



महाराष्ट्र विद्युत नियामक आयोग Maharashtra Electricity Regulatory Commission



Ref. No. MERC/FAC/2025-26/ 0837

Date: 12 November, 2025

To,
The Managing Director
Tata Power Company Ltd.
Dharavi Receiving Station
New Shalimar Industrial Estate
Matunga, Mumbai – 400 019

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of TPC-D for the month of July, 2024.

Reference: 1. TPC-D's FAC submission dated 19 August, 2024 for prior approval of FAC for the month of July, 2024.
2. Data gaps communicated to TPC-D vide email dated 22 August, 2024.
3. TPC-D's response to data gaps on 06 September, 2024.

Sir,

Upon vetting the FAC calculations for the month of July, 2024 as mentioned in the above reference, the Commission has accorded approval for FAC amount of Rs. (3.50) Crore. As FY 2024-25 is already over and Provisional Truing-up of FY 2024-25 has also been done by the Commission in the recent MYT Order dated 28 March, 2025, the revised power purchase cost resulting in FAC is already adjusted in the said MYT Order. Accordingly, the FAC chargeable to consumers is as shown in the table below:

Month	FAC Amount (Rs. Crore)
July, 2024	0

*FAC already allowed to be recovered as approved in FAC approval dated 30.08.2024 for the period from September 2024 to November 2024



Yours faithfully,

(Dr. Prafulla Varhade)
Executive Director, MERC

Enclosed: Annexure A: Detailed Vetting Report for the month of July, 2024.

Page 1 of 22

**PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF
JULY, 2024**

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of TPC-D for the month of July, 2024.

Reference: TPC-D's FAC submission dated 19 August, 2024 and 06 September, 2024 for prior approval of FAC for the month of July, 2024.

1. FAC submission by TPC-D:

TPC-D has submitted FAC submissions for the month of July, 2024 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by TPC-D against the data gaps issued, the Commission has accorded approval for FAC Amount of Rs. (3.50) Crore for the month of July 2024. The approved FAC amount is adjusted at the time of Provisional Truing-up of FY 2024-25 in the MYT Order dated 28 March, 2025.

2. Background

2.1 On 06 March, 2024, the Commission has issued Tariff Order for TPC-D in Case No. 237 of 2023 for Truing-up of FY 2022-24, provisional Truing-up for FY 2023-24, and Aggregate Revenue Requirement and Tariff for FY 2024-25. Revised Tariff has been made applicable from 1 April, 2024.

2.2 In the Tariff Order, the Commission has stipulated methodology of levying FAC as follows:

“6.12.4 Stabilisation (buffer) for fuel cost adjustment

.....

Therefore, using its powers for Removing Difficulty under Regulation 106 of the MYT Regulations, 2019, the Commission is making following changes in the FAC mechanism specified under Regulation 10 of the MYT Regulations, 2019:

6.12.5 Distribution Licensee shall undertake computation of monthly FAC as per Regulation 10 of the MYT Regulations, 2019 except for treatment to be given to negative FAC as follows:



- *Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost;*
- *Such carried forward negative FAC shall be adjusted against FAC amount for the next month and balance negative amount shall be carried forward to subsequent month with holding cost;*
- *Such carry forward of negative FAC shall be continued till the accumulated negative FAC becomes 20% of monthly tariff revenue approved by the Commission in Tariff Order. In case of TPC-D, such limit shall be Rs. 50 crore. Any accumulated amount above such limit shall be refunded to consumers through FAC mechanism;*
- *In case such FAC Fund is yet to be generated or such generated fund is not sufficient to adjust against FAC computed for given month, then Distribution Licensee can levy such amount to the consumers through FAC mechanism.*

6.12.6 In order to maintain transparency in management and use of such FAC Fund, the Distribution Licensee shall maintain monthly account of such FAC fund and upload it on its website for information of stakeholders.

6.12.7 As the Commission has continued concept of FAC fund as stated above to stabilize the increase in fuel prices and power purchase costs, the Commission has modified the FAC mechanism such that the Distribution Licensees shall submit the FAC computations on a monthly basis for prior approval, irrespective of whether FAC is chargeable in a month or whether some amount is accruing to the Fund on account of negative FAC.

6.12.8 The details of the FAC as per the Regulations, shall be submitted by the 15th of the every month prior to the month in which the FAC is proposed to be levied and the Commission will endeavour to decide on the same within 10 days so that the same can be levied from the 1st of the subsequent month.”

- 2.3 Vide its letter dated 20 April, 2020, the Commission communicated the excel formats along with the checklist to file FAC submissions for prior approval to all Distribution Licensees. The Commission also directed all Distribution Licensees to file FAC submissions by 15th of every month prior to the month for which the FAC is proposed to be levied for prior approval.
- 2.4 Accordingly, TPC-D has filed FAC submissions for the month of July, 2024 for prior approval. The Commission has scrutinized the submissions provided by TPC-D and has also verified the fuel and power purchase bills provided along with its submissions.

3. Energy Sales of the Licensee

- 3.1 The net energy sales within licence area as submitted by TPC-D in the FAC submission and as approved by the Commission are as shown in the table below:



Consumer Category	Approved by the Commission* (MU)	Monthly Approved* (MU)	Actual Sales*
	(I)	(II=I/12)	July 2024 (MU)
	(I)	(II=I/12)	(III)
EHV – Industry	761.44	63.45	66.91
HT I - Industry	1113.23	92.77	91.79
EHV- Commercial	105.50	8.79	7.40
HT II - Commercial	408.07	34.01	34.50
HT III - Group Housing Society (Residential)	49.59	4.13	3.53
HT IV – Railways/Metro/Monorail			
22/33 kV	146.70	12.22	10.58
HT V - Public Services			
a) Govt. Edu. Inst. & Hospitals	19.56	1.63	2.16
b) Others	124.80	10.40	12.92
HT VIII – EV Charging Stations	17.31	1.44	1.17
LT I (A)- Residential (BPL)			
LT I (B)- Residential	2218.43	184.87	190.35
LT II - LT Commercial			
(A)- u pto 20 kW	201.08	16.76	16.68
(B) >20 kW and <50 kW	106.91	8.91	8.58
(C) - 50 kW	410.40	34.20	32.96
LT III (A) - Industry < 20 kW	37.50	3.12	2.96
LT III (B) - Industry > 20 kW	242.86	20.24	18.71
LT IV - Public Services			
a) Govt. Edu. Inst. & Hospitals	4.76	0.40	0.58
b) Others	36.25	3.02	2.83
LT V - EV Charging Stations	12.19	1.02	0.65
Total	6016.59	501.38	505.25

* - Approved and Actual Sales includes the direct sales and changeover sales of TPC-D

*- In Case of TPC-D, the sales is approved on annual basis. Monthly approved sales derived based on approved annual sales for comparison purpose.

