry of Urban Development and updated from time to time.

(6) The operator of the solid waste processing and treatment facility shall submit annual report in Form III each year by 30th April to the State Pollution Control Board or Pollution Committee and concerned local body.

20. Criteria and actions to be taken for solid waste management in hilly areas.- In the hilly areas, the duties and responsibilities of the local authorities shall be the same as mentioned in rule 15 with additional clauses as under:

(a) Construction of landfill on the hill shall be avoided. A transfer station at a suitable enclosed location shall be setup to collect residual waste from the processing facility and inert waste. A suitable land shall be identified in the plain areas down the hill within 25 kilometers for setting up sanitary landfill. The residual waste from the transfer station shall be disposed of at this sanitary landfill.

(b) In case of non-availability of such land, efforts shall be made to set up regional sanitary landfill for the inert and residual waste.

(c) Local body shall frame Bye-laws and prohibit citizen from littering wastes on the streets and give strict direction to the tourists not to dispose any waste such as paper, water bottles, liquor bottles, soft drink canes, tetra packs, any other plastic or paper waste on the streets or down the hills and instead direct to deposit such waste in the litter bins that shall be placed by the local body at all tourist destinations.

(d) Local body shall arrange to convey the provisions of solid waste management under the bye-laws to all tourists visiting the hilly areas at the entry point in the town as well as through the hotels, guest houses or like where they stay and by putting suitable hoardings at tourist destinations.

(e) Local body may levy solid waste management charge from the tourist at the entry point to make the solid waste management services sustainable.

(f) The department in- charge of the allocation of land assignment shall identify and allot suitable space on the hills for setting up decentralised waste processing facilities. Local body shall set up such facilities. Step garden system may be adopted for optimum utilisation of hill space.

21. Criteria for waste to energy process.- (1) Non recyclable waste having calorific value of 1500 K/cal/kg or more shall not be disposed of on landfills and shall only be utilised for generating energy either or through refuse derived fuel or by giving away as feed stock for preparing refuse derived fuel.

(2) High calorific wastes shall be used for co-processing in cement or thermal power plants.

(3) The local body or an operator of facility or an agency designated by them proposing to set up waste to energy plant of more than five tones per day processing capacity shall submit an application in Form-I to the State Pollution Control Board or Pollution Control Committee, as the case may be, for authorisation.

(4) The State Pollution Control Board or Pollution Control Committee, on receiving such application for setting up waste to energy facility, shall examine the same and grant permission within sixty days.

22. Time frame for implementation.- Necessary infrastructure for implementation of these rules shall be created by the local bodies and other concerned authorities, as the case may be, on their own, by directly or engaging agencies within the time frame specified below:

Sl. No.	Activity	Time limit from the date of notification of rules
(1)	(2)	(3)
1.	identification of suitable sites for setting up solid waste processing facilities	1 year

2.	identification of suitable sites for setting up common regional sanitary landfill facilities for suitable clusters of local authorities under 0.5 million population and for setting up common regional sanitary landfill facilities or stand alone sanitary landfill facilities by all local authorities having a population of 0.5 million or more .	1 year
3.	procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities	2 years
4.	enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source ,	2 years
5.	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	2 years
6.	ensure separate storage, collection and transportation of construction and demolition wastes	2 years
7.	setting up solid waste processing facilities by all local bodies having 100000 or more population	2 years
8.	Setting up solid waste processing facilities by local bodies and census towns below 100000 population.	3 years
9	setting up common or stand alone sanitary landfills by or for all local bodies having 0.5 million or more population for the disposal of only such residual wastes from the processing facilities as well as untreatable inert wastes as permitted under the Rules	3 years
10.	setting up common or regional sanitary landfills by all local bodies and census towns under 0.5 million population for the disposal of permitted waste under the rules	3years
11.	bio-remediation or capping of old and abandoned dump sites	5years

23. State Level Advisory Body. – (1) Every Department in-charge of local bodies of the concerned State Government or Union territory administration shall constitute a State Level Advisory Body within six months from the date of notification of these rules comprising the following members, namely:-

Sl. No	**Designation**	**Member**
(1)	**(2)**	**(3)**
1.	Secretary, Department of Urban Development orLocal self government department of the State	Chairperson, ex-officio
2.	One representative of Panchayats or Rural development Department not below the rank of Joint Secretary to State Government	Member, ex-officio
3.	one representative of Revenue Department of State Government	Member,ex-officio
4.	One representative from Ministry of Environment, Forest and Climate Change Government of India	Member, ex-officio

5.	One representative from Ministry of Urban Development, Government of India	Member, ex-officio
6.	One representative from Ministry of Rural Development, Government of India	Member, ex-officio
7.	One representative from the Central Pollution Control Board	Member, ex-officio
8.	One representative from the State Pollution Control Board or Pollution Control Committee	Member, ex-officio
9.	One representative from Indian Institute of Technology or National Institute of Technology	Member,Ex-officio
10.	Chief town planner of the state	Member
11.	Three representatives from the local bodies by rotation	Member
12.	Two representatives from census towns or urban agglomerations by rotation.	Member
13.	One representative from reputed Non-Governmental Organisation or Civil Society working for the waste pickers or informal recycler or solid waste management	Member
14.	One representative from a body representing Industries at the State or Central level	Member
15.	one representative from waste recycling industry	member
16.	Two subject experts	Member
17.	Co-opt one representative each from agriculture department, and labour department of State Government.	Member

(2) The State Level Advisory Body shall meet at least one in every six months to review the matters related to implementation of these rules, state policy and strategy on solid waste management and give advice to state government for taking measures that are necessary for expeditious and appropriate implementation of these rules.

(3) The copies of the review report shall be forwarded to the State Pollution Control Board or Pollution Control Committee for necessary action.

24. Annual report.- (1) The operator of facility shall submit the annual report to the local body in Form-III on or before the 30th day of April every year.

(2) The local body shall submit its annual report in Form-IV to State P Control Board or P Committee and the Secretary-in-Charge of the Department of Urban Development of the concerned State or Union Territory in case of metropolitan city and to the Director of Municipal Administration or Commissioner of Municipal Administration or Officer in -Charge of Urban local bodies in the state in case of all other local bodies of state on or before the 30th day of June every year

(3) Each State Pollution Control Board or Pollution Control Committee as the case may be, shall prepare and submit the consolidated annual report to the Central Pollution Control Board and Ministry of Urban Development on the implementation of these rules and action taken against non complying local body by the 31stday of July of each year in Form-V.

(4) The Central Pollution Control Board shall prepare a consolidated annual review report on the status of implementation of these rules by local bodies in the country and forward the same to the Ministry of Urban Development

and Ministry of Environment, Forest and Climate Change, along with its recommendations before the 31st day of August each year.

(5) The annual report shall be reviewed by the Ministry of Environment, Forest and Climate Change during the meeting of Central Monitoring Committee.

25. Accident reporting- In case of an accident at any solid waste processing or treatment or disposal facility or landfill site, the Officer- in- charge of the facility shall report to the local body in Form-VI and the local body shall review and issue instructions if any, to the in- charge of the facility.

SCHEDULE I

[see rule 15 (w),(zi), 16 (1) (b) (e), 16 (4)]

Specifications for Sanitary Landfills

(A) Criteria for site selection.-

(i) The department in the business allocation of land assignment shall provide suitable site for setting up of the solid waste processing and treatment facilities and notify such sites.

(ii) The sanitary landfill site shall be planned, designed and developed with proper documentation of construction plan as well as a closure planin a phased manner. In case a new landfill facility is being established adjoining an existing landfill site, the closure plan of existing landfill should form a part of the proposal of such new landfill.

(iii) The landfill sites shall be selected to make use of nearby wastes processing facilities. Otherwise, wastes processing facility shall be planned as an integral part of the landfill site.

(iv) Landfill sites shall be set up as per the guidelines of the Ministry of Urban Development, Government of India and Central Pollution Control Board.

(v) The existing landfill sites which are in use for more than five years shall be improved in accordance with the specifications given in this Schedule.

(vi) The landfill site shall be large enough to last for at least 20-25 years and shall develop 'landfill cells' in a phased manner to avoid water logging and misuse.

(vii) The landfill site shall be 100 meter away from river, 200 meter from a pond, 200 meter from Highways, Habitations, Public Parks and water supply wells and 20 km away from Airports or Airbase. However in a special case, landfill site may be set up within a distance of 10 and 20 km away from the Airport/Airbase after obtaining no objection certificate from the civil aviation authority/ Air force as the case may be. The Landfill site shall not be permitted within the flood plains as recorded for the last 100 years, zone of coastal regulation, wetland, Critical habitat areas, sensitive eco-fragile areas..

(viii) The sites for landfill and processing and disposal of solid waste shall be incorporated in the Town Planning Department's land-use plans.

(ix) A buffer zone of no development shall be maintained around solid waste processing and disposal facility, exceeding five Tonnes per day of installed capacity. This will be maintained within the total area of the solid waste processing and disposal facility. The buffer zone shall be prescribed on case to case basis by the local body in consultation with concerned State Pollution Control Board.

(x) The biomedical waste shall be disposed of in accordance with the Bio-medical Waste Management Rules, 2016, as amended from time to time . The hazardous waste shall be managed in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended from time to time. The E-waste shall be managed in accordance with the e-Waste (Management) Rules, 2016 as amended from time to time.

(xi) Temporary storage facility for solid waste shall be established in each landfill site to accommodate the waste in case of non- operation of waste processing and during emergency or natural calamities.

(B) Criteria for development of facilities at the sanitary landfills.-

(i) Landfill site shall be fenced or hedged and provided with proper gate to monitor incoming vehicles, to prevent entry of unauthorised persons and stray animals

(ii) The approach and / internal roads shall be concreted or paved so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.

(iii) The landfill site shall have waste inspection facility to monitor waste brought in for landfilling h, office facility for record keeping and shelter for keeping equipment and machinery including pollution monitoring equipment. The operator of the facility shall maintain record of waste received, processed and disposed.

(iv) Provisions like weigh bridge to measure quantity of waste brought at landfill site, fire protection equipment and other facilities as may be required shall be provided.

(v) Utilities such as drinking water and sanitary facilities (preferably washing/bathing facilities for workers) and lighting arrangements for easy landfill operations during night hours shall be provided.

(vi) Safety provisions including health inspections of workers at landfill sites shall be carried out made.

(vii) Provisions for parking, cleaning, washing of transport vehicles carrying solid waste shall be provided. The wastewater so generated shall be treated to meet the prescribed standards.

(C) Criteria for specifications for land filling operations and closure on completion of land filling.-

(i) Waste for land filling shall be compacted in thin layers using heavy compactors to achieve high density of the waste. In high rainfall areas where heavy compactors cannot be used, alternative measures shall be adopted.

(ii) Till the time waste processing facilities for composting or recycling or energy recovery are set up, the waste shall be sent to the sanitary landfill. The landfill cell shall be covered at the end of each working day with minimum 10 cm of soil, inert debris or construction material..

(iii) Prior to the commencement of monsoon season, an intermediate cover of 40-65 cm thickness of soil shall be placed on the landfill with proper compaction and grading to prevent infiltration during monsoon. Proper drainage shall be constructed to divert run-off away from the active cell of the landfill.

(iv) After completion of landfill, a final cover shall be designed to minimise infiltration and erosion. The final cover shall meet the following specifications, namely :--

a) The final cover shall have a barrier soil layer comprising of 60 cm of clay or amended soil with permeability coefficient less than 1 x 10^{-7} cm/sec.

b) On top of the barrier soil layer, there shall be a drainage layer of 15 cm.

c) On top of the drainage layer, there shall be a vegetative layer of 45 cm to support natural plant growth and to minimise erosion.

(D) Criteria for pollution prevention.-In order to prevent pollution from landfill operations, the following provisions shall be made, namely:-

(i) The storm water drain shall be designed and constructed in such a way that the surface runoff water is diverted from the landfilling site and leachates from solid waste locations do not get mixed with the surface runoff water. Provisions for diversion of storm water discharge drains shall be made to minimise leachate generation and prevent pollution of surface water and also for avoiding flooding and creation of marshy conditions.

(ii) Non-permeable lining system at the base and walls of waste disposal area. For landfill receiving residues of waste processing facilities or mixed waste or waste having contamination of hazardous materials (such as aerosols, bleaches, polishes, batteries, waste oils, paint products and pesticides) shall have liner of composite barrier of 1.5 mm thick high density polyethylene (HDPE) geo-membrane or geo-synthetic liners, or equivalent, overlying 90 cm of soil (clay or amended soil) having permeability coefficient not greater than 1 x 10-7 cm/sec. The highest level of water table shall be at least two meter below the base of clay or amended soil barrier layer provided at the bottom of landfills.

(iii) Provisions for management of leachates including its collection and treatment shall be made. The treated leachate shall be recycled or utilized as permitted, otherwise shall be released into the sewerage line, after meeting the standards specified in Schedule- II**.**. In no case, leachate shall be released into open environment.

(iv) Arrangement shall be made to prevent leachate runoff from landfill area entering any drain, stream, river, lake or pond. In case of mixing of runoff water with leachate or solid waste, the entire mixed water shall be treated by the concern authority.

(E) Criteria for water quality monitoring.-

(i) Before establishing any landfill site, baseline data of ground water quality in the area shall be collected and kept in record for future reference. The ground water quality within 50 meter of the periphery of landfill site shall be periodically monitored covering different seasons in a year that is, summer, monsoon and post-monsoon period to ensure that the ground water is not contaminated.

(ii) Usage of groundwater in and around landfill sites for any purpose (including drinking and irrigation) shall be considered only after ensuring its quality. The following specifications for drinking water quality shall apply for monitoring purpose, namely :-

S. No.	Parameters	IS 10500:2012, Edition 2.2(2003-09) Desirable limit (mg/l except for pH)
(1)	(2)`	(3)
	Arsenic	0.01
	Cadmium	0.01
	Chromium(as Cr^{6+})	0.05
	Copper	0.05
	Cyanide	0.05
	Lead	0.05
	Mercury	0.001
	Nickel	-
	Nitrate as NO_3	45.0
	pH	6.5-8.5
	Iron	0.3
	Total hardness (as $CaCO_3$)	300.0
	Chlorides	250
	Dissolved solids	500
	Phenolic compounds (as C_6H_5OH)	0.001
	Zinc	5.0
	Sulphate (as SO_4)	200

(F) Criteria for ambient air quality monitoring.-

(i) Landfill gas control system including gas collection system shall be installed at landfill site to minimize odour, prevent off-site migration of gases, to protect vegetation planted on the rehabilitated landfill surface. For enhancing landfill gas recovery, use of geomembranes in cover systems along with gas collection wells should be considered.

(ii) The concentration of methane gas generated at landfill site shall not exceed 25 per cent of the lower explosive limit (LEL).

(iii) The landfill gas from the collection facility at a landfill site shall be utilized for either direct thermal applications or power generation, as per viability. Otherwise, landfill gas shall be burnt (flared) and shall not be allowed to escape directly to the atmosphere or for illegal tapping. Passive venting shall be allowed in case if its utilisation or flaring is not possible.

(iv) Ambient air quality at the landfill site and at the vicinity shall be regularly monitored. Ambient air quality shall

meet the standards prescribed by the Central Pollution Control Board for Industrial area.

G. Criteria for plantation at landfill Site.- A vegetative cover shall be provided over the completed site in accordance with the following specifications, namely:-

(a) Locally adopted non-edible perennial plants that are resistant to drought and extreme temperatures shall be planted;

(b) The selection of plants should be of such variety that their roots do not penetrate more than 30 cms. This condition shall apply till the landfill is stabilized;

(c) Selected plants shall have ability to thrive on low-nutrient soil with minimum nutrient addition;

(d) Plantation to be made in sufficient density to minimise soil erosion.

(e) Green belts shall be developed all around the boundary of the landfill in consultation with State Pollution Control Boards or Pollution Control Committees .

H. Criteria for post-care of landfill site.- (1) The post-closure care of landfill site shall be conducted for at least fifteen years and long term monitoring or care plan shall consist of the following, namely :-'

(a) Maintaining the integrity and effectiveness of final cover, making repairs and preventing run-on and run-off from eroding or otherwise damaging the final cover;

(b) Monitoring leachate collection system in accordance with the requirement;

(c) Monitoring of ground water in and around landfill;

(d) Maintaining and operating the landfill gas collection system to meet the standards.

(2) Use of closed landfill sites after fifteen years of post-closure monitoring can be considered for human settlement or otherwise only after ensuring that gaseous emission and leachate quality analysis complies with the specified standards and the soil stability is ensured.

I. Criteria for special provisions for hilly areas.-Cities and towns located on hills shall have location-specific methods evolved for final disposal of solid waste by the local body with the approval of the concerned State Pollution Control Board or the Pollution Control Committee. The local body shall set up processing facilities for utilisation of biodegradable organic waste. The non-biodegradable recyclable materials shall be stored and sent for recycling periodically. The inert and non-biodegradable waste shall be used for building roads or filling-up of appropriate areas on hills. In case of constraints in finding adequate land in hilly areas, waste not suitable for road-laying or filling up shall be disposed of in regional landfills in plain areas.

J. Closure and Rehabilitation of Old Dumps- Solid waste dumps which have reached their full capacity or those which will not receive additional waste after setting up of new and properly designed landfills should be closed and rehabilitated by examining the following options:

(i) Reduction of waste by bio mining and waste processing followed by placement of residues in new landfills or capping as in (ii) below.

(i). Capping with solid waste cover or solid waste cover enhanced with geomembrane to enable collection and flaring / utilisation of greenhouse gases.

(iii) Capping as in (ii) above with additional measures (in alluvial and other coarse grained soils) such as cut-off walls and extraction wells for pumping and treating contaminated ground water.

(iv) Any other method suitable for reducing environmental impact to acceptable level.

SCHEDULE II

[see rule 16 (1), (b), (e), 16 (4))

Standards of processing and treatment of solid waste

A. Standards for composting.- The waste processing facilities shall include composting as one of the technologies for processing of bio degradable waste. In order to prevent pollution from compost plant, the following shall be complied with namely :-

(a) The incoming organic waste at site shall be stored properly prior to further processing. To the extent possible, the waste storage area should be covered. If, such storage is done in an open area, it shall be provided with impermeable base with facility for collection of leachate and surface water run-off into lined drains leading to a leachate treatment and disposal facility;

(b) Necessary precaution shall be taken to minimise nuisance of odour, flies, rodents, bird menace and fire hazard;

(c) In case of breakdown or maintenance of plant, waste intake shall be stopped and arrangements be worked out for diversion of waste to the temporary processing site or temporary landfill sites which will be again reprocessed when plant is in order;

(d) Pre-process and post-process rejects shall be removed from the processing facility on regular basis and shall not be allowed to pile at the site. Recyclables shall be routed through appropriate vendors. The non-recyclable high calorific fractions to be segregated and sent to waste to energy or for RDF production, co-processing in cement plants or to thermal power plants. Only rejects from all processes shall be sent for sanitary landfill site(s).

(e) The windrow area shall be provided with impermeable base. Such a base shall be made of concrete or compacted clay of 50 cm thick having permeability coefficient less than 10^{-7} cm/sec. The base shall be provided with 1 to 2 per cent slope and circled by lined drains for collection of leachate or surface run-off;

(f) Ambient air quality monitoring shall be regularly carried out. Odurnuisance at down-wind direction on the boundary of processing plant shall also be checked regularly.

(g) Leachate shall be re-circulated in compost plant for moisture maintenance.

(h) The end product compost shall meet the standards prescribed under Fertilizer Control Order notified from time to time.

(i) In order to ensure safe application of compost, the following specifications for compost quality shall be met, namely:-

Parameters	**Organic Compost (FCO 2009)**	**Phosphate Rich Organic Manure (FCO 2013)**
(1)	**(2)**	**(3)**
Arsenic (mg/Kg)	10.00	10.00
Cadmium (mg/Kg)	5.00	5.00
Chromium (mg/Kg)	50.00	50.00
Copper (mg/Kg)	300.00	300.00
Lead (mg/Kg)	100.00	100.00
Mercury (mg/Kg)	0.15	0.15
Nickel (mg/Kg)	50.00	50.00
Zinc (mg/Kg)	1000.00	1000.00
C/N ratio	<20	Less than 20:1
pH	6.5-7.5	(1:5 solution) maximum 6.7
Moisture, percent by weight, maximum	15.0-25.0	25.0
Bulk density (g/cm^3)	<1.0	Less than 1.6
Total Organic Carbon, per cent by weight, minimum	12.0	7.9

Total Nitrogen (as N), per cent by weight, minimum	0.8	0.4
Total Phosphate (as $P_2 0_5$) percent by weight, minimum	0.4	10.4
Total Potassium (as $K_2 0$), percent by weight, minimum	0.4	-
Colour	Dark brown to black	-
Odour	Absence of foul Odor	-
Particle size	Minimum 90% material should pass through 4.0 mm IS sieve	Minimum 90% material should pass through 4.0 mm IS sieve
Conductivity (as dsm-1), not more than	4.0	8.2

* Compost (final product) exceeding the above stated concentration limits shall not be used for food crops. However, it may be utilized for purposes other than growing food crops.

B. Standards for treated leachates.-The disposal of treated leachates shall meet the following standards, namely:-

S. No	Parameter	Standards (Mode of Disposal)		
		Inland surface water	Public sewers	Land disposal
(1)	(2)	(3)	(4)	(5)
1.	Suspended solids, mg/l, max	100	600	200
2.	Dissolved solids (inorganic) mg/l, max.	2100	2100	2100
3	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
4	Ammonical nitrogen (as N), mg/l, max.	50	50	-
5	Total Kjeldahl nitrogen (as N), mg/l, max.	100	-	-
6	Biochemical oxygen demand (3 days at 27^0 C) max.(mg/l)	30	350	100
7	Chemical oxygen demand, mg/l, max.	250	-	-
8	Arsenic (as As), mg/l, max	0.2	0.2	0.2
9	Mercury (as Hg), mg/l, max	0.01	0.01	-
10	Lead (as Pb), mg/l, max	0.1	1.0	-
11	Cadmium (as Cd), mg/l, max	2.0	1.0	-

12	Total Chromium (as Cr), mg/l, max.	2.0	2.0	-
13	Copper (as Cu), mg/l, max.	3.0	3.0	-
14	Zinc (as Zn), mg/l, max.	5.0	15	-
15	Nickel (as Ni), mg/l, max	3.0	3.0	-
16	Cyanide (as CN), mg/l, max.	0.2	2.0	0.2
17	Chloride (as Cl), mg/l, max.	1000	1000	600
18	Fluoride (as F), mg/l, max	2.0	1.5	-
19	Phenolic compounds (as C_6H_5OH) mg/l, max.	1.0	5.0	-

Note : While discharging treated leachates into inland surface waters, quantity of leachates being discharged and the quantity of dilution water available in the receiving water body shall be given due consideration.

C. Standards for incineration: The Emission from incinerators /thermal technologies in Solid Waste treatment/disposal facility shall meet the following standards, namely:-

Parameter	**Emission standard**	
(1)	**(2)**	**(3)**
Particulates	50 mg/Nm^3	Standard refers to half hourly average value
HCl	50 mg/Nm^3	Standard refers to half hourly average value
SO2	200 mg/Nm^3	Standard refers to half hourly average value
CO	100 mg/Nm^3	Standard refers to half hourly average value
	50 mg/Nm^3	Standard refers to daily average value
Total Organic Carbon	20 mg/Nm^3	Standard refers to half hourly average value
HF	4 mg/Nm^3	Standard refers to half hourly average value
NOx (NO and NO2 expressed as NO2)	400 mg/Nm^3	Standard refers to half hourly average value
Total dioxins and furans	0.1 ng TEQ/Nm^3	Standard refers to 6-8 hours sampling. Please refer guidelines for 17 concerned congeners for toxic equivalence values to arrive at total toxic equivalence.
Cd + Th + their compounds	0.05 mg/Nm^3	Standard refers to sampling time anywhere between 30 minutes and 8 hours.
Hg and its compounds	0.05 mg/Nm^3	Standard refers to sampling time anywhere between 30 minutes and 8 hours.

Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V + their compounds	0.5 mg/Nm^3	Standard refers to sampling time anywhere between 30 minutes and 8 hours.
Note.- *All values corrected to 11% oxygen on a dry basis.*		

Note:

(a) Suitably designed pollution control devices shall be installed or retrofitted with the incinerator to achieve the above emission limits..

(b) Waste to be incinerated shall not be chemically treated with any chlorinated disinfectants.

(c) Incineration of chlorinated plastics shall be phased out within two years.

(d) if the concentation of toxic metals in incineration ash exceeds the limits specified in the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules, 2008, as amended from time to time, the ash shall be sent to the hazardous waste treatment, storage and disposal fcaility.

(e) Only low sulphur fuel like LDO, LSHS, Diesel**,** bio-mass, coal, LNG, CNG, RDF and bio-gas shall be used as fuel in the incinerator.

(f) The CO2 concentration in tail gas shall not be more than 7%.

(g) All the facilities in twin chamber incinerators shall be designed to achieve a minimum temperature of 950^0C in secondary combustion chamber and with a gas residence time in secondary combustion chamber not less than 2 (two) seconds.

(h) Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, as to achieve total Organic Carbon (TOC) content in the slag and bottom ash less than 3%, or the loss on ignition is less than 5% of the dry weight.

(i) Odour from sites shall be managed as per guidelines of CPCB issued from time to time

FORM – I

[see rule 15 (y) 16 (1) (c), 21(3)]

Application for obtaining authorisation under solid waste management rules

for processing/recycling/treatment and disposal of solid waste

To,

The Member Secretary,

State Pollution Control Board or Pollution Control Committee,

of…....

Sir,

I/We hereby apply for authorisation under the Solid Waste Management Rules, 2016 for processing, recycling, treatment and disposal of solid waste.

1.	Name of the local body/agency appointed by them/ operator of facility	
2.	Correspondence address Telephone No. Fax No. ,e-mail:	

3.	Nodal Officer & designation(Officer authorised by the local body or agency responsible for operation of processing/ treatment or disposal facility)	
4.	Authorisation required for setting up and operation of the facility (Please tick mark)	waste processing recycling treatment disposal at landfill
5.	Attach copies of the Documents Site clearance (local body) Proof of Environmental Clearance Consent for establishment Agreement between municipal authority and operating agency Investment on the project and expected return	
6.	**Processing/recycling/treatment of solid waste** (i) Total Quantity of waste to be processed per day Quantity of waste to be recycled Quantity of waste to be treated Quantity of waste to be disposed into landfill (ii)Utilisation programme for waste processed (Product utilisation) (iii)Methodology for disposal (attach details) Quantity of leachate Treatment technology for leachate (iv)Measures to be taken for prevention and control of environmental pollution (v)Measures to be taken for safety of workers working in the plant (vi)Details on solid waste processing/recycling/ treatment/disposal facility (to be attached)	
7.	**Disposal of solid waste** Number of sites identified Quantity of waste to be disposed per day Details of methodology or criteria followed for site selection (attach) Details of existing site under operation Methodology and operational details of landfilling Measures taken to check environmental pollution	
8	Any other information.	

Date: Signature:

Place: Designation

Form- II

[see rule 16 (1) (e)]

Format for issue of authorisation

File No.: _____

Dated:_____

Authorisation No_____

To

Ref: Your application number _____dt. _____

The _____State Pollution Control Board/Pollution Control Committee after examining the proposal hereby authorises_____ having administrative office at _____to set up and operate waste processing/recycling/ treatment/disposal facility at_____

The authorisation is hereby granted to operate the facility for processing, recycling, treatment and disposal of solid waste.

The authorisation is subject to the terms and conditions stated below and such conditions as may be otherwise specified in these rules and the standards laid down in Schedules I and II under these rules.

The _____State Pollution Control Board/Pollution Control Committees of the UT may, at any time, revoke any of the conditions applicable under the authorisation and shall communicate the same in writing.

Any violation of the provision of the Solid Waste Management Rules, 2016will attract the penal provision of the Environment (Protection) Act, 1986 (29 of 1986).