3.2 It is observed that the total sales for July, 2024 is 505.25 MU which is 0.77% higher than approved monthly sales of 501.38 MU. With respect to overall consumption of TPC-D, HT category consumption of 230.95 MU is higher by 0.92% as compared to approved monthly HT energy sales of 228.85 MU, and the LT sales of 274.30 MU are higher by 0.65% than approved sales of 272.53 MU. The overall sales are higher due to higher sales across EHV (Industry), HT V (Public Services) - a) Govt. Edu. Inst. & Hospitals and b. Others, LT I (B) – Residential, LT IV (Public Services) - a) Govt. Edu. Inst. & Hospitals than approved by the Commission in the Tariff Order.

3.3 The comparison of estimated sales and sales based on actual meter reading for the month of July 2024 is as given below:



Particulars	Actual – MU	Estimated - MU	Total	% sales based on Estimated Reading
July-24	504.53	0.72	505.25	0.15%

It is observed that the assessed sales percentage is marginal at 0.15% in July, 24.

3.4 Further, comparison of sales for April, 2024 to July, 2024 as compared to last year is as shown below:

Particulars	LT - Residential (MU)	LT Others (MU)	HT (MU)	Total (MU)
April-23	174.77	78.31	229.52	482.59
April-24	195.19	84.82	246.29	526.29
May-23	202.43	85.58	239.67	527.69
May-24	221.80	90.76	241.33	553.88
Jun-23	232.97	86.17	224.32	543.46
Jun-24	236.27	88.55	235.46	560.28
Jul-23	181.25	77.32	236.29	494.86
Jul-24	190.35	83.95	230.95	505.25
April 23 – July 23	791.42	327.38	929.80	2048.60
April 24 - July 24	843.60	348.08	954.03	2145.71

The Commission observes that overall sales in July, 2024 are higher than July, 2023 mainly due to higher sales for LT Category.

4. Power Purchase Details

4.1 The Commission has approved following sources in the Tariff Order for power purchase by TPC-D.

- Tata Power Company Ltd. (TPC-G)
- Renewable Energy (Solar and Non-Solar)
- Short Term Sources (Bilateral and Power Exchange).

In addition to the aforesaid, there may be some variation in real time which will be settled through Deviation Settlement Mechanism approved by the Commission.

4.2 Summary of Power Purchase for TPC-D is as follows:

Sr. No.	Particular	Compliance
1	Sources of approved Power Purchase	TPC-D has purchased power from approved sources.
2	Merit Order Dispatch	TPC-D has followed merit order for scheduling of power and preference was given to cheapest power.
3	Fuel Utilization	TPC-G has entered into coal contract for 2 MT based on the



Sr. No.	Particular	Compliance																								
	Plan	HBA index for the period 1 August, 2022 to 31 July, 2024. TPC-G has also contracted to procure imported coal from multiple source at price linked with ICI index till September 2024. Further, APM Gas Contract with GAIL has been for the period 7 July, 2021 to 6 July, 2026.																								
4	Deviation Quantum	TPC-D has underdrawn 6.68 MU as compared to the Schedule.																								
5	Sale of Surplus Power	TPC-D has sold 31.00 MU at Rs. 5.64/kWh thereby benefitting its consumers. Also, TPC-D has also returned banked power to the tune of 14.25 MU, which was supplied by BSES Yamuna Power Limited in October 2023. The overall surplus power sold by TPC-D including banking is 45.25 MU at Rs. 3.86/kWh.																								
6	Power Purchase	Actual Power Purchase is 524.66 MU as against approved quantum of 520.97 MU.																								
7	Source wise Power Purchase	<table border="1"> <thead> <tr> <th>Source Name</th> <th>Approved (MU)</th> <th>Actual (MU)</th> <th>Proportion of each Source in Actual Purchase</th> </tr> </thead> <tbody> <tr> <td>TPC-G</td> <td>241.31</td> <td>299.85</td> <td>57.15%</td> </tr> <tr> <td>RE Sources</td> <td>120.95</td> <td>236.97</td> <td>45.17%</td> </tr> <tr> <td>Short Term</td> <td>158.71</td> <td>39.77</td> <td>7.58%</td> </tr> <tr> <td>Deviation & Sale</td> <td>-</td> <td>(51.93)</td> <td>-9.90%</td> </tr> <tr> <td>Total</td> <td>520.97</td> <td>524.66</td> <td>100%</td> </tr> </tbody> </table>	Source Name	Approved (MU)	Actual (MU)	Proportion of each Source in Actual Purchase	TPC-G	241.31	299.85	57.15%	RE Sources	120.95	236.97	45.17%	Short Term	158.71	39.77	7.58%	Deviation & Sale	-	(51.93)	-9.90%	Total	520.97	524.66	100%
Source Name	Approved (MU)	Actual (MU)	Proportion of each Source in Actual Purchase																							
TPC-G	241.31	299.85	57.15%																							
RE Sources	120.95	236.97	45.17%																							
Short Term	158.71	39.77	7.58%																							
Deviation & Sale	-	(51.93)	-9.90%																							
Total	520.97	524.66	100%																							
8	Power Purchase: Section 62 of Electricity Act, 2003	As part of verification of fixed cost claimed by TPC-D, the same has been verified from the invoice raised by TPC-G. As part of verification of energy charges claimed by TPC-D, verification of operational parameters, fuel cost, GCV etc. vis-à-vis the MTR Order/Tariff Regulations is carried out.																								
9	RE Purchase	Solar Cost and Solar MU verified as per Invoice. Non-Solar MU considered as submitted by TPC-D based on the meter reading data/scheduled energy (bilateral purchase) with a direction to submit invoice in next FAC submission.																								
10	Short-Term Power Purchase	Short-term power purchase by TPC-D has been verified from the invoices of July, 2024 submitted by TPC-D.																								