(Member Secretary)

State Pollution Control Board/Pollution Control Committee of the UT

(Signature and designation)

Date:

Place:

Form – III

[see rule 19 (6), 24 (1)]

Format of annual report to be submitted by the operator of facility to the local body

1	Name of the City/Town and State	
2	Population	
3	Area in sq. kilometers	
4	Name & Address of the local body Telephone No. Fax No. E-mail:	
5	Name and address of operator of the facility	
6	Name of officer in-charge of the facility Phone No: Fax No: E-mail:	

7	Number of households in the city/town , Number of non-residential premises in the city Number of election/ administrative wards in the city/town	
8	Quantity of Solid waste	
	Estimated Quantity of solid waste generated in the local body area per day in metric tones	/tpd
	Quantity of solid waste collected per day	/tpd
	Per capita waste collected per day	/gm/day
	Quantity of solid waste processed	/tpd
	Quantity of solid waste disposed at landfill	/tpd
9	Status of Solid Waste Management (SWM) service	
	Segregation and storage of waste at source Whether solid waste is stored at source in domestic/commercial/ institutional bins If yes, Percentage of households practice storage of waste at source in domestic bins Percentage of non-residential premises practice storage of waste at source in commercial /institutional bins Percentage of households dispose of throw solid waste on the streets Percentage of non-residential premises dispose of throw solid waste on the streets Whether solid waste is stored at source in a segregated form If yes, Percentage of premises segregating the waste at source	 Yes/No % % % % Yes/No %
	Door to Door Collection of solid waste	
	Whether door to door collection (D2D) of solid waste is being done in the city/town	Yes/No
	if yes	
	Number of wards covered in D2D collection of waste	
	No. of households covered	
	No. of non-residential premises including commercial establishments ,hotels, restaurants educational institutions/ offices etc covered	

	Percentage of residential and non-residential premises covered in door to door collection through : Motorized vehicle Containerized tricycle/handcart Other device	% % %
	If not, method of primary collection adopted	
	Sweeping of streets	
	Length of roads, streets, lanes, bye-lanes in the city that need to be cleaned	km
	Frequency of street sweepings and percentage of population covered	frequency: Daily / Alternate days / Twice a week / Occasionally % of population covered
	Tools used Manual sweeping Mechanical sweeping Whether long handle broom used by sanitation workers Whether each sanitation worker is given handcart/tricycle for collection of waste Whether handcart / tricycle is containerized Whether the collection tool synchronizes with collection/ waste storage containers utilized	% % Yes/No Yes/No Yes/No Yes/No
.	Secondary Waste Storage facilities	
	No. and type of waste storage depots in the city/town Open waste storage sites Masonry bins Cement concrete cylinder bins Dhalao/covered rooms/space Covered metal/plastic containers Upto 1.1 m^3 bins 2 to 5 m^3 bins Above 5m^3 containers Bin-less city	No. Capacity in m^3
	Bin/ population ratio	

	Ward wise details of waste storage depots (attach) : Ward No: Area: Population: No. of bins placed Total volume of bins placed		
	Total storage capacity of waste storage facilities in cubic meters		
	Total waste actually stored at the waste storage depots daily		
	Give frequency of collection of waste from the depots Number of bins cleared	Frequency	No. of bins
		Daily	
		Alternate day	
		Twice a week	
		Once a week	
		Occasionally	
	Whether storage depots have facility for storage of segregated waste in green, blue and black bins	Yes/ No (if yes, add details) No. of green bins: No. of blue bins: No. of black bins:	
	Whether lifting of solid waste from storage depots is manual or mechanical. Give percentage	(%) of Manual Lifting of SOLID WASTE	%
		(%) of Mechanical lifting	%
	If mechanical – specify the method used	front-end loaders/ Top loaders	
	Whether solid waste is lifted from door to door and transported to treatment plant directly in a segregated form	Yes/ No (if yes, specify)	

	Waste Transportation per day Type and Number of vehicles used (pl tick or add)	No. Trips made waste transported
	Animal cart Tractors Non tipping Truck Tipping Truck Dumper Placers Refuse collectors Compactors Others JCB/loader	
	Frequency of transportation of waste	Frequency (%) of waste transported Daily Alternate day Twice a week Once a week Occasionally
	Quantity of waste transported each day	/tpd
	Percentage of total waste transported daily	%
	Waste Treatment Technologies used Whether solid waste is processed	Yes/No
	If yes, Quantity of waste processed daily Land(s) available with the local body for waste processing (in Hectares)	/tpd
	Land currently utilized for waste processing	
	Solid waste processing facilities in operation	
	Solid waste processing facilities under construction Distance of processing facilities from city/town boundary	
	Details of technologies adopted	

	Composting ,	Qty. raw material processed Qty. final product produced Qty. sold Qty. of residual waste landfilled
	vermi composting	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Bio-methanation	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Refuse Derived Fuel	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Waste to Energy technology such as incineration, gasification, pyrolysis or any other technology (give detail)	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Co-processing	Qty. raw material processed
	Combustible waste supplied to cement plant	
	Combustible waste supplied to solid waste based power plants	
	Others	Qty.
	Solid waste disposal facilities	
	No. of dumpsites sites available with the local body	
	No. of sanitary landfill sites available with the local body Area of each such sites available for waste disposal	
	Area of land currently used for waste disposal	
	Distance of dumpsite/landfill facility from city/town	kms
	Distance from the nearest habitation	kms
	Distance from water body	kms

	Distance from state/national highway	kms
	Distance from Airport	kms
	Distance from important religious places or historical monument	kms
	Whether it falls in flood prone area	Yes/No
	Whether it falls in earthquake fault line area	Yes/No
	Quantity of waste landfilled each day	tpd
	Whether landfill site is fenced	Yes / No
	Whether Lighting facility is available on site Whether Weigh bridge facility available	Yes / No Yes / No
	Vehicles and equipments used at landfill (specify)	Bulldozer, Compacters etc. available
	Manpower deployed at landfill site	Yes/No (if yes, attach details)
	Whether covering is done on daily basis	Yes/No
	If not, Frequency of covering the waste deposited at the landfill	
	Cover material used	
	Whether adequate covering material is available	Yes/No
	Provisions for gas venting provided	Yes/No, (if yes, attach technical data sheet)
	Provision for leachate collection	Yes/No, (if yes, attach technical data sheet)
10	Whether an Action Plan has been prepared for improving solid waste management practices in the city	Yes/No (if Yes attach Action Plan details)
11	What separate provisions are made for : Dairy related activities : Slaughter houses waste : C&D waste (construction debris) :	Attach details on Proposals, Steps taken, Yes/No Yes/No Yes/No
12	Details of Post Closure Plan	Attach Plan
13	How many slums are identified and whether these are provided with Solid Waste Management facilities :	Yes/ No (if Yes, attach details)
14	Give details of manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	

15	Mention briefly, the difficulties being experienced by the local body in complying with provisions of these rules	
16	Mention briefly, if any innovative idea is implemented to tackle a problem related to solid waste, which could be replicated by other local bodies.	

Signature of Operator

Dated :

Place:

Form – IV

[see rules 15(za), 24(2)]

Format for annual report on solid waste management to be submitted by the local body

CALENDAR YEAR:	**DATE OF SUBMISSION OF REPORT:**

1	Name of the City/Town and State	
2	Population	
3	Area in sq. kilometers	
4	Name & Address of local body Telephone No. Fax No. E-mail:	
5	Name of officer in-charge dealing with solid waste management (SOLID WASTEM)Phone No: Fax No: E-mail:	
6	Number of households in the city/town Number of non-residential premises in the city Number of election/ administrative wards in the city/town	
7	Quantity of Solid waste (solid waste)	
	Estimated Quantity of solid waste generated in the local body area per day in metric tones	/tpd
	Quantity of solid waste collected per day	/tpd

	Per capita waste collected per day	/gm/day
	Quantity of solid waste processed	/tpd
	Quantity of solid waste disposed at dumpsite/ landfill	/tpd
8	Status of Solid Waste Management service	
	Segregation and storage of waste at source	
	Whether SOLID WASTE is stored at source in domestic/commercial/ institutional bins, If yes,	Yes/No
	Percentage of households practice storage of waste at source in domestic bins	%
	Percentage of non-residential premises practice storage of waste at source in commercial /institutional bins	%
	Percentage of households dispose or throw solid waste on the streets	%
	Percentage of non-residential premises dispose of throw solid waste on the streets	%
	Whether solid waste is stored at source in a segregated form, If yes,	Yes/No
	Percentage of premises segregating the waste at source	%
	Door to Door Collection of solid waste	
	Whether door to door collection (D2D) of solid waste is being done in the city/town	Yes/No
	if yes	
	Number of wards covered in D2D collection of waste	
	No. of households covered	
	No. of non-residential premises including commercial establishments ,hotels, restaurants educational institutions/ offices etc covered	
	Percentage of residential and non-residential premises covered in door to door collection through :	
	Motorized vehicle	%
	Containerized tricycle/handcart	%
	Other device	%
	If not, method of primary collection adopted	
	Sweeping of streets	
	Length of roads, streets, lanes, bye-lanes in the city that need to be cleaned	km

	Frequency of street sweepings and percentage of population covered	frequency	Daily	Alternate days	Twice a week	Occasionally
		% of population covered				
	Tools used					
	Manual sweeping			%		
	Mechanical sweeping			%		
	Whether long handle broom used by sanitation workers			Yes/No		
	Whether each sanitation worker is given handcart/tricycle for collection of waste			Yes/No		
	Whether handcart / tricycle is containerized			Yes/No		
	Whether the collection tool synchronizes with collection/ waste storage containers utilized			Yes/No		
.	Secondary Waste Storage facilities					
	No. and type of waste storage depots in the city/town	No. Capacity in m^3				
	Open waste storage sites					
	Masonry bins					
	Cement concrete cylinder bins					
	Dhalao/covered rooms/space					
	Covered metal/plastic containers					
	Upto 1.1 m3 bins					
	2 to 5 m3 bins					
	Above 5m3 containers					
	Bin-less city					
	Bin/ population ratio					
	Ward wise details of waste storage depots (attach) :					
	Ward No:					
	Area:					
	Population:					
	No. of bins placed					
	Total volume of bins placed					
	Total storage capacity of waste storage facilities in cubic meters					
	Total waste actually stored at the waste storage depots daily					

	Give frequency of collection of waste from the depots Number of bins cleared	Frequency	No. of bins
		Daily Alternate day Twice a week Once a week	
		Occasionally	
	Whether storage depots have facility for storage of segregated waste in green, blue and black bins	Yes/ No (if yes, add details) No. of green bins: No. of blue bins: No. of black bins:	
	Whether lifting of solid waste from storage depots is manual or mechanical. Give percentage (%) of Manual Lifting of solid waste (%) of Mechanical lifting	% %	
	If mechanical – specify the method used	front-end loaders/ Top loaders	
	Whether solid waste is lifted from door to door and transported to treatment plant directly in a segregated form	Yes/ No (if yes, specify)	
	Waste transportation per day Type and Number of vehicles used	No. Trips made waste transported	
	Animal cart Tractors Non tipping Truck Tipping Truck Dumper Placers Refuse collectors Compactors Others JCB/loader		

	Frequency of transportation of waste	Frequency (%) of waste transported Daily Alternate day Twice a week Once a week Occasionally
	Quantity of waste transported each day	/tpd
	Percentage of total waste transported daily	%
	Waste Treatment Technologies used	
	Whether solid waste is processed	Yes/No
	If yes, Quantity of waste processed daily	/tpd
	Whether treatment is done by local body or through an agency	
	Land(s) available with the local body for waste processing (in Hectares)	
	Land currently utilized for waste processing	
	Solid waste processing facilities in operation	
	Solid waste processing facilities under construction	
	Distance of processing facilities from city/town boundary	
	Details of technologies adopted	
	Composting ,	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Vermi composting	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Bio-methanation	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled

	Refuse Derived Fuel	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Waste to Energy technology such as incineration, gasification, pyrolysis or any other technology (give detail)	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Co-processing	Qty. raw material processed
	Combustible waste supplied to cement plant	
	Combustible waste supplied to solid waste based power plants	
	Others	Qty.
	Solid waste disposal facilities	
	No. of dumpsites sites available with the local body	
	No. of sanitary landfill sites available with the local body	
	Area of each such sites available for waste disposal	
	Area of land currently used for waste disposal	
	Distance of dumpsite/landfill facility from city/town	kms
	Distance from the nearest habitation	kms
	Distance from water body	kms
	Distance from state/national highway	kms
	Distance from Airport	kms
	Distance from important religious places or historical monument	kms
	Whether it falls in flood prone area	Yes/No
	Whether it falls in earthquake fault line area	Yes/No
	Quantity of waste landfilled each day	tpd
	Whether landfill site is fenced	Yes / No
	Whether Lighting facility is available on site	Yes / No

	Whether Weigh bridge facility available	Yes / No
	Vehicles and equipments used at landfill (specify)	Bulldozer, Compacters etc. available
	Manpower deployed at landfill site	Yes/No (if yes, attach details)
	Whether covering is done on daily basis	Yes/No
	If not, Frequency of covering the waste deposited at the landfill	
	Cover material used	
	Whether adequate covering material is available	Yes/No
	Provisions for gas venting provided	Yes/No (if yes, attach technical data sheet)
	Provision for leachate collection	Yes/No (if yes, attach technical data sheet)
9	Whether an Action Plan has been prepared for improving solid waste management practices in the city	Yes/No (if Yes attach Action Plan details)
10	What separate provisions are made for : Dairy related activities : Slaughter houses waste : C&D waste (construction debris) :	Attach details on Proposals,Steps taken, Yes/No Yes/No Yes/No
11	Details of Post Closure Plan	Attach Plan
12	How many slums are identified and whether these are provided with Solid Waste Management facilities :	Yes/ No (if Yes, attach details)
13	Give details of: Local body's own manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	
14	Give details of: Contractor/ concessionaire's manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	
15	Mention briefly, the difficulties being experienced by the local body in complying with provisions of these rules	

16	Mention briefly, if any innovative idea is implemented to tackle a problem related to solid waste, which could be replicated by other local bodies	

Signature of CEO/Municipal Commissioner/

Executive Officer/Chief Officer

Date:

Place:

Form – V

[see rule 24(3)]

Format of annual report to be submitted by the state pollution control board or pollution control committee committees to the central pollution control board

PART A

To,

The Chairman

Central Pollution Control Board

Parivesh Bhawan, East Arjun Nagar

DELHI- 110 0032

1.	Name of the State/Union territory	:	
2.	Name & address of the State Pollution Control	:	
3.	Number of local bodies responsible for management of solid waste in the State/Union territory under these rules	:	
4.	No. of authorisation application Received	:	
5.	A Summary Statement on progress made by local body in respect of solid waste management	:	Please attach as Annexure-I
6.	A Summary Statement on progress made by local bodies in respect of waste collection, segregation, transportation and disposal	:	Please attach as Annexure-II
7.	A summary statement on progress made by local bodies in respect of implementation of Schedule II	:	Please attach as Annexure-III

Date: …….	Chairman or the Member Secretary
Place: ……..	State Pollution Control Board/
	Pollution Control Committee

PART B

Towns/cities

Total number of towns/cities

Total number of ULBs

Number of class I & class II cities/towns

Authorisation status (names/number)

Number of applications received

Number of authorisations granted

Authorisations under scrutiny

SOLID WASTE Generation status

Solid waste generation in the state (TPD)

collected

treated

landfilled

Compliance to Schedule I of SW Rules (Number/names of towns/capacity)

Good practices in cities/towns

House-to-house collection

Segregation

Storage

Covered transportation

Processing of SW (Number/names of towns/capacity)

Solid Waste processing facilities setup:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelletization

Processing facility operational:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelletization

Processing facility under installation/planned:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelletisation

Waste-to-Energy Plants: (Number/names of towns/capacity)

Sl. No.	Plant Location	Status of operation	Power generation (MW)	Remarks

Disposal of solid waste (number/names of towns/capacity):

Landfill sites identified

Landfill constructed

Landfill under construction

Landfill in operation

Landfill exhausted

Landfilled capped

Solid Waste Dumpsites (number/names of towns/capacity):

Total number of existing dumpsites

Dumpsites reclaimed/capped

Dumpsites converted to sanitary landfill

Monitoring at Waste processing/Landfills sites

Sl. No.	Name of facilities	Ambient air	Groundwater	Leachate quality	Compost quality	VOCs
1.						
2.						
3.						

Status of Action Plan prepared by Municipalities

Total number of municipalities:

Number of Action Plan submitted:

Form – VI

[see rule 25]

Accident Reporting

1.	Date and time of accident	:	
2.	Sequence of events leading to accident	:	
3.	The waste involved in accident	:	

4.	Assessment of the effects of the accidents on human health and the environment	:	
5.	Emergency measures taken	:	
6.	Steps taken to alleviate the effects of accidents	:	
7.	Steps taken to prevent the recurrence of such an accident	:	
Date: ……		Signature:……..……	
Place: ……		Designation: ……	

[F. No. 18-3/2004-HSMD]

BISHWANATH SINHA, Jt. Secy.

Uploaded by Dte. of Printing at Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

Project	Replacement of HP Bypass Steam valve and Spray control valve
Customer	MAITHON POWER LIMITED
Customer ref. No.	E-mail
Proposal #	210601-053333-8
Date of issue	July 04, 2023

TECHNICAL DISCUSSION FOR COMPLETE VALVE UPGRADE WITH EROSOLVE TRIM

Existing Valve Details:

Tag no.	BP1 & BP2
Service	HP turbine Bypass Valve
Valve Model	ARS-140

Existing valve issues

M/s. Maithon Power Ltd reported minor seat leakage on HP bypass valve. HP bypass valve actuator piston rod has broken two times and Actuator seals are also damaging that leading to leakage of hydraulic oil into atmosphere.

Proposed solution: ARS EroSolve upgrade

ARS high-pressure turbine bypass valve is upgraded with improved features that can assure better performance and reliability. EroSolve trim included in the ARS valve will extend the life of trim sealing surfaces against wet steam impingement erosion by slowing the wear, and thus longer seat leakage performance. The proposed upgrade solution adds value by addressing the following,

- Engineered and Improved minimum opening to protect plug sealing surface keeping flashing condensate away; reduces erosion
- Specially designed wing type stem minimizes vibration and extends life.
- Hard facing on erosion prone surfaces of plug and seat ring: fights erosion
- Special alloy coating; extends trim life.
- Optimized body shape to minimize thermal stress and multi-function contoured cage eliminates thermal shocks.
- Improved spray nozzle design; superior evaporation.
- **Quick change seat and replaceable trim components are incorporated. No welding and PWHT required which eases maintenance.**

IMI CCI recommends upgrading the complete HP bypass steam control valve(ARS) including actuator without accessories to ensure proper functionality. The existing valve assembly can be removed from the pipe by cutting at 50 mm upstream and downstream of the existing welding joint between the valve inlet and outlet. The Inlet and outlet nozzle of the valves shall be supplied with an additional length of 50 mm to compensate for the length.

RJ/IRC/39

aarvee associates Hyd.

IRC : 39-1986

STANDARDS
FOR
ROAD-RAIL LEVEL CROSSINGS

(*First Revision*)

THE INDIAN ROADS CONGRESS
1990

MEMBERS OF THE SPECIFICATIONS AND STANDARDS COMMITTEE

1.	Shri J.S. Marya (*Convenor*)	Addl. Director General to the Govt. of India (Roads), Ministry of shipping & Transport, Roads Wing, Transport Bhawan', New Delhi-1
2.	Shri R P Sikka (*Member-Secretary*)	Superintending Engineer (Standards), Ministry of Shipping & Transport, Roads Wing, 'Transport Bhawan, New Delhi-1
3.	Shri N.M. Andhare	Chief Engineer (Communications) & Joint Secretary to the Govt. of Maharashtra, B. & C Department, Sachivalaya Bombay-32 BR.
4.	Maj. Genl. Arjan Singh	C/o Engineering and Evaluation Consultant, B-21, Ministry of External Affairs Hostel, Curzon Road, New Delhi-1.
5.	Maj. Genl. J.S. Bawa	Director General, Border Roads Organisation, D.H.Q. P.O : Kashmir House, New Delhi-11
6.	Shri D.S. Borkar	Chief Technical Adviser, C/o State Bank of India, Central office, P.B. No. 12, Bombay-1
7.	Shri M.M. Bose	Chief Engineer, Bihar, P.W.D B & R. Patna,
8.	Prof E.C. Chandra-sekharan	Head of Soil Mechanics & Foundation Engineering Deptt., College of Engineering, Guindy, Madras-25.
9.	Shri B.K. Choksi	"Shri Kunj", Athwa Lines, Surat-1.
10.	Dr. M.P. Dhir	Scientist, Central Road Research Institute, P.O. CRRI, Okhla, New Delhi-20.
11.	Dr. R.K. Ghosh	Scientist, Central Road Research Institute, P.O. CRRI, Okhla, New Delhi-20.
12.	Shri M.K. Guha	Chief Engineer, Public Works (Roads) Deptt., Writers' Building, Calcutta-1 (W B.).
13.	Shri I C. Gupta	Chief Engineer, Haryana, P.W.D., B and R., Chandigarh.
14.	Shri C L N. Iyengar	Concrete Association of India, 121, Maharshi Karve Road, Fort, Bombay-20.
15.	Shri M B Jayawant	Hill View, Mahul Road, Chembur, Bombay-74.
16.	Shri S.L. Kathuria	Chief Engineer, Ministry of Shipping & Transport, Roads Wing, 'Transport Bhawan, New Delhi-1
17.	Shri N.H. Keswani	Superintending Engineer, Ministry of Shipping & Transport' Roads Wing, 'Transport Bhawan. New Delhi.
18.	Shri Kewal Krishan	Chief Engineer, Punjab, P.W.D., B & R. Patiala.
19.	Shri D.R. Kohli	M/s, Burmah Shell Oil Co, Burmah Shell House, Ballard Estate, P O. Box 688, Fort, Bombay-1.
20	Shri Mahabir Prasad	Superintending Engineer, XV Circle, P.WD. Lucknow.
21.	Shri H.C. Malhotra	Chief Engineer (II), H.P., P.W.D., Simla-1.
22.	Shri A. Muthukmara-swamy	Chief Engineer (Retd.), 3206, Anna Nagar, Madras-40.

2003

STANDARDS
FOR
ROAD-RAIL LEVEL CROSSINGS

(*First Revision*)

aarvee associates Hyd.

Published by
THE INDIAN ROADS CONGRESS
Jamnagar House, Shahjahan Road,
New Delhi-110 011
1990

Price Rs. Rs. 24
(plus postage & packing)

IRC: 39-1986

First published : December, 1970
First Revision : July, 1986
Reprinted : Sept. 1990

(Rights of Publication and of Translation are reserved)

Printed at Sagar Printers & Publishers, New Delhi
1000 — Sept. 1990

STANDARDS FOR ROAD-RAIL LEVEL CROSSINGS

CONTENTS

		Page No.
1.	Introduction ...	3
2.	Locations ...	3
3.	Classification of Level Crossings ...	4
4.	Categorization of Roads ...	4
5.	Width of Carriageway ...	5
6.	Type of the Pavements ...	5
7.	Minimum Width of Gates at Right Angles to the Centre Line of the Road ...	6
8.	Minimum Length of Guard Rails ...	6
9.	Position of Gates with respect to the Carriageway ...	6
10.	Minimum Distance of Gates from the Centre Line of the Nearest Rail Track ...	7
11.	Width of Road Formation Outside the Gates ...	7
12.	Level Lengths and Gradients ...	7
13.	Angle of Crossing between the Centre Lines of the Railway Track and the Road ...	8

14. Minimum Radius of the Centre Line of the Road on Curved Approaches ... 8

15. Sight Distances ... 9

16. Minimum Straight Length of Road Outside the Gates ... 10

17. Warning to Road Traffic of the Proximity of Level Crossing ... 10

18. Minimum Distance of Gate Lodge ... 11

19. Provision of Wicket Gates for Foot-Passengers ... 11

20. Provision of Light on Gates at Night ... 11

21. Safety Measures to Minimise Accidents ... 12

STANDARDS FOR ROAD-RAIL LEVEL CROSSINGS

1. INTRODUCTION

1.1. Road-rail level crossings, however, adequately designed and constructed, are accident prone. However, where it is not possible from engineering and economic considerations to provide road over/under bridges, and level crossings have to be provided, the standards given here under should be followed in the interest of maximum safety.

1.2. These standards are intended primarily to be applied to new constructions or where an existing crossing is being reconstructed. Existing level crossings need not be altered merely to suit these standards.

1.3. The draft of this standard had been approved by the Specifications and Standards Committee at its meeting held at New Delhi in September 1961. Thereafter, as suggested by the Committee, it was forwarded to the Roads Wing of the Ministry of Shipping and Transport for finalisation in consultation with the Ministry of Railways. The Railways gave their concurrence to the standard in September 1970, after effecting slight changes in the original text. The draft standard was subsequently approved for publication by the Executive Committee and the Council at their meetings held respectively in November and December 1970. Provisions of this Standard have been separately circulated by the Railway Board among the different Zonal Railways.

1.4. On the request of the Indian Roads Congress, the first revision has been made by the Ministry of Transport, Department of Surface Transport (Roads Wing) after obtaining the comments from the Ministry of Transport, Department of Railways. Besides the minor editorial changes a fresh clause 21 "Safety Measures to Minimise Accidents" has been added in the revision.

2. LOCATIONS

As far as possible, road-rail level crossings should not be located near railway stations and marshalling yards. If this is unavoidable, they should be located beyond shunting limits.

3. CLASSIFICATION OF LEVEL CROSSINGS

3.1. Level crossings shall be classified as below :

Special A class B class C class	For vehicular traffic
D class	For cattle crossings and footpaths

3.2. The classification of a rail-road level crossing shall be settled mutually by the Railway and Road Authorities keeping in view the class of the road, visibility conditions, the volume of road traffic and the number of trains passing over the level crossing.

4. CATEGORIZATION OF ROADS

For the purpose of this standard, the roads shall be categorized as under :

(*i*) Class I Roads

(*a*) National Highways ;

(*b*) State Highways ;

(*c*) Important roads within municipal towns ; and

(*d*) Roads in and around towns where road and rail traffic is heavy.

(*ii*) Class II Roads

(*a*) Major and Other District roads ;

(*b*) Unimportant roads within municipal towns ;

(*c*) Roads within non-municipal towns including those within shunting limits of its railway stations ; and

(*d*) Other surfaced roads.

(*iii*) Class III Roads

(*a*) Earth roads ; and

(*b*) Cart tracks.

(*iv*) Class IV Roads

Cattle crossings and footpaths.

5. WIDTH OF CARRIAGEWAY

(*i*) Between gates

Between gates the width of carriageway shall be the same as that of the gates (see Clause 7).

(*ii*) Outside gates

The minimum width of carriageway immediately outside the gates (but tapering off to the existing carriageway width within a distance of 30 m from the gate) shall be as below :

(*a*) Class I Roads

7 m or the width of the existing carriageway, whichever is greater.

(*b*) Class II Roads

5.5 m or the width of the existing carriageway, whichever is greater.

(*c*) Class III Roads

3.75 m or the width of the existing carriageway, whichever is greater.

(*d*) Class IV Roads

Suitable width, subject to 2 m being the minimum.

6. TYPE OF THE PAVEMENTS

(*i*) Between gates

The surface shall not be of a lower standard than the surface outside the railway boundary. In case the surface outside the gates be of cement-concrete, black-topped surface may be provided.

(*ii*) **Outside gates**

The surface should not be of a lower specification than that of the existing road. However, in the case of Class I and Class II roads, it will be desirable to have a black-topped surface for a distance of at least 30 m beyond each gate.

7. MINIMUM WIDTH OF GATES AT RIGHT ANGLES TO THE CENTRE LINE OF THE ROAD

(*i*) **For Class I Roads**

9 m or equal to the width of the carriageway, immediately outside gates plus 2.5 m whichever is more.

(*ii*) **For Class II Roads**

7.5 m or equal to the width of the carriageway immediately outside gates plus 2 m whichever is more.

(*iii*) **For Class III Roads**

5 m or equal to the width of the carriageway immediately outside the gates plus 1.25 m whichever is more.

(*iv*) **For Class IV Roads**

Suitable width, subject to 2 m being the minimum.