4.3 TPC-D has purchased power of 524.66 MU as against approved 520.97 MU from the sources approved by the Commission.

The following table show the variation in average power purchase cost (Rs/kWh) for the month of July, 2024 submitted by TPC-D as compared to average power purchase cost approved in Tariff Order:



Particulars	-Tariff Order Dated 06.03.2024			Actual for July, 2024 as submitted by TPC-D		
	FY 2024-25 Approved					
	Net Purchase – Monthly*	Cost – Monthly	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
TPC-G	241.31	149.15	6.18	299.85	177.87	5.93
RE Sources	120.95	38.37	3.17	236.97	78.63	3.32
Short Term	158.71	80.43	5.07	39.77	26.56	6.68
Deviation Quantum and Cost	-	-	-	(6.68)	0.75	(1.12)
Sale of Power	-	-	-	(45.25)	(17.47)	3.86
Total	520.97	267.95	5.14	524.66	266.34	5.08

* Although, power purchase quantum is not approved on monthly basis, the monthly quantum is arrived at based on yearly approved quantum and shown for comparison purpose only

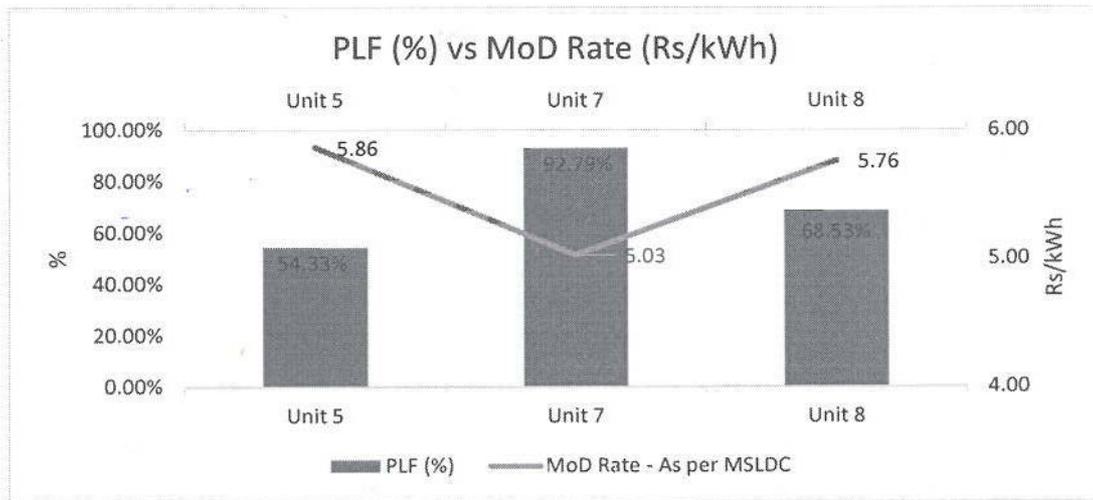
5. Power Purchase Cost

- 5.1 The Commission has sought detailed bills/invoices for all of the power purchase sources in order to verify the claim of TPC-D with regards to average power purchase cost for the month of July, 2024. The Commission has verified the Net Purchase, Variable Cost, Fixed Charge and the Power Purchase Cost from the relevant bills/invoices received for all purchasing sources. TPC-D has purchased power from approved sources as per the Tariff Order.

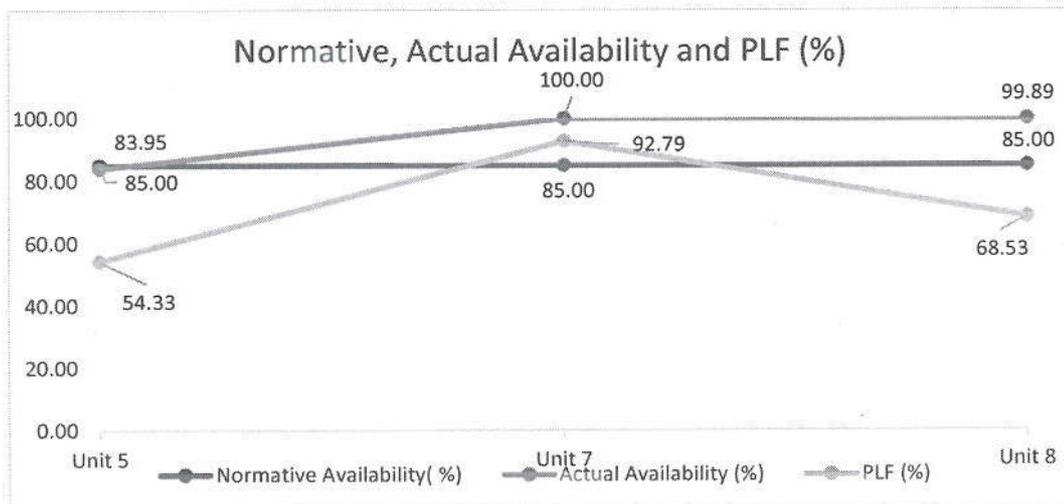
TPC-G

- 5.2 TPC-G Units 7 and 8 have declared availability of more than 90%, which is higher than the normative availability of 85%. However, the availability of Unit 5 was lower at 83.95% due to forced outage for attending the Turbine Electrohydraulic Controller 'EHC' fault. The Unit 5 was out of service from 28th July, 2024 (01:34 Hrs) and taken online on 4th August 2024. Further, the PLF of Unit 5 and 8 are lower i.e., 54.33% and 68.53%, respectively. In response to data gaps raised by the Commission for lower PLF of Unit 5 was lower due to forced outage taken for attending the EHC fault. Also, TPC submitted that the PLF of Unit 5 and 8 are lower due to lower requisition by beneficiaries. The graph showing the comparison of Variable Cost in MoD Stack and monthly PLF for TPC-G thermal/gas units is given below:





5.3 The graphical comparison of normative availability and actual availability for the month of July, 2024 is as given below:



The entire monthly fixed cost was payable in line with MYT Regulations, 2019 as the cumulative plant availability of Unit 5, 7 and 8 are higher than the normative availability of 85%.

5.4 The Availability of TPC-G units as compared to last year is as given below:

TPC-G Units	Availability – July 2024	Availability – July 2023
Unit 5	83.95%	70.14%
Unit 7	100.00%	100.00%
Unit 8	99.89%	99.44%

5.5 The Commission has observed that TPC-D has purchased 299.85 MU from TPC-G as against monthly approved quantum of 241.31 MU. TPC-D has purchased 75.56 MU of hydro power which is higher than the approved quantum of 59.74 MU, whereas balance quantum of 224.29 MU is purchased from TPC-G Unit 5, 7 and 8 as against approved quantum of 181.57 MU. Further, the Commission has verified that the



payment of Fixed Charges for all the Thermal/Gas Units as well as Hydro Units have been worked out based on the cumulative availability as per the provisions of MYT Regulations, 2019.