8. MINIMUM LENGTH OF GUARD-RAILS

This should be 2 m more than the width of the gates on square crossings, and proportionately longer on skew crossings.

9. POSITION OF GATES WITH RESPECT TO THE CARRIAGEWAY

9.1. The gates may be swing gates, lifting gates or movable barriers of approved design.

9.2. The gates should be at right angles to the centre line of the road.

9.3. On level crossings across Class IV roads, stakes shall be fixed between the gate posts to prevent passage of road vehicles.

10. MINIMUM DISTANCE OF GATES FROM THE CENTRE LINE OF THE NEAREST RAIL TRACK

This should be 3 m on broad gauge lines and 2.5 m on metre gauge and narrow gauge lines.

11. WIDTH OF ROAD FORMATION OUTSIDE THE GATES

The width of the road formation for a distance of 30 m beyond the gate should be as follows :

(*i*) **Class I and Class II Roads**

Width of carriageway immediately outside the gates (see Clause 5) plus 5 m.

(*ii*) **Class III Roads**

Width of the carriageway immediately outside the gates (see Clause 5) plus 2.5 m.

(*iii*) **Class IV Roads**

Suitable width subject to 3 m being the minimum.

12. LEVEL LENGTHS AND GRADIENTS

(*i*) **Between gates**

Level for all classes.

(*ii*) **Outside gates**

(*a*) **Class I Roads**

Same level as between the gates upto 15 m beyond gates and not steeper than 1 in 40 beyond.

(*b*) **Class II Roads**

Same level as between the gates upto 8 m beyond gates and not steeper than 1 in 30 beyond.

(*c*) **Class III Roads**

Same level as between the gates upto 8m beyond gates and not steeper than 1 in 20 beyond.

(*d*) **Class IV Roads :** Not steeper than 1 in 15.

Note : Shock-free vertical curves as per Indian Roads Congress Standards should be provided at all gradient changes. The level distances mentioned above are exclusive of the lengths required for the provision of vertical curves.

13. ANGLE OF CROSSING BETWEEN THE CENTRE LINES OF THE RAILWAY TRACK AND THE ROAD

The angle of crossing between the centre line of the road and that of the railway track should ordinarily not be lower than 45 degrees* in the case of Class I, Class II and Class III roads. For Class IV roads, the angle of crossing should be 90 degrees.

14. MINIMUM RADIUS OF THE CENTRE LINE OF THE ROAD ON CURVED APPROACHES

14.1. Minimum radius of the curve shall depend upon the design speed, coefficient of friction between the tyres and road surface and maximum allowable value of superelevation. The minimum radii for different design speeds for good surfaced roads may be provided as indictated in the table below :

Speed km/h	Radius of horizontal curve (metres)		
	Plain and rolling terrain	Hilly	
		Not affected by snow	Snow bound
20	—	14	15
25	—	20	23
30	—	30	33
35	45	40	45
40	60	50	60
50	90	80	90
60	130	—	—
65	155	—	—
80	230	—	—
100	360	—	—

* An angle of crossing lower than 45 degrees can also be provided but only after special permission from the Railway Board which may be granted in exceptional cases.

14.2. In difficult terrain where it is not possible to adopt the above standard, the radius may be reduced with the concurrence of the Road Authority.

14.3. For other categories of roads, the best possible radius having regard to safety of the road traffic, should be adopted.

15. SIGHT DISTANCES

15.1. The roads in the vicinity of the level crossings shall be provided with sight distances depending upon the design speed as per table No. 11 of IRC : 73-1980 reproduced below :

STOPPING SIGHT DISTANCE FOR VARIOUS SPEEDS

Speed	Perception and brake reaction		Braking		Safe stopping sight distance (metres)	
V (km/h)	Time, t (Sec.)	Distance (metres) $d_1 = 0.278\ Vt$	Coefficient of longitudinal friction (f)	Distance (metres) $d_2 = \frac{V^2}{254\ f}$	Calculated values $d_1 + d_2$	Rounded off values for design
20	2.5	14	0.40	4	18	20
25	2.5	18	0.40	6	24	25
30	2.5	21	0.40	9	30	30
40	2.5	28	0.38	17	45	45
50	2.5	35	0.37	27	62	60
60	2.5	42	0.36	39	81	80
65	2.5	45	0.36	46	91	90
80	2.5	56	0.35	72	118	120
100	2.5	70	0.35	112	182	180

15.2. To further improve visibility, gate lodges should be so sited that a clear and unobstructed view is obtained by the road traffic of all approaching trains. While doing so, care should be taken to make allowance for all possible future extensions, *e.g.*, additions to the railway track(s) or widening of the road.

15.3. On unmanned level crossings, efforts should be made to keep the sight triangles demarcated in the four corners on the basis of speeds of trains and the road vehicles, clear of any obstruction to sight.

16. MINIMUM STRAIGHT LENGTH OF ROAD OUTSIDE THE GATES

This shall normally be 30 m, 22.5 m and 15 m for level crossings of Class I, Class II and Class III roads respectively. The straight length may, however, be reduced depending on sight conditions if difficult to attain. The reduction should, however, not go below the minimum straight lengths of 15 m, 9 m and 4.5 m for the three classes of roads respectively.

17. WARNING TO ROAD TRAFFIC OF THE PROXIMITY OF LEVEL CROSSING

17.1. Unguarded Railway Crossing

The sign should be used on the approaches of level crossings where there are no gates or other barriers. A pair of signs shall be used for the purpose : (i) an advance warning sign located at 200 metre away from the crossing, and (ii) a second sign to be erected near the crossing. The distance of the second sign from the crossing may be 50-100 metre in plain and rolling terrain and 30-60 metre in hilly terrain.

17.2. Guarded Railway Crossing

The sign should be used to warn traffic on the approaches of guarded railway crossings. A pair of signs shall be used for the purpose : (i) an advance warning sign located at 200 metre away from the crossing, and (ii) a second sign to be erected near the crossing. The distance of the second sign from the crossing may be 50-100 metre in plain and rolling terrain and 30-60 metre in hilly terrain.

17.3. Gates should be painted white, with a red disc not less than 60 cm in diameter in the centre. The gate posts also must be painted white. Where gates or chains are not provided, posts must still be provided at the position prescribed for gate posts and these should be painted white.

18. MINIMUM DISTANCE OF GATE LODGE

18.1. The minimum distance of gate lodge shall be as given below :

	Class I Roads	*Class II Roads*	*Class III Roads*	*Class IV Roads*
(*a*) From the centre line of the nearest rail track	6 m	6 m	6 m	6 m
(*b*) From the edge of the carriageway	6 m	6 m	6 m	6 m

18.2. The recommendation in Clause 15 regarding sight distances should also be kept in view.

19. PROVISION OF WICKET GATES FOR FOOT-PASSENGERS

19.1. In the case of level crossings on Class I and Class II roads, wicket gates for pedestrians shall be provided except where there are foot overbridges.

19.2. In the case of level crossings on Class III and Class IV roads, wicket gates need not be provided.

19.3. Wicket gates should be of such a design that cattle cannot easily and readily pass through them.

20. PROVISION OF LIGHT ON GATES AT NIGHT

(*i*) **Light as observed by road users**

(*a*) **Class I and Class II Roads**

Red when either gate is closed to the road. White, when the gates are opened to the road.

(*b*) **Class III Roads**

Same as above, but reflectors may be used as an alternative to lamps.

(*ii*) **Light as observed by drivers of approaching trains**

(*a*) **Class I Roads :** Red, when gates are closed across the railway track.

(*b*) **Other cases :** Nil.

21. SAFETY MEASURES TO MINIMISE ACCIDENTS

21.1. Latest IRC road signs indicating whether the railway crossing is manned or unmanned shall be installed on either end of the crossing at the prescribed distance as per IRC : 67-1977.

21.2. Speed limit road signs for the imposed Speed Signs of limit on speed of approaching traffic shall be installed on either end of the crossing at the prescribed distance.

21.3. Rumble strips on both sides of the Railway crossing shall be provided as per following specifications. A common application of rumble strips is the placement of intermittent, raised bituminous overlays across the roadway. Raised sections can be 15-25 mm high, 200-300 mm wide, and spaced about one metre centre to centre. A series of such strips, roughly 15-20 at one location shall be provided. The raised sections shall consist of premix carpet/semi-dense carpet/asphaltic concrete.

21.4. Speed breakers shall not be permitted.

21.5. Flashing signals shall be installed on both sides of the crossing after assessing their requirement for each case.

23.	Shri R. Nagarajan	Director (Civil Engineering), Indian Standards Institution, 'Manak Bhawan' 9-Bahadurshah Zaffar Marg, New Delhi-1,
24.	Seri K.K. Nambiar	Chief Engineer, Cement Service Bureau, "The Grove, Tynampel", Madras-18.
25.	Shri T.K. Natarajan	Scientist, Central Road Research Institute, P.O. CRRI, Okhla, New Delhi-20.
26.	Brig. K.U.K. Pandalai	D. of P., Engineer-in-Chief's Branch, Army Headquarters, D.H.Q. P.O., Kashmir House, New Delhi-11
27.	Shri B.P. Patel	Chief Engineer, Ministry of Shipping & Transport, Roads Wing, 'Transport Bhawan', New Delhi-1.
28.	Shri P.J. Prasad	Superintending Engineer (Designs), Bihar P.W.D., B & R., C.D.O. Building, Bailley Road, Patna-15
29.	Shri W.G.S. Saldanha	Chief Engineer, Mysore, P.W.D., C. & B. Deptt., Bangalore-1.
30.	Shri Satish Prasad	Asphalt Engineer, Indian Oil Corporation Ltd., B-11, South Extension (Part I), New Delhi.
31.	Shri A.R. Satyanarayana Rao	Chief Engineer (Highways), Andhra Pradesh, P.W.D.R. & B., Hyderabad.
32.	Prof. R.C. Sharma	Principal, Regional College of Engineering, Kurukshetra.
33.	Dr. N.S. Srinivasan	Scientist, Central Road Research Institute, P.O. C.R.R.I., Okhla, New Delhi-20.
34.	Shri C.G. Swaminathan	Scientist, Central Road Research Institute P.O. C.R.R.I., Okhla, New Delhi-20.
35.	Dr. Bh. Subbaraju	Director, Central Road Research Institute, P.O., C R R I., Okhla, New Delhi-20.
36.	Shri Sujan Singh	'Byrne Villa', Lower Mall, Kasauli.
37.	Dr. H.L. Uppal	Scientist, Central Road Research Institute, P.O., CRRI., Okhla, New Delhi-20.
38.	The Director General (Road Development) & Addl Secretary to the Govt. of India.	Ministry of Shipping & Transport, Roads Wing, 'Transport Bhawan', New Delhi-1.

ANNEXURE P/64

Proposed Decapitalization 2024-29

Sl.No	List of Capex items with proposed Decap	Proposed Capitalization in 2024-29 (Rs. Lakh)					Assumed Deletion* (Rs. Lakh)				
		2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28	2028-29
1	Centrifugal compressor and motor for BTG	-	-	-	1,000.00	-	-	-	-	458.11	-
2	Centrifugal Compressors for Ash Plant	-	1,454.00	500.00	1,000.00	-	-	734.37	240.51	458.11	-
3	Laboratory Instruments (Chemical Laboratory)	50.00	50.00	65.00	-	-	26.52	25.25	31.27	-	-
4	Laboratory Instruments (C & I Laboratory)	-	-	50.00	-	-	-	-	24.05	-	-
5	AVR Retrofitting for Unit - 1 &2	-	-	250.00	250.00		-	-	120.25	114.53	-
6	Conveyor Belt	300.00	200.00	250.00	350.00	-	159.10	101.01	120.25	160.34	-
7	Retrofitting of Boiler Elevators	-	-	-	100.00	100.00	-	-	-	45.81	43.63
8	Station Battery Banks	500.00	-	-	-	-	265.16	-	-	-	-
9	Upgradation of Mill & Compressor HT Breakers of the main plant	60.00	60.00	60.00	-	-	31.82	30.30	28.86	-	-
10	Upgradation of AHP & CHP HT & LT Breakers	125.00	125.00	125.00	125.00	50.00	66.29	63.13	60.13	57.26	21.81
11	Testing Equipment for Electrical Equipment	25.00	25.00	25.00	-	-	13.26	12.63	12.03	-	-
12	Replacement of Fire Extinguisher	25.00	-	-	-	-	13.26	-	-	-	-
13	Reheater Upgradation	500.00	500.00	500.00	500.00	500.00	265.16	252.53	240.51	229.06	218.15
14	Infrastructure - IT	95.57	50.00	50.00	50.00	50.00	50.68	25.25	24.05	22.91	21.81
15	Replacement of H2 plant electrolysis module	300.00	300.00	-	-	-	159.10	151.52	-	-	-
16	Replacement of Fire Tenders	109.40	-	-	-	-	58.02	-	-	-	-
17	Replacement of pneumatic actuator and control mechanism	-	-	200.00	200.00	-	-	-	96.20	91.62	-
18	ESP Internals	393.64	510.00	300.00	300.00	-	208.76	257.58	144.31	137.43	-
	Total	**2,483.61**	**3,274.00**	**2,375.00**	**3,875.00**	**700.00**	**1,317.11**	**1,653.59**	**1,142.42**	**1,775.18**	**305.41**

**Arrived at by de-escalating the value of the new asset by 5% per year until the year of capitalisation of the old asset*

ANNEXURE P/65 (COLLY.)

Ash Disposal Expenses without Additional Capital Expenditure proposed FY25 to FY29

FY ---------->		FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
Gross Generation	Mus	7818.30	7818.30	7818.30	7839.72	7818.30
Sp. Coal Consumption	kg/Kwh	0.583				
Coal Consumption at 85% P	MT	4555195	4555195	4555195	4567675	4555195

FY	Consumption Plan MT(As Per 85% PLF)	Ash Generation	Fly Ash & Bottom Ash (Cost effective Utilisation)	FLY Ash (Stowing of Mines)	Bottom Ash (Stowing of Mines)	Lifting from Ash Pond	Closing Stock	Ash Disposal Cost (In Rs. Lakh)	Total Fly ash disposal including moisture	Total bottom ash disposal including moisture	Total Ash Utilization%
FY-25	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	2,07,519.68	6468.9	12,28,417.14	7,02,825.73	101.67
FY-26	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	1,76,155.63	6792.4	12,28,417.14	7,02,825.73	101.67
FY-27	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	1,44,791.57	6792.4	12,28,417.14	7,02,825.73	101.67
FY-28	4567675	1888733	8,37,796	5,41,984	5,56,754	4,30,000	1,14,201.58	7144.2	12,31,782.67	7,04,751.28	101.62
FY-29	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	82,837.53	7129.4	12,28,417.14	7,02,825.73	101.67

Assumptions :

1) Ash Generation Considered at 85% PLF.
2) Ash production is based on 41.35% of coal consumption
3) Ash % in coal has been assumed as 41.35% as an average of FY 20 to FY 24
4) Cost effective Utilization has been taken 56% of Fly ash and 21% of bottom ash
5) Moisture % included in the quantity as Fly Ash -8%, Bottom Ash -33% and Pond Ash -27% based on past data
6) Ash Disposal Rate (Rs/MT) Considered is as per prevailing Rate for FY 24-25 for disposable distance of about 41 km as below:
Ash Disposal rate for Fly Ash - 353, Bottom Ash - 353 and Pond Ash -362 as per prevailing rate for FY 24-25 and with price escallation of 5% at every 2 year starting from FY 25-26.
7) Cost effective Disposal considered as an average rate of Rs 125/Mt as per prevailing rate for FY 24-25 and with price escallation of 5% at every 2 year starting from FY 25-26
8) Opening Pond Ash stock as on 1.4.2024 = 238884/0.73=327238 MT



Ash Disposal Expenses with Additional Capital Expenditure proposed FY25 to FY29

FY ---------->		FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
Gross Generation at	Mus	7818.30	7818.300	7818.300	7839.720	7818.300
Sp. Coal Consumptio	kg/Kwh	0.583				
Coal Consumption	MT	4555195	4555195	4555195	4567675	4555195

FY	Consumption Plan MT	Ash Generation	Fly Ash & Bottom Ash (Cost effective Utilisation)	FLY Ash (Stowing of Mines)	Bottom Ash (Stowing of Mines)	Lifting from Ash Pond	Closing Stock	Ash Disposal Cost (In Rs. Lakh)	Total Fly ash disposal including moisture	Total bottom ash disposal including moisture	Total Ash Utilization %	Difference between Original and Add cap_ash wharf (In Rs Lacs)
FY-25	4555195	1883573	8,35,507	5,40,504	5,55,232	4,30,000	2,07,519.68	5873.9	12,28,417.14	7,02,825.73	101.67	595.0
FY-26	4555195	1883573	9,12,757	4,91,367	5,27,119	4,30,000	1,76,155.63	6254.6	12,28,417.14	7,02,825.73	101.67	537.8
FY-27	4555195	1883573	9,12,757	4,91,367	5,27,119	4,30,000	1,44,791.57	6254.6	12,28,417.14	7,02,825.73	101.67	537.8
FY-28	4567675	1888733	9,15,257	4,92,713	5,28,563	4,30,000	1,14,201.58	6578.6	12,31,782.67	7,04,751.28	101.62	565.6
FY-29	4555195	1883573	10,09,319	4,29,946	4,91,978	4,30,000	82,837.53	5477.4	12,28,417.14	7,02,825.73	101.67	1652.0

Assumptions :

1) Ash Generation Considered at 85% PLF.
2) Ash production is based on 41.35% of coal consumption
3) Ash % in coal has been assumed as 41.35% as an average of FY 20 to FY 24
4) Cost effective Utilization has been taken as below considering the additional capitalisation of Ash Wharf in FY 24-25 and Ash Silos in FY29:

	Of 80% Fly Ash	Bottom Ash
FY 25	56%	21%
FY 26	60%	25%
FY 27	60%	25%
FY 28	60%	25%
FY 29	65%	30%

Balance of Fly Ash and Bottom Ash is being disposed off for filling Void mines and low lying areas to meet 100% ash utilisation target

5) Moisture % included in the quantity as Fly Ash -8%, Bottom Ash -33% and Pond Ash -27% based on past data
6) Ash Disposal Rate (Rs/MT) Considered is as per prevailing Rate for FY 24-25 for disposable distance of about 41 km as below:

Ash Disposal rate for Fly Ash - 353, Bottom Ash - 353 and Pond Ash -362 as per prevailing rate for FY 24-25 and with price escallation of 5% at every 2 year starting from FY 25-26.

7) Opening Pond Ash stock as on 1.4.2024 = 238884/0.73=327238 MT
8) Rake Handling Charges is considered at rate of Rs 168.93/Mt for pond Ash and Rs. 153/Mt for FLY Ash as per prevailing rate for FY 24-25 and with price escallation of 5% at every 2 year starting from FY 25-26
9) Subsidy of Rs. 100/Mt and Revenue of Rs. 110/Mt has been considered for offtake of Pond Ash and Fly Ash respectively in Rake mode as per prevailing rate for FY 24-25.
10)With commissioning of Ash Silos for loading, the net rate of disposal of FLY Ash in Rake mode has been considered as -Rs 50/Mt from FY 2028-29 onwards



Jamal Arif

From: MATHEW XAVIER <protechswitchgear@gmail.com>
Sent: 08 February 2024 11:50
To: Kumar Vivek
Cc: Banerjee R D; Kumar Sanjay
Subject: Re: Requested to kindly provide the budgetary offer of Isolator set (complete for 3phase) with E/S and without E/S.

[EXTERNAL sender, Exercise caution..!]

Dear Sir,

Kindly refer to our discussion, Please note that M/s Siemens closed the manufacturing of isolators a few years back. We can offer the isolators of other make (S&S POWER, Chennai) as one to one replacement against Siemens make Isolators.
We recommend you to replace the defective/problematic Siemens make isolators with New S&S Power make isolators in a planned manner. We request you to kindly provide as the no of isolators you indent to purchase so that we can provide you the complete retrofitting Solutions & budgetary offer.

Thanks & Regards

On Thu, Feb 8, 2024 at 10:49 AM Kumar Vivek <vivek.Kumar@tatapower.com> wrote:

> Dear sir,
>
> Requested to kindly provide the budgetary offer of Isolator set (complete for 3phase) with E/S and without E/S.
>
> Details as attached
>
> Regards,
>
> Vivek Kumar
>
> Lead Engineer - Electrical Maintenance
>
> Maithon Power Ltd., (A Joint Venture Company of Tata Power & DVC), Works: Villàge Dambhui, P.O. Barbindia, P.S. Nirsa, District Dhanbad 828 205, Jharkhand, India
>
> Tel: 9204784760 Mobile: 9204784760
>
> ---
>
> Disclaimer:- Information contained and transmitted by this email is confidential and proprietary to The Tata Power Company Ltd. and is included for use only by the addressee. If you are not the intended recipient, you are notified that any dissemination or copying of this email or contents therein is strictly prohibited. If this message is not intended for you, then you are requested to delete this email immediately and notify the originator.

--
(MATHEW XAVIER)
DIRECTOR

PROTECH TRANSPOWER PVT LTD.
1 & 2 DEEPLAXMI APARTMENT
NEAR HOTEL SEVEN HEAVEN
RANE NAGAR, NASHIK,
MAHARASHTRA- 422009

+91 9422252510 (MOBILE)
+91 8600236160 (MOBILE)



FOREIGN OBJECT DAMAGED OF 1st STAGE BLADES (TS)

B) Repairs

- Aluminum oxide blasting to clean the inner casing
- cleaning & freeness of L ring
- Measurement of distortion and accordingly correction of fin clearance
- Dessing of FOD blades of Stage 1st (TS)
- Straightening of twisted inter stage fins

D) Assembly Highlights :

- OEM recommended practices are adopted during assembly

D) Recommendation Details:

- Water chemistry to be monitored to control the steam parameters
- All lubrite packers needs to be replaced in next overhauling
- Stationary blades healthiness of 1st stage to be inspected in next schedule AOH

<u>IP rotor</u>

A) Inspection Findings:

- BrownDeposits on blades
- Heavy Damage of blades trailing edge of TS stage 1,2 & 3 by foreign object (Detail attached-IP turbine fact finding report)
- Catenary value of rear journal was less than erection value
- Twisted of inter stage fins
- Rear gland fins partially eroded
- Front gland fins are partially eroded
- Caulking wire found came out from groove
- Hitting mark on airfoils of all stages by oxide hard components of steam



Rotor airfoil damaged due to FOD



IP ROTOR



IP ROTOR 1st STAGE DAMAGED BLADES



B) Repairs

- Aluminum oxide blasting of IP rotor to clean the deposits
- Catenary value is correction by add shim below bearing 3 support
- Straightening of inter stage fins
- Dressing of gland fins
- Refining of gland damaged fins as per requirement and made clearance
- Dressing of teared blades of TS stage 1,2 & 3
- Gland fins Caulking wire properly fitted in position

C.Assembly Highlights :

- OEM practice addoted for assembly

D.Recommendation Details:

- Ensure healthiness of HRH strainer element
- Spare blades to be kept in stock
- Water chemistry to be monitored to control the steam parameters
- Damaged blades to be replaced in next schedule MOH

ANNEXURE P/68

CUSTOMER : Maithon Power Limited
END USER : Maithon Power Limited

GLANDLESS HOT CIRCULATION PUMP TYPE

H L A V

WET MOTOR TYPE

OPERATION AND MAINTENANCE MANUAL



PRODUCT. NO. PU0092720
PUMP TYPE HLAV300X2-470/1C

IMPORTANT !

To assure safe and proper operation, be sure to read this "INSTRUCTION MANUAL" and the annexed "SAFETY PRECAUTIONS" prior to installing and using your pump.

TORISHIMA PUMP MFG. CO., LTD.
HEAD OFFICE & WORKS : 1-1-8, MIYATA-CHOU, TAKATSUKI-SHI, OSAKA, 569-8660 JAPAN
TEL : +81-72-690-2308
TELEFAX : +81-72-690-2329

9.2.2 Overhaul Inspection

For the first time approx. 1 year after the commissioning and thereafter once every 4 to 5 years, the pumps are recommended to be completely stripped.
On this occasion, at least the following inspections should be carried out:

(1) Inspection of all parts subject to wear and of their fastenings, including fits, bolts and screws, locking devices, pins and dowels. These components should be replaced by new ones, depending on their condition. Criteria for replacement: See table of clearances, Item 9.2.3.
(3) Cleaning of pumping set (the motor winding ends should be **lightly** rinsed with water).
(4) Out-of-round (true running) check of rotor (max. permissible out-of-round: 0.08 mm).
If a new impeller is fitted, the rotor must be dynamically balanced (See Item 9.4.).
(5) Check of flow conditions through the cooling channels in the heat barrier (clean out same if necessary). Pressure drop through heat barrier at the nominal rate of flow: 1 mAq approx.
(6) Cleaning out of LP side of the motor cooler.
Hydrostatic testing of the HP side.
(7) Cleaning out of the Filter
(8) Visual examination of the motor winding

For disassembly, please refer to Item 9.3.
For part inspection, please refer to Item 9.4.
For reassembly, please refer to Item 9.1 and 9.4.1.
For disassembly and inspection of Filter only, please refer to Item 4.6.

<Note>

In the case of major overhauls, or of damage to the motor winding, please contact to our office and dispatch the pumping set to our works for complete inspection and repairs.

2021

VAKALATNAMA

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION

AT NEW DELHI

PETITION NO. ____/GT/2025

IN THE MATTER OF:

Maithon Power Limited ...Petitioner

Versus

Tata Power Delhi Distribution Ltd. & Ors. ...Respondents

I, Angshuman Chakrabarti, CFO and Authorized Representative of Maithon Power Limited i.e. the Petitioner in the above petition do hereby appoint Mr. Shri Venkatesh, Mr. Shryeshth Ramesh Sharma, Ms. Kanika Chugh, Mr. Ashutosh Kumar Srivastava, Mr. Bharath Gangadharan, Mr. Abhishek Nangia, Mr. Akash Lamba, Mr. Nihal Bhardwaj, Mr. Siddharth Nigotia, Mr. Shivam Kumar, Mr. Kartikay Trivedi, Mr. Aashwyn Singh, Mr. Mohit Gupta, Ms. Manu Tiwari, Mr. Harsh Vardhan and Mr. Aniket Kanhaua, Mr. Suhael Buttan, Ms. Priya Dhankhar, Mr. Anant Singh, Mr. Vineet Kumar, Mr. Nikunj Bhatnagar, Mr. Kunal Veer Chopra, Ms. Surbhi Kapoor, Mr. Vedant Choudhary and Ms. Tarang Saraogi **(SKV Law Offices)** with e-portal Id SHRIVENKATESH123 to appear, plead and act for me/us in the above petition/application and to conduct and prosecute all proceedings that may be taken in respect thereof and applications for return of documents, enter into compromise and to draw any moneys payable to me/us in the said proceeding.