- 5.6 The Commission in its Order dated 31 March, 2023 in Case No 221 of 2022 in respect of Fuel Supply Arrangement (FSAs) of TPC-G as held as follows:

“8.4.2 The Commission notes that the projected Availability of all thermal generating Units and hydro generating stations are greater than the normative Availability as specified in the MYT Regulations, 2019. The Commission sought the details of Fuel Supply Agreements (FSAs) in place for achieving the projected Availability for thermal Units. In reply, TPC-G submitted that the current coal supply agreement is valid upto 31 July, 2026 and the current gas supply agreement is valid upto 31 July, 2026. TPC-G further, submitted that the new agreements would be executed subject to the outcome of the finalisation of new PPAs.

8.4.3 The Commission sought the details of measures for fulfilling the shortfall in fuel quantum, if any, from the current FSAs. In reply, TPC-G submitted that the current contracts are adequate for meeting the projected Availability of its thermal Units. TPC-G submitted that alternate arrangements have been made based on the type of fuel in case of any non-availability under current contracts due to uncontrollable factors from the existing supplier side. Coal would be arranged through the short-term spot contracts/sourcing distress shipments as and when available on competitive basis from Open Market on need basis. Gas would be arranged through the purchase of RLNG under auction purchase/spot contract, if required. TPC-G submitted that the alternate arrangements would be pursued after due consultation with the beneficiaries as per the prevailing Regulations.

.....
8.8.9 The Commission sought the current status of imported coal supply agreement for FY 2023-24 and FY 2024-25. The Commission also sought the basis and detailed rationale for reduction in imported coal prices for FY 2023-24 and FY 2024-25 along with supporting documents. In reply, TPC-G submitted that the coal contracts for the period beyond July, 2024, if required, would be executed through tendering process depending on the market scenario. TPC-G submitted that it has procured coal shipments for Q1 of FY 2023-24 on ICI-3/ICI-4 linked prices. TPC-G submitted the copies of coal contracts.

8.8.10 TPC-G further submitted that it has planned to procure coal at the most optimum market price to optimise the cost of generation. TPC-G is closely monitoring the indices on day-to-day basis for procuring the most economic sourcing of coal. Further, the trend of ICI-3/ICI-4 during the period from November 2022 to February 2023 shows a downward trend.

.....
8.8.15 The Commission is aware that in FY 2021-22 and FY 2022-23 there has been a very large volatility in the prices of imported coal. The volatility and the increase in the price directly affect the end tariff of the consumers. The Imported coal needs to be



procured based on international index. The Commission has analysed the month wise ICI-3 and ICI-4 index imported coal price for FY 2022-23 i.e., from April 2022 to March 2023. Based on the analysis and the data available in the Public Domain there looks to be a possibility of softening of imported coal prices. The same is indicated by the imported ICI index as ICI 4 imported coal price for the month of March 2023 has reduced to 72.82 \$/T in March 2023 from 91.39 \$/T in January 2022. (Source www.argusmedia.com). Further, the imported coal price is linked to GCV of coal and hence the imported coal pricing cannot be taken in isolation to GCV of imported coal.

8.8.16 As discussed earlier, the average imported coal price for the latest three months from January 2022 to January 2023 as per the provisions of MYT Regulations, 2019 works out to be around Rs 14072/MT. However, based on the analysis of the ICI 4 index for the past 9 months, the extreme volatility in the imported coal market and in the interest of the consumers, the Commission by exercising its Power to Remove Difficulties under Regulation 106 of MYT Regulations, 2019 has considered the imported coal price of Rs 12500/MT for approving the energy charges for FY 2023-24 and FY 2024-25. This approach of considering imported coal price in deviation to approach as per MYT Regulations, 2019 is in very specific/isolated condition due to volatility of imported coal prices and hence cannot be taken as precedence.

8.8.17 The Commission in MYT Order has considered escalation of 3% in fuel prices for approving the Energy Charges for ensuing years. In case of TPC-G, the major fuel source is imported coal and as submitted by TPC-G the imported coal prices. As discussed earlier, based on analysis of ICI.4 imported coal prices for the period April 2022 to March 2023, there appears to be a possibility of softening of coal prices. Hence, the Commission, for the purpose of this Order, has not considered any escalation in fuel prices for FY 2023-24 and FY 2024-25.”

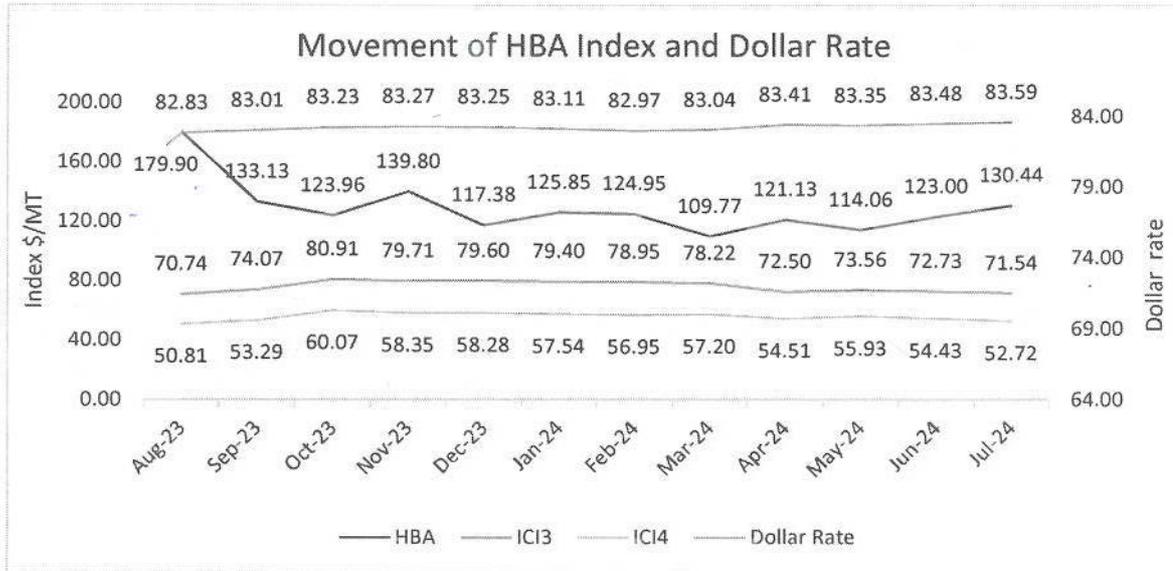
- 5.7 The previous coal purchase contract of TPC-G, which was for 2.2 Million MT and valid for two years from August 1, 2020, to July 2022, has expired. It has been further extended for an additional two years through competitive bidding, based on the HBA index, for the period from August 1, 2022, to July 31, 2024. TPC stated that, if extension required post expiry of the contract, it would be executed through tendering process depending on the market scenario and outcome of finalisation of new PPA. The Commission notes that the purchase of coal has been from the contracts entered into by TPC-G. TPC further stated that, in case of any non-availability under current contracts due to uncontrollable factors from the existing supplier side. TPC-G would arrange the coal through open market on competitive basis or short-term spot contract. TPC-G has also signed contract with GAIL for supply of APM Gas for the period 7 July, 2021 to 6 July, 2026.
- 5.8 In MTR Petition, TPC-G submitted that in order to reduce the cost of generation, it is exploring ICI index coal which has less value than HBA index. The Commission in its MTR order dated 31 March, 2023 in Case No. 221 of 2022, held the following regarding the procurement of ICI index linked coal by TPC-G:



“8.8.14 Based on the actual imported coal price details submitted by TPC-G for the months of October 2022 to January 2023, the Commission finds that the price of imported coal for the said period is lower than that for July-September, 2022. Further, the Commission observes that TPC-G is endeavouring to procure more imported coal at lower prices based on ICI index. Therefore, the Commission has examined the actual coal price for ICI linked procurement during the months of November, 2022 to January, 2024.....”

- 5.9 It is observed that TPC-G has entered into contract to procure Indonesian origin coal with coal specifications similar to TPC-G's long term contracted coal, with price linked to ICI index and the same offers significant cost advantage over HBA pricing.
- 5.10 The APPC for TPC-G, which generates power on Imported Coal, Domestic Natural Gas (under APM mechanism), Oil (LSHS), imported RLNG and hydro has been worked out at Rs. 5.93/kWh as against the approved rate of Rs. 6.18/kWh.
- 5.11 The landed cost of coal for energy charge computation as claimed by TPC-G is Rs. 8,472.21/MT as compared to approved rate of Rs. 12,500/MT. It can be seen that the actual landed price is lower as compared to approved rate in the Tariff Order. TPC-G's thermal power plant at Trombay is operated with 100% Indonesian coal. As mentioned above, TPC-G has purchased Indonesian origin coal linked to ICI4 index in July 2024, which is cheaper, to optimise the cost. The Commission observes that there has been a decreasing trend in the imported coal price primarily attributed to demand supply position of the global coal market which is reflected in the HBA and ICI index for the last few months. The Commission notes that MYT Regulations, 2019 permit use of alternate source of fuel for optimization of economical operation through blending. It is also observed that the price of APM Gas was Rs. 31,736.23/SCM in July, 24 which is also lower than the approved rate of Rs. 41,279/SCM in MTR Order. However, the Commission notes that prices of APM Gas as per notification by Ministry of Petroleum and Natural Gas, Government of India in July 2024 was \$6.50/MMBTU.
- 5.12 TPC-G mainly procures imported coal from Indonesian market. As per the Contract, the coal reference price is HBA index i.e., Harga Batubara Acuan and ICI index i.e., Indonesian Coal Index for Indonesian coal which is set by Ministry of Energy and Mineral Resources (Indonesia). The Commission has sought for prevailing HBA/ICI index during the aforesaid period along with the detailed computation of FOB price at which the coal has been procured by TPC-G. The graph below shows the trend of HBA, ICI3 and ICI4 index which is considered by TPC-G for energy charge calculations.





* - HBA index at 6,322 kcal/kg GAR coal with 8% total moisture, 15% ash as received and 0.8% sulphur
 #-ICI3 index at 4,800 kcal/kg GAR and ICI- 4 index at 4,200kcal/kg GAR.
 @ - For the ICI 3 and 4 index, the average rate for the month is considered
 \$ - Dollar Rate source - www.x-rates.com (Average rate for the month for representation purpose and may not be a reference rate at which Coal is procured)

5.13 The Commission has also sought coal purchase bills considered for July, 2024. The Commission has scrutinised the bills submitted and computed the purchase price of coal for the month of July, 2024 as shown in Table below:

Date	Invoice QTY	GCV	Invoice Rate	Coal Cost	Freight Rate	BF Correction	Freight Payable	Total Coal Cost	S/MT
	MT	kcal/kg	S/MT	\$	S/MT	S/MT	\$	\$	
13-Jun-24	39,260.00	4,136.00	58.22	2285717	16.15	0.39	649360	2935078	74.76
14-Jun-24	37,559.00	4,011.00	58.05	2180300	16.15	0.43	624933	2805233	74.69
24-Jun-24	51,800.00	4,678.00	73.91	3828538	16.15	0.61	868168	4696706	90.67
28-Jun-24	51,550.00	4,111.00	58.33	3006912	16.15	0.75	871195	3878107	75.23
06-Jul-24	53,202.00	4,187.00	57.45	3056455	16.15	0.8	901774	3958229	74.40
09-Jul-24	15,577.00	4,011.00	55.89	870599	16.15	0.74	263096	1133694	72.78
Total	248948	25134	61.17	15228520	16.15	0.63	4178526	19407046	77.96

5.14 TPC-G has submitted the detailed coal computation for the coal purchase considered in July, 2024 and also the reconciliation of coal cost considered in Form F12 along with each coal invoice. The coal cost is arrived on the basis of Goods Receipt Note (GRN) in the SAP system which is dependent on the rate of coal purchase (in Rs./MT or USD/MT) considered at the time of coal order (PO) booking. However, the coal cost mentioned in the coal invoice is as per the base price of coal purchase (in Rs./MT or USD/MT) arrived on the basis of actual Gross Calorific Value, Moisture content, Ash content, Sulphur content, HBA indices, etc. Once the invoice is booked in the SAP system after GRN of full coal quantity of a shipment, the cost as per coal invoice gets booked against each shipment in the SAP system in order to make payment to the supplier. To facilitate this, the difference between coal cost in Goods Receipt Note



(GRN) and coal cost in the invoice is booked as adjustment entry in the SAP. Hence, the coal inventory gets valued ultimately at the invoice values and at the coal purchase rate (in Rs./MT or USD/MT) prevailing on the date of billing.