Place: New Delhi
Date: 26.02.2025

Signature of the Party

"Accepted"

MAITHON POWER LIMITED

Signature with date
Advocate for the Petitioner
(Address for service on the Counsel for Petitioner)
Shri Venkatesh
SKV Law Offices
B-50, Defence Colony, New Delhi - 110024
Phone No. 9818771818
Phone No. 011-47099951-99
Email: lawyers@skvlawoffices.com

Signature with date
(Name and Designation)

ADVOCATES' WELFARE FUND STAMP ₹25 1640566



Shri Venkatesh
(D/815/2008)



Shryeshth Ramesh Sharma
(D/2127/2003)



Kanika Chugh
(D/3183/2009)



Ashutosh Kumar Srivastava
(D/268/2017)



Bharath Gangadharan
(D/7325/2017)



Abhishek Nangia
(D/2691/2019)



Nihal Bhardwaj
(D/9517/2019)



Siddharth Nigotia
(D/6850/2019)



Shivam Kumar
(D/3458/2019)



Mohit Gupta
(D/5916/2020)



Manu Tiwari
(D/4191/2020)



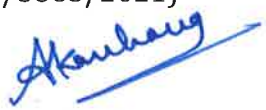
Kartikay Trivedi
(D/5863/2021)



Aashwyn Singh
(D/462/2023)



Harsh Vardhan
(D/13622/2023)



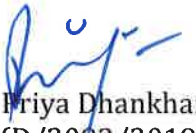
Aniket Kanhaua
(MP/4421/2023)



Akash Lamba
(D/2963/2017)



Suhael Buttan
(D/2324/2017)



Priya Dhankhar
(D/2092/2019)



Anant Singh
(D/2353/2018)



Vineet Kumar
(D/4863/2019)



Kunal Veer Chopra
(D/6836/2022)



Nikunj Bhatnagar
(D/7122/2022)



Vedant Choudhary
(D/3909/2023)



Surbhi Kapoor
D/5294/2020



Tarang Saraogi
(MAH/12911/2023)

2023



महाराष्ट्र MAHARASHTRA ◐ 2024 ◐ DG 918324

NOTARY S.M.H.ZAIDI Mumbai & Thane Dist. Reg. No. 3640 My Commission Expires 25 Sept. 2026 GOVT. OF INDIA

प्रधान मुद्रांक कार्यालय, मुंबई.
प.मु.वि.क. /०००००३
13 FEB 2025
सक्षम अधिकारी

श्रीमती संगिता जाधव

The stamp paper forms an integral part of the Power of Attorney issued by Malthon Power Limited dated 25th February, 2025

जोडपत्र - २ Annexure - II

दस्ताचा प्रकार	
दस्त नोंदणी करणार आहेत का ?	YES/NO
मिळकतीचे वर्णन -	
मुद्रांक विकत घेणाऱ्याचे नाव	
दुसऱ्या पक्षकाराचे नाव	Angshuman Chakrabarti
हस्ते असल्यास त्याचे नाव व पत्ता	Dipraj Jain
मुद्रांक शुल्क रक्कम	
मुद्रांक विक्री नोंद वही अनु. क्रमांक/दिनांक	
मुद्रांक विकत घेणाऱ्याची सही	
मुद्रांक विक्रेत्याची सही	

परवाना क्रमांक : ८००००० ३
मुद्रांक विक्रीचे नाव/पत्ता : श्री. अशोक रघुनाथ कदम
२१०, भांडार भगत सिंह रोड, २/१५, आनंद भुवन, पंपई, मुंबई-४०० ००१.

ज्या कारणासाठी ज्यांनी मुद्रांक खरेदी केला त्यांनी त्याच कारणासाठी मुद्रांक खरेदी केल्यापासून ६ महिन्यात वापरणे बंधनकारक आहे.

000715

KAITHAN POWER LIMITED
Registered Office: Corporate Centre,
34, Sant Tukaram Road, Carnac Bunder,
Mumbai - 400 009, Maharashtra, India

20 FEB 2025

20 FEB 2025

NOTARY

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS THAT Maithon Power Limited, a Company incorporated under the Companies Act, 1956 having its Registered Office at Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai – 400 009 (hereinafter called 'the Company'), do hereby nominate, constitute and appoint Mr. Angshuman Chakrabarti, Chief Financial Officer as Attorney of the Company in the name and on behalf of the Company to do and perform the following acts and deeds:

1. To appear, to prepare, to argue, to act, to sign and file documents, petition, applications, affidavits, declarations, forms and returns etc. and to represent on behalf of the Company before any Statutory/Regulatory Authorities, Judicial or Quasi Judicial Authorities under Direct and Indirect Taxes Acts, Rules and Regulations etc. including Income Tax Act, 1961, Custom Act 1962 and Central Excise Act 1944, Sales Tax, Service Tax, Value Added Tax, Director General of Foreign Trade (DGFT) and any other commercial taxes etc., whether Central or State, enacted or to be enacted anywhere in India, under Companies Act, 2013 and rules made thereunder, Employees' Provident Fund & Miscellaneous Provisions Act, 1952, Employees State Insurance (ESI) ACT, 1948 and Payment of Gratuity, (as amended from time to time and for the time being applicable in India).

2. To apply for, obtain, make sign, file and/or furnish and pursue any and all such documents, return, forms, declaration, reports, statements, certificates, notices or information including relating to the Accounts of the Company as the Company may be required to make, obtain, file or furnish before the any Statutory Authority, State or Central Government Authorities.

3. To prepare, modify, execute and sign all correspondence, return, forms, challans, road permits, invoices and other documents and paper etc. relating to the goods and materials of the Company for commercial purposes and also relating to billing and collection matter of the Company in transaction with any person or authorities in India that may be necessary in the ordinary course of business of the Company.

4. To appoint and authorize any Chartered Accountant or Company Secretary (in whole time practice) or legal consultant to certify the various forms/returns/applications and to sign, execute, verify and file written statements, affidavits, applications, petitions required to be filed with office of Hon'ble Ministry of Corporate Affairs/Regional Director/ National Company Law Tribunal (NCLT)/ National Company Law Appellate Tribunal (NCLAT)/Registrar of Companies/Direct or Indirect Tax Department/ DGFT/Labour Department or with any other Government (Central or State) Authorities in India.

5. To publish advertisement in newspapers as required under the provisions of Companies Act, 2013 and rules made thereunder or the Listing Agreement or the regulations of the Securities and Exchange Board of India.

6. To perform and observe and do all acts, deeds, matters and things whatsoever necessary to be performed and observed by the Company and all requirements or provisions affecting the Company contained in any act, statute, decree, ordinance or regulation and any rule(s) or order(s) made thereunder and any other enactment or statutory rules and regulations applicable to the Company in the place in which this Power of Attorney may for the time being be exercisable.

7. To make, enter into, sign and execute on behalf of the Company contracts, agreements, leases (whether as Lessor or Lessee) and other documents with the Government of India, State Governments, public and private bodies, joint stock companies and individuals for a period extending up to 3 years as are normally required in the conduct of the business of the Company.

Note: To be signed jointly with any one of the attorneys similarly authorised to exercise this power.

8. To sign all correspondence that may be necessary in the ordinary course of business of the Company.

9. While discharging his function with respect to matters involving financial implications, the said Mr Angshuman Chakrabarti, Chief Financial Officer shall exercise his powers granted vide the aforesaid Power of Attorney subject to the limits as prescribed in the Schedule of Authorities as may be approved by the Board of Directors of Maithon Power Limited, from time to time.

10. AND GENERALLY to do and execute or cause to be done and executed all documents and assurances, acts, deeds, matters or things ancillary or incidental to the abovementioned matters and all and whatsoever the Attorney shall do or cause to be done in or about the premises by virtue of the aforesaid powers or any of them, the Company doth hereby for itself, their successors and assigns covenant with the said Mr Angshuman Chakrabarti, his heirs, executors and administrators to allow, ratify and confirm.

11. And is hereby declared that the said Mr Angshuman Chakrabarti, Chief Financial Officer when signing on behalf of the Company shall sign "For and on behalf of Maithon Power Limited".

IN WITNESS WHEREOF the Common seal of the Maithon Power Limited has hereunto been affixed this 25th February 2025.

The Common Seal of Maithon Power Limited hereunto affixed pursuant to Resolution passed by its Board of Directors on 16th January 2025 in the presence of Ms. Anjali Pandey, Chairperson and Ms. Mona Purandare, Company Secretary of the Company

Witnesses:

1) Signature:
Name: Vikas Dube
Father's Name: Mr. Paras Nath Dube
Address: 34, Sant Tukaram Road, Carnac Bunder, Mumbai Maharashtra - 400009

2) Signature:
Name: Mahek Petkar
Father's Name: Mr. Riyaz Petkar
Address: 34, Sant Tukaram Road, Carnac Bunder, Mumbai Maharashtra - 400009

S.M.H. ZAIDI
NOTARY
Government of India
Mumbai & Thane Dist
25 FEB 2025

NOTED & REGISTERED
Sr. No. 540 Page No. 42
Book No. 9 Date 25 FEB 2025

FORM-1

1.	Name of the Petitioner/Applicant	Maithon Power Limited
2.	Address of the Petitioner/Applicant	Maithon Power Limited, Corporate Center, 34 Sant Tukaram Road, Carnac Bunder, Mumbai
3.	Subject Matter	*Petition filed under Sections 62 and 79 of the Electricity Act, 2003, read with Regulation 15(a) of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 seeking:* 1. *Truing up of the generation tariff for the period FY 2019-20 to FY 2023-24 under Regulation 13 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 and Regulation 12 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).* 2. *Determination of the generation tariff for the period FY 2024-25 to FY 2028-29, under Regulation 10 of CERC (Terms and Conditions of Tariff) Regulations, 2024 for 2x525 MW Maithon Right Bank Thermal Power Project (MRBTPP) operated by Maithon Power Limited (MPL).*
4.	Petition No., or Application No, if any	Petition No._____/GT/2025
5.	Details of generation assets	
	(a) Generating station/units	2
	(b) Capacity in MW	(2 * 525) MW
	(c) Date of commercial operation	U#1-01.09.2011, U#2 – 27.07.2012
	(d) Period for which fee paid	FY 2020-21 to FY 2024-25
	(e) Amount of fee paid	Rs.46,20,000/- (Annually)
	(f) Surcharge, if any	NA
6.	Details of transmission assets	NA

MAITHON POWER LIMITED

	(a) Transmission line and sub-stations (b) Date of commercial operation (c) Period for which fee paid (d) Amount of fee paid (e) Surcharge, if any	
7.	Fee paid for Adoption of tariff for (a) Generation asset (b) Transmission asset	NA
8.	Application fee for licence (a) Trading licence (b) Transmission licence (c) Period for which paid (d) Amount of fee paid	NA
9.	Fees paid for Miscellaneous Petition	NA
10.	Fees paid for Interlocutory Application	NA
11.	Fees paid for Regulatory Compliance Petition	NA
12.	Fees paid for Review Application	NA
13.	Licence fees for inter-State Trading (a) Category (b) Period (c) Amount of fee paid (d) Surcharge, if any	NA
14.	Licence fees for inter-State Transmission (a) Expected/Actual transmission charge (b) Period	NA



	(c) Amount of fee calculated as a percentage of transmission charge. (d) Surcharge, if any	
15.	Annual Registration Charge for Power Exchange/OTC Platform (a) Period (b) Amount of turnover (c) Fee paid (d) Surcharge, if any	
16.	Details of fee remitted (a) Transaction id, Reference No./ Payment id (b) Date of remittance (c) Amount remitted	SBINR12020042000080742 (FY-20-21) dated 20.04.2020 (Amount 46,20,000) SBINR12021041520922220 (FY-21-22) dated 15.04.2021 (Amount 46,20,000) 15007280681CHJ1548082 (FY-22-23) dated 12.04.2022 (Amount 46,20,000) SBINR12023041744078008 (FY-23-24) dated 17.04.2023 (Amount 46,20,000) SBINR12024041917120868 (FY-24-25) dated 20.04.2024 (Amount 46,20,000)
Note: While Sl.No.1 to Sl. No.3 and Sl. No.16 are compulsory, the rest may be filled up as applicable		
Signature of the authorized signatory with date 26/2/202		



DTDC Express Limited
Regd.Office: No-3,Victoria Road
Bengaluru - 560047

ORIGIN | DEST.
POUCH NO. | DATE 26/11/25

Non Negotiable Consignment Note / Subject to Bengaluru Jurisdiction.

The consignment note is not a tax invoice. A tax invoice will be made available by DTDC or it's channel partner as the case may be, upon request.

Download MyDTDC app — Available at select cities & pin codes

1 Sender's (Consignor) Name: Stcv | Ph:
Company Name & Address:
City: | State: | PIN Code:
Sender's GSTIN*: *Where Applicable

2 Recipient's (Consignee) Name: TP DDL | Ph:
Company Name & Address:
City: Delhi | State: | PIN Code: 110009
Recipient's GSTIN*: *Where Applicable

3 Nature of consignment (✓) Dox [ ] Non-Dox [ ] | Total Num Pcs:
DIM 1: L___ cm X B___ cm X H___ cm X___ Pcs | Actual Wt.: kg
DIM 2: L___ cm X B___ cm X H___ cm X___ Pcs | Volumetric Wt.: kg
DIM 3: L___ cm X B___ cm X H___ cm X___ Pcs | Chargeable Wt.: kg

4 Description of Content | Total Value of consignment for carriage / E-Way bill ₹

5 Paper Work Enclosures

6 Type of consignment (✓) Commercial [ ] Non Commercial [ ]
7 Value Added Services SECURE PACK 7.1 | CN Expiry Date

8 Mode (✓) Surface [ ] Air Cargo [ ] Express [ ]

Consignment Number: D89999628

10 I/We declare that this consignment does not contain personal mail, cash, jewellery, contraband, illegal drugs, any prohibited items and commodities which can cause safety hazards while transporting

Sender's Signature & Seal

Date: Time: AM/PM

I have read and understood terms & conditions printed overleaf of this consignment note and I agree to the same.

9 Charges | Amount (₹)
a) Tariff (incl. of FSC+GST)
b) Value Added Service Charges
c) Risk Surcharge
d) Total amount (a+b+c)

Above charges are inclusive of GST & other taxes if applicable

Mode of Payment: Cash [ ] Card [ ] Wallet [ ]

11 Booking Branch / Franchisee Code

Courier Signature

12 Risk Surcharge | Owner [ ] | Carrier [ ]

13 Receiver's Name:
Relationship:
Company Stamp & Signature:
Ph No.: Date: / / Time ____ AM/PM

http://www.dtdc.in || customersupport@dtdc.com || +91-9606 911 811 | POD COPY | Jan. 2024

Item : Non Dox 'D'series Cnote sheet with - 8.5 x 6 x 3 | Vendor Code : 107445

Download MyDTDC app — Available at select cities & pin codes

D89999628



DTDC Express Limited
Regd.Office: No-3,Victoria Road
Bengaluru - 560047

ORIGIN | DEST.
POUCH NO. | DATE 26/Mar

Non Negotiable Consignment Note / Subject to Bengaluru Jurisdiction.

The consignment note is not a tax invoice. A tax invoice will be made available by DTDC or it's channel partner as the case may be, upon request.