5.15 Further, as the coal purchase during a month is generally not utilised in the same month, hence, there is a variation in above computed coal price vis-à-vis coal price as considered by TPC-G for energy charge calculations. The cost of coal for energy charge computation pertains to coal consumed during the respective months which is arrived based on the actual cost of coal inventory as well as the purchased coal cost received in the coal yard.

5.16 From the Table above, the basic purchase cost of imported coal including freight during the month of July, 2024 is \$77.96/MT. TPC has booked Rs. 7,163.17/MT (i.e. Rs. 5,763.16/MT for Coal and Rs. 1,400.01/MT for freight). Also, other coal handling charges such as insurance, handling and wharfage charges, taxes and duties, clean energy cess and other miscellaneous charges considered by TPC are in line with the average prices approved in the previous quarters. Accordingly, the break-up of the cost as submitted by TPC-D and as considered by the Commission against the procurement of coal for the month of July, 2024 is as given below:

Sr. No	Particular	Source / Formula	units	As Submitted – Coal Cost	As Approved – Coal Cost
1	Basic Coal cost + Freight in Rs.	As submitted	Rs./MT	7,163.17	7,163.17
2	Excise + Custom Duty + CE Cess+ Insurance	As submitted	Rs./MT	773.60	773.60
3	Handling and Wharfage	As submitted	Rs./MT	632.08	632.08
4	Other Fuel Handling Charges	As submitted	Rs./MT	292.38	292.38
5	Other Adjustment	As submitted	Rs./MT	(576.96)	(576.96)
6	Total as per Form 12	Sum (1:5)	Rs./MT	8,284.26	8,284.26

5.17 Apart from above, the Commission has also sought for third party sampling report for GCV verifications. TPC has submitted the third-party sampling certificate for the respective period. The Commission has verified the document submitted and found to be in order. Further, the 'As received' GCV of imported coal received in July 2024 was 4120 kCal/kg and 'As billed' GCV was 4,228 kCal/kg. The 'As fired' GCV of imported coal considered by TPC-G is 3,900kCal/kg. Considering the difference between the 'As received' GCV and the 'As Fired' GCV, the stacking loss works out to 220kCal/kg which is above limit of 120 kCal/kg as specified in the MYT Regulations, 2019. The Commission has sought justification from TPC-G for higher stacking loss, wherein TPC-G submitted that reduction in GCV occurs due to various reason such as initial moisture content/quality of the coal, environment factors like monsoon/summer and it also depends on the proportion of receipt and usage of



different types of coals during the month. In view of the above, weighted average 'As fired' GCV was lower than the weighted average 'As received' GCV leading to higher stacking loss for the month of July 2024. Therefore, TPC-G has considered the stacking loss as per norms approved by the Commission while computing the Energy Charges i.e. 120kCal/kg. The transit loss claimed by TPC-G for the month of July 2024 is Nil.

- 5.18 The Commission notes that TPC-G in Form 12 had considered coal consumption cost during the month based on weighted average of opening inventory and coal purchased during the month as per methodology approved by the Commission. TPC-G has considered the closing of June 2024 as per FAC approval of June 2024 which is matching with closing amount determined based on weighted average rate of computing coal by the Commission. Hence, the Commission has considered the same for computing the energy charge which is in line with TPC-G submission.
- 5.19 It is observed that the coal cost considered by TPC-G in Form 12 is Rs. 2,06,23,53,393.66. for the purchase of coal during the month, which does not match with the Annexure giving details of the coal cost of Rs. 2,07,09,15,857.45. The Commission notes a discrepancy of Rs. 85,62,463.79 and has, therefore, raised a query regarding the difference. In response, TPC-G submitted that dispatch/demurrage charges were inadvertently included as part of the coal purchase cost. Accordingly, TPC-G revised the coal cost for the month to Rs. 2,06,23,53,393.66, which led to a revision of the energy charges for Unit 5 and Unit 8, from Rs. 5.83/kWh and Rs. 5.64/kWh to Rs. 5.81/kWh and Rs. 5.62/kWh, respectively. The Commission has taken into account the revised coal cost and energy charges as submitted by TPC-G.
- 5.20 It is observed that there is difference in coal cost considered in Form 11 and Form 12. TPC-D submitted that the difference in the cost is due to Foreign exchange variation due to difference in dollar rate at the time of booking of Purchase Order and the actual payment made to vendor and the employee cost. Accordingly, the coal consumption cost considered by the Commission as per Form 11 is as given below:

Particulars	Units	TPC Submission	As Approved
Form F12 - Coal Consumption Cost	Rs/MT	8,305.54	8,305.54
Foreign Exchange Rate Variation	Rs/MT	102.05	102.05
Employee Cost	Rs/MT	33.87	33.87
Form F11 - Coal Consumption Cost	Rs/MT	8,441.46	8,441.46

- 5.21 The Commission notes that TPC-D has also considered compensation of Rs 1.98 Crore on account of degradation of Heat Rate and Auxiliary Consumption due to part load operation as per provisions of Maharashtra Electricity Grid Code, 2020. **The Commission has considered the same as per invoice raised by TPC-G. In view of the above, the Commission has considered APPC of Rs. 5.93/kWh as against approved rate of Rs. 6.18/kWh for power purchased from TPC-G for the month of July, 2024.**



5.22 Variation in power purchase expenses from TPC-G can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from TPC-G (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
July 2024	36.19	(7.46)	28.73

Out of above, variation on account of increased per unit rate is only considered for FAC computation.

Renewable Sources

5.23 TPC-D has tied up non-solar generation (wind) of 87.50 MW, 178.06 MW of solar and 225 MW wind-solar hybrid to meet its Renewable Purchase Obligation.

5.24 TPC-D had purchased solar RE (77.68 MU) and non-solar RE (158.69 MU) power during the month of July, 2024. TPC-D has purchased 77.68 MU of solar energy from its long-term contracts at weighted average Rs. 3.04/kWh and this also includes solar power from 225 MW wind-solar hybrid project and the impact of a Change in Law, amounting to Rs. 0.82 crore (Rs. 0.47 Crore for solar and Rs. 0.35 Crore for non-solar), due to the increase in Goods and Services Tax (GST) on supply and service contracts, as per the GST notification dated September 30, 2021, approved under Case No. 34 of 2023 on 28 November, 2023. The Commission has considered the total solar energy of 77.68 MU at the rate of Rs. 3.04/kWh as submitted by TPC-D. The said solar purchase is considered as per the invoice submitted by TPC-D. In respect of non-solar, TPC-D has submitted that it is yet to receive credit notes (invoices) for the wind power procured from various generators during July, 2024 and accordingly wind power purchase has been considered based on the monthly meter reading data as 66.53 MU at rate of Rs. 3.81 /kWh, this purchase includes wind power from 225 MW wind-solar hybrid project and impact of the Change in Law amounting to Rs. 0.35 crore. Additionally, TPC-D purchased 92.17 MU of wind power at Rs. 3.15 /kWh. The Commission has considered the total non-solar energy of 158.69 MU at the rate of Rs. 3.43 /kWh as submitted by TPC-D. However, TPC-D is directed to submit the invoices of non-solar wind energy purchase during the FAC submission of next month for verification.

5.25 TPC-D has also purchased 0.0004 MU, 0.02 MU and 0.0008 MU of solar energy, non-solar and hydro power respectively from IEX through G-DAM at Rs. 10.51 /kWh. Also, TPC-D has purchased hydro power of 0.57 MU from IEX through G-TAM at Rs. 10.41/kWh. The Commission has considered total energy under GDAM and GTAM transaction of 0.60 MU at the rate of Rs. 10.41 kWh as submitted by TPC-D.



5.26 The Commission observes that TPC-D has purchased total 236.97 MU of RE power during the month of July, 2024. **The average power purchase cost from RE sources is Rs. 3.32/kWh as compared to approved rate of Rs. 3.17/kWh. Accordingly, the Commission has considered RE purchase as submitted by TPC-D.**

5.27 Variation in power purchase expenses from RE Sources can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from RE Sources (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
July 2024	36.80	3.46	40.26

Out of above, variation on account of increased per unit rate is only considered for FAC computation.

Short Term Purchase

5.28 With regards to short term purchase, **TPC-D has purchased 39.77 MU at average rate of Rs. 6.68/kWh as compared to approved rate of Rs. 5.07/kWh to meet its demand.**

5.29 TPC-D has purchased 3.91 MU at Rs. 5.35/kWh, 32.84 MU at Rs. 4.11 /kWh and 2.29 MU at Rs. 10.73 /kWh from DAM, RTM and TAM (IEX and PXIL) respectively through IEX and PXIL in the month of July, 2024. Overall, TPC-D has purchased 39.03 MU from Power Exchanges at rate of Rs. 4.63/kWh.. TPC-D has also claimed Rs. 15,000 for MSLDC Standing Clearance Charges for power sale and purchase from power exchange. Additionally, TPC-D claimed ISTS charges raised by Central Transmission Utility India Limited Rs. 7.73 Crore for the month of June 2024 as per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) (First Amendment) Regulations, 2023 and also claimed bills of Rs. 0.06 Crore for rescheduling charges raised by MSLDC in the month of July 2024.

5.30 The Commission has observed that BEST and TPC-D have executed the agreement of Inter-Discom trade of Power under MERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2019 read with Scheduling and Dispatch code, which *inter alia* provides guiding principles for exchange of power between utilities on Day-ahead and Intra-day basis. In view of the above, TPC-D has purchased 0.73 MU at Rs. 9.82/kWh.

5.31 Variation in power purchase expenses from Short Term Sources can be divided on account of change in quantum and per unit rate as follows:



Month	Increase in Expenses for power purchase from Bilateral Short Term (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
July 2024	(60.28)	6.41	(53.87)

Deviation Quantum and Cost

5.32 It was observed that TPC-D has underdrawn 6.68 MU during the month of July, 2024. The said deviation quantum is arrived after grossing up T\diamondD periphery quantum to G\diamondT periphery by considering the normative transmission loss of 3.18%. Accordingly, the deviation quantum (6.68 MU) and cost (Rs. 0.75 Crore) has been considered as per provisional weekly invoice raised by MSLDC for the period 1 July, 2024 to 31 July, 2024. Further, it is observed that TPC-G has not considered DSM and ADSM charges for calculation of energy charges as well as fixed charges. Also, TPC-D has considered only DSM charges and not considered ADSM charges for calculation of cost towards deviation quantum.

Sale of Power

5.33 TPC-D has done sale of surplus power to the extent of 45.25 MU during the month at Rs. 3.86 /kWh. With such a sale of power TPC-D has earned revenue of Rs. 17.73 Crore. TPC-D has sold surplus power of 31.00 MU at Rs. 5.64/kWh thereby benefitting its consumers. Additionally, TPC-D has returned 14.25 MU banked power to in the month of July 2024, which was supplied by BSES Yamuna Power Limited in October 2023. The overall surplus power sold by TPC-D is 45.25 MU at Rs. 3.86/kWh. Therefore, TPC-D has managed to sale the surplus power at a higher rate (excluding the return of banking power), thus lowering the APPC and benefitting the consumers. Hence, the Commission has considered the actual quantum and revenue against surplus sale.

Approved Cost of Power Purchase

5.34 In view of the above, the overall cost approved in the Tariff Order and actual for the month of July, 2024 considered by the Commission is as shown below:

Particulars	Source	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs. /kWh)	Total Cost (Rs. Crore)	APPC (Rs. /kWh)
TPC-G	Approved	241.31	37.64	1.56	111.51	4.62	149.15	6.18
	Actual	299.85	38.57	1.29	139.31	4.65	177.87	5.93
RE and	Approved	120.95	-	-	38.37	3.17	38.37	3.17



Particulars	Source	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs./kWh)	Total Cost (Rs. Crore)	APPC (Rs./kWh)
Additional RE Sources	Actual	236.97		-	78.63	3.32	78.63	3.32
Bilateral (Short Term)	Approved	158.71	-	-	80.43	5.07	80.43	5.07
	Actual	39.77		-	26.56	6.68	26.56	6.68
Deviation Quantum	Approved	-	-	-	-	-	-	-
	Actual	(6.68)			0.75	(1.12)	0.75	(1.12)
Sale of Surplus Power	Approved	-	-	-	-	-	-	-
	Actual	(45.25)		-	(17.47)	3.86	(17.47)	3.86
Total	Approved	520.97	37.64	0.72	230.31	4.42	267.95	5.14
	Actual	524.66	38.57	0.74	227.78	4.34	266.34	5.08

5.35 Considering the above, the Commission allows the average power purchase cost of Rs. 5.08/kWh for the month of July, 2024 as shown in Table above. The actual purchase for same month in FY 2023-24 i.e., July, 2023 was 477.39 MU and power purchase cost was Rs. 246.63 Crore with APPC of Rs. 5.17/kWh.

6. FAC on account of fuel and power purchase cost (F)

6.1 The Commission has worked out the average power purchase cost for the month of July, 2024 as shown in above table. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 06 March, 2024 and accordingly arrived at differential per unit rate at which Z_{FAC} is to be passed on to the consumers.

6.2 The following table shows the Z_{FAC} worked out by the Commission on account of difference in fuel and power purchase cost for the month of July, 2024.

S. No.	Particulars	Units	July 2024
1	Average power purchase cost approved by the Commission	Rs./kWh	5.14
2	Actual average power purchase cost	Rs./kWh	5.08
3	Change in average power purchase cost (=2 -1)	Rs./kWh	(0.07)
4	Net Power Purchase	MU	524.66
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	(3.50)

7. Adjustment for over recovery/under recovery (B)

7.1 The Commission has not approved any levy of FAC in July, 2024 and thus there would not be any adjustment factor that is to be considered while computing allowable FAC.

8. Carrying Cost for over recovery/under recovery (B)



8.1 Since there is no over recovery/under recovery of FAC, levy of carrying cost does not arise and accordingly not considered by the Commission.

9. Disallowance due to excess Distribution Loss

9.1 Regulation 10.8 of MYT Regulations, 2019 provides for FAC amount to be reduced in case the actual distribution loss for the month exceeds the approved distribution loss. The relevant extract is reproduced as follows.

“10.8 The total Z_{FAC} recoverable as per the formula specified above shall be recovered from the actual sales in terms of “Rupees per kilowatt-hour”:

Provided that, in case of unmetered consumers, the Z_{FAC} shall be recoverable based on estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

Provided further that, where the actual annual sliding distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of Z_{FAC} corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total Z_{FAC} recoverable”

The following table provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss if any.

S. N	Particulars	Units	Approved in Tariff Order	July 2024- Actual	Actual Cumulative (up to July 2024)	Annual Sliding Distribution Loss (August 2023 to July 2024)
1	Net Energy Input at Distribution Voltage	MU	3796.94	317.83	1307.48	3577.90
2	TPC-D Retail Sales (excluding sales at 110/132 kV level)	MU	3758,21	316.86	1288.69	3533.92
3	Distribution Loss (1 - 2)	MU	38.73	0.973	18.80	43.98
4	Distribution Loss as % of net energy input (3/1)	%	1.02%	0.31%	1.44%	1.23%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	-	-	0.66
6	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	-	-	-

9.2 It is seen that standalone distribution loss for the month of July, 2024 is 0.31%, which is lower than the approved loss. The cumulative loss up to July 2024 of 1.44% is higher than approved loss i.e., 1.02%. In response to the query raised by the Commission,



TPC-D submitted that in monthly distribution loss computation, input energy is considered for calendar month and energy billed in the month (output energy) does not correspond to exact calendar month on account of billing cycle spread across consecutive months. However, such variations normalise when cumulative losses are considered for the year. It is observed that annual sliding distribution loss of 1.23% for August 2023 to July 2024 is higher than approved loss of 1.02%.

- 9.3 The Commission notes that estimated sales for the month of July, 2024 is only 0.15% of the total sales i.e., 0.74 MU. The comparison of Distribution Loss for July, 2024 as compared to previous years is as given below:

Particulars	FY 2024-25	FY 2023-24
Approved Loss	1.02%	1.02%
April	2.05%	3.18%
May	3.89%	2.71%
June	-0.62%	-0.28%
July	0.31%	1.49%
Cumulative up to July	1.44%	0.83%

- 9.4 Since standalone FAC Amount for the month is negative, the Commission has not worked out any disallowance on account of Distribution Loss for the month of July 2024 even though Annual Sliding Loss for the month of July, 2024 is higher than approved loss.

10. Summary of Allowable Z_{FAC}

- 10.1 The summary of the FAC amount as approved by the Commission for the month of July, 2024 is as shown in the Table below:

S. No.	Particulars	Units	July 2024 - As per TPC	July 2024- As Approved
1.0	Calculation of ZFAC			
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	(3.50)	(3.50)
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-	-
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	-	-
1.4	ZFAC = F+C+B	Rs. Crore	(3.50)	(3.50)
2.0	Calculation of Per Unit FAC			
2.1	Energy Sales within the License Area	MU	505.25	505.25
2.2	Excess Distribution Loss	MU	0.71	-



2.3	ZFAC per kWh	Rs./kWh	(0.07)	(0.07)
3.0	Allowable FAC			
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	(0.00)	-
3.2	FAC allowable [1.4-3.1]	Rs. Crore	(3.50)	(3.50)
4.0	Utilization of FAC Fund			
4.1	Opening Balance of FAC Fund	Rs. Crore	42.14	0.00
4.2	Carrying Cost on FAC Fund	Rs. Crore	0.36	0.00
4.3	Z _{FAC} for the month (Sr. N. 3.2)	Rs. Crore	(3.50)	(3.50)
4.4	Closing Balance of FAC Fund	Rs. Crore	39.28	(3.50)
4.5	Z _{FAC} leivable/refundable to consumer	Rs. Crore	39.28	0.00
5.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	39.28	0.00
6.0	Carried forward FAC for recovery during future period (4.5-5.0)	Rs. Crore	0.00	0.00

10.2 The Commission notes that TPC-D has considered the opening FAC Fund and added the standalone monthly FAC amount to the said fund and deducted FAC recovery amount in the month on July 2024 to arrive at the closing fund. The Commission in its FAC approval for June 2024 has allowed FAC recovery at ceiling rate up to November 2024. The Commission, thereafter, has issued MYT Order on 28 March, 2025 and approved the revised power purchase cost in the Provisional Truing-up of FY 2024-25 and accordingly determined tariff for 5th Control Period i.e., from FY 2025-26 to FY 2029-30. Thus, the Commission is approving the monthly FAC for standalone month as per provisions of MYT Regulations, 2019 and has not considered any adjustment towards FAC fund as the said amount is subsumed and already adjusted in provisional truing-up of FY 2024-25.

11. Recovery from Consumers:

11.1 Regulation 10.9 of MYT Regulations, 2019 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

"10.9 The ZFAC per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —



$Z_{FAC\ Cat} (Rs/kWh) = [Z_{FAC} / (Metered