1 Sender's (Consignor) Name: Star Ph:
Company Name & Address:
City: State: PIN Code:
Sender's GSTIN*: *Where Applicable

2 Recipient's (Consignee) Name: Damodar Valley Corporation Ph:
Company Name & Address:
City: Kolkata - 700054 State: PIN Code:
Recipient's GSTIN*: *Where Applicable

3 Nature of consignment (✓) Dox ☐ Non-Dox ☐ Total Num Pcs:
DIM 1: L____cm X B____cm X H____cm X____Pcs Actual Wt.: kg
DIM 2: L____cm X B____cm X H____cm X____Pcs Volumetric Wt.: kg
DIM 3: L____cm X B____cm X H____cm X____Pcs Chargeable Wt.: kg

4 Description of Content | Total Value of consignment for carriage / E-Way bill ₹

5 Paper Work Enclosures

6 Type of consignment (✓) Commercial ☐ Non Commercial ☐

7 Value Added Services SECURE PACK 7.1 | CN Expiry Date

8 Mode (✓) Surface ☐ Air Cargo ☐ Express ☐

Consignment Number: D89999629

10 I/We declare that this consignment does not contain personal mail, cash, jewellery, contraband, illegal drugs, any prohibited items and commodities which can cause safety hazards while transporting

9 Charges	Amount (₹)
a) Tariff (incl. of FSC+GST)	
b) Value Added Service Charges	
c) Risk Surcharge	
d) Total amount (a+b+c)	

Above charges are inclusive of GST & other taxes if applicable

Mode of Payment: Cash ☐ Card ☐ Wallet ☐

Sender's Signature & Seal

Date: Time: AM/PM

I have read and understood terms & conditions printed overleaf of this consignment note and I agree to the same.

11 Booking Branch / Franchisee Code

Courier Signature

12 Risk Surcharge | Owner ☐ | Carrier ☐

13 Receiver's Name:
Relationship:
Company Stamp & Signature:
Ph No.: Date: / / Time ____ AM/PM

http://www.dtdc.in || customersupport@dtdc.com || +91-9606 911 811 POD COPY Jan. 2024

Download MyDTDC app
GET IT ON Google Play
Available at select cities & pin codes

D89999629

Download MyDTDC app
Download on the App Store
Available at select cities & pin codes

Vendor Code : 107445

Item : Non Dox 'D'series Cnote sheet with - 8.5 x 6 x 3

2032



DTDC Express Limited
Regd.Office: No-3,Victoria Road
Bengaluru - 560047

ORIGIN		DEST.	
POUCH NO.		DATE	26/11/25

No : Negotiable Consignment Note / Subject to Bengaluru Jurisdiction.

The consignment note is not a tax invoice. A tax invoice will be made available by DTDC or it's channel partner as the case may be, upon request.

1
Sender's (Consignor) Name: Ph:
Company Name & Address: SKV
City: State: PIN Code:
Sender's GSTIN*: *Where Applicable

2
Recipient's (Consignee) Name: WBSEDCL Ph:
Company Name & Address:
City: Kolkata - 700091 State: PIN Code:
Recipient's GSTIN*: *Where Applicable

3 Nature of consignment (✓) Dox ☐ Non-Dox ☐ | Total Num Pcs:
DIM 1: L ___ cm X B ___ cm X H ___ cm X ___ Pcs | Actual Wt.: kg
DIM 2: L ___ cm X B ___ cm X H ___ cm X ___ Pcs | Volumetric Wt.: kg
DIM 3: L ___ cm X B ___ cm X H ___ cm X ___ Pcs | Chargeable Wt.: kg

4 Description of Content | Total Value of consignment for carriage / E-Way bill ₹

5 Paper Work Enclosures

6 Type of consignment (✓) Commercial ☐ Non Commercial ☐

7 Value Added Services SECURE PACK 7.1 | CN Expiry Date

8 Mode (✓) Surface ☐ Air Cargo ☐ Express ☐

Consignment Number: D89999630

10 I/We declare that this consignment does not contain personal mail, cash, jewellery, contraband, illegal drugs, any prohibited items and commodities which can cause safety hazards while transporting

9

Charges	Amount (₹)
a) Tariff (incl. of FSC+GST)	
b) Value Added Service Charges	
c) Risk Surcharge	
d) Total amount (a+b+c)	

Above charges are inclusive of GST & other taxes if applicable

Mode of Payment: Cash ☐ Card ☐ Wallet ☐

Sender's Signature & Seal

Date: Time: AM/PM

I have read and understood terms & conditions printed overleaf of this consignment note and I agree to the same.

11 Booking Branch / Franchisee Code

Courier Signature

12 Risk Surcharge | Owner ☐ | Carrier ☐

13 Receiver's Name:
Relationship:
Company Stamp & Signature:
Ph No.: Date: / / Time ___ AM/PM

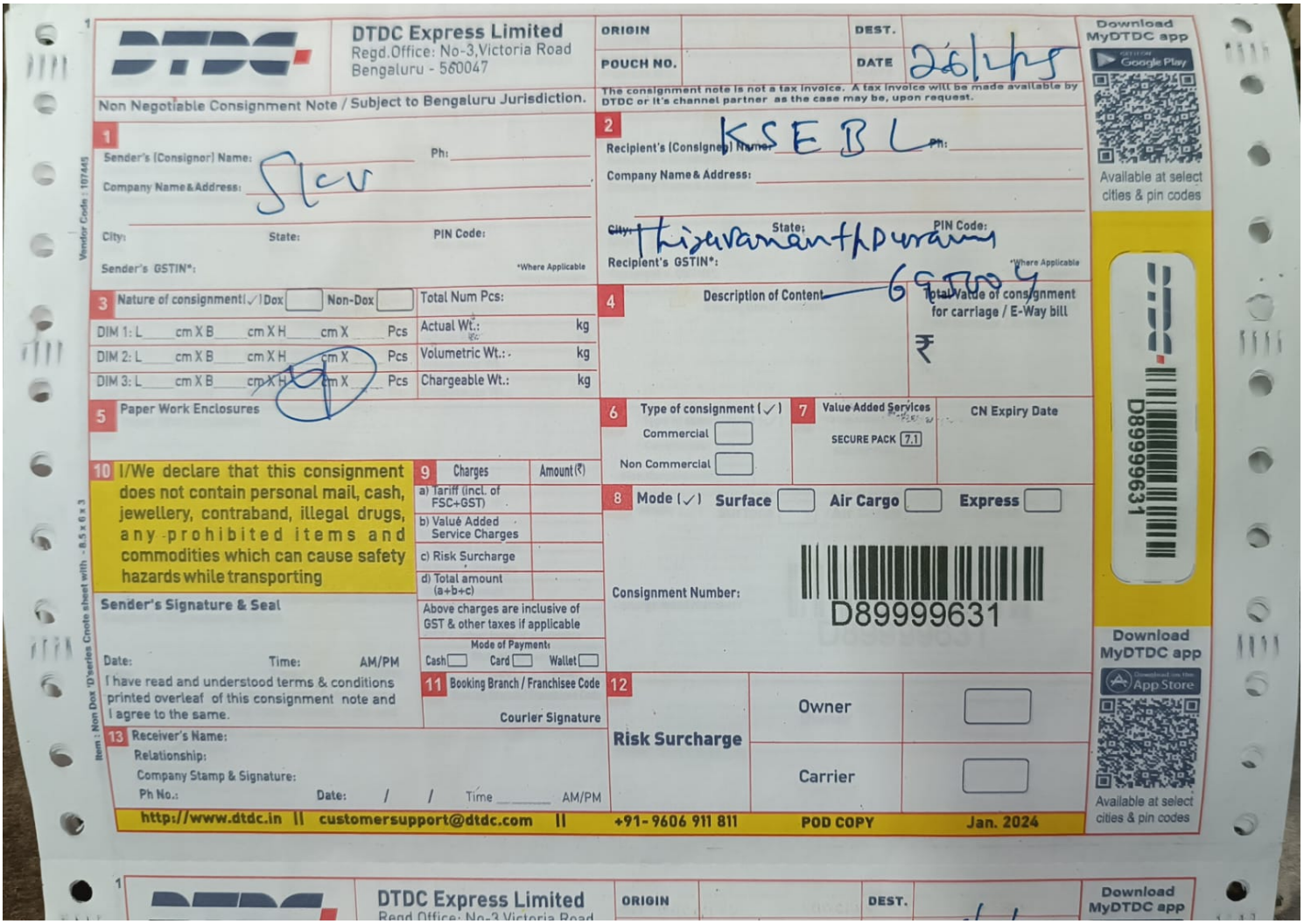
http://www.dtdc.in || customersupport@dtdc.com || +91-9606 911 811 POD COPY Jan. 2024

Download MyDTDC app
Google Play
Available at select cities & pin codes

D89999630

Download MyDTDC app
App Store
Available at select cities & pin codes

Vendor Code : 107445
Item : Non Dox 'D'series Crote sheet with - 8.5 x 6 x 3



DTDC Express Limited
Regd.Office: No-3,Victoria Road
Bengaluru - 560047

ORIGIN | DEST.
POUCH NO. | DATE 26/4/25

Non Negotiable Consignment Note / Subject to Bengaluru Jurisdiction.

The consignment note is not a tax invoice. A tax invoice will be made available by DTDC or it's channel partner as the case may be, upon request.

Download MyDTDC app — Available at select cities & pin codes

1 Sender's (Consignor) Name: Slcv | Ph:
Company Name & Address:
City: | State: | PIN Code:
Sender's GSTIN*: *Where Applicable

2 Recipient's (Consignee) Name: KSEBL | Ph:
Company Name & Address:
City: Thiruvananthapuram | State: | PIN Code:
Recipient's GSTIN*: *Where Applicable

3 Nature of consignment (✓) Dox ☐ Non-Dox ☐ | Total Num Pcs:
DIM 1: L ___ cm X B ___ cm X H ___ cm X ___ Pcs | Actual Wt.: kg
DIM 2: L ___ cm X B ___ cm X H ___ cm X ___ Pcs | Volumetric Wt.: kg
DIM 3: L ___ cm X B ___ cm X H ___ cm X ___ Pcs | Chargeable Wt.: kg

4 Description of Content: 6 GI Pipe | Total Value of consignment for carriage / E-Way bill: ₹

5 Paper Work Enclosures

6 Type of consignment (✓) Commercial ☐ Non Commercial ☐

7 Value Added Services: SECURE PACK 7.1 | CN Expiry Date

8 Mode (✓) Surface ☐ Air Cargo ☐ Express ☐

Consignment Number: D89999631

10 I/We declare that this consignment does not contain personal mail, cash, jewellery, contraband, illegal drugs, any prohibited items and commodities which can cause safety hazards while transporting

Sender's Signature & Seal

Date: Time: AM/PM

I have read and understood terms & conditions printed overleaf of this consignment note and I agree to the same.

9 Charges	Amount (₹)
a) Tariff (incl. of FSC+GST)	
b) Value Added Service Charges	
c) Risk Surcharge	
d) Total amount (a+b+c)	

Above charges are inclusive of GST & other taxes if applicable

Mode of Payment: Cash ☐ Card ☐ Wallet ☐

11 Booking Branch / Franchisee Code

Courier Signature

12 Risk Surcharge | Owner ☐ | Carrier ☐

13 Receiver's Name:
Relationship:
Company Stamp & Signature:
Ph No.: Date: / / Time ___ AM/PM

http://www.dtdc.in || customersupport@dtdc.com || +91-9606 911 811 | POD COPY | Jan. 2024

Download MyDTDC app — Available at select cities & pin codes

Vendor Code : 107445 | Item : Non Dox 'D'series Create sheet with : 8.5 x 6 x 3

1 DTDC Express Limited Regd.Office: No-3,Victoria Road | ORIGIN | DEST. | Download MyDTDC app



DTDC Express Limited
Regd.Office: No-3,Victoria Road
Bengaluru - 560047

ORIGIN | DEST.
POUCH NO. | DATE 26/12/25

No : Negotiable Consignment Note / Subject to Bengaluru Jurisdiction.

The consignment note is not a tax invoice. A tax invoice will be made available by DTDC or it's channel partner as the case may be, upon request.

Download MyDTDC app — Available at select cities & pin codes

1 Sender's (Consignor) Name: Ph:
Company Name & Address: Slcv
City: State: PIN Code:
Sender's GSTIN*: *Where Applicable

2 Recipient's (Consignee) Name: TPTCL Ph:
Company Name & Address:
City: NOIDA State: PIN Code: 201301
Recipient's GSTIN*: *Where Applicable

3 Nature of consignment (✓) Dox ☐ Non-Dox ☐ | Total Num Pcs:
DIM 1: L ___ cm X B ___ cm X H ___ cm X ___ Pcs | Actual Wt.: kg
DIM 2: L ___ cm X B ___ cm X H ___ cm X ___ Pcs | Volumetric Wt.: kg
DIM 3: L ___ cm X B ___ cm X H ___ cm X ___ Pcs | Chargeable Wt.: kg

4 Description of Content | Total Value of consignment for carriage / E-Way bill ₹

5 Paper Work Enclosures

6 Type of consignment (✓) Commercial ☐ Non Commercial ☐

7 Value Added Services SECURE PACK 7.1

CN Expiry Date

8 Mode (✓) Surface ☐ Air Cargo ☐ Express ☐

Consignment Number: D89999632

10 I/We declare that this consignment does not contain personal mail, cash, jewellery, contraband, illegal drugs, any prohibited items and commodities which can cause safety hazards while transporting

Sender's Signature & Seal

Date: Time: AM/PM

I have read and understood terms & conditions printed overleaf of this consignment note and I agree to the same.

9 Charges | Amount (₹)
a) Tariff (incl. of FSC+GST)
b) Value Added Service Charges
c) Risk Surcharge
d) Total amount (a+b+c)

Above charges are inclusive of GST & other taxes if applicable

Mode of Payment: Cash ☐ Card ☐ Wallet ☐

11 Booking Branch / Franchisee Code

Courier Signature

12 Risk Surcharge | Owner ☐ | Carrier ☐

13 Receiver's Name:
Relationship:
Company Stamp & Signature:
Ph No.: Date: / / Time ___ AM/PM

http://www.dtdc.in || customersupport@dtdc.com || +91-9606 911 811 POD COPY Jan. 2024

Download MyDTDC app — Available at select cities & pin codes

Vendor Code : 107448
Item : Non Dox 'D'series Cnote sheet with - 8.5 x 6 x 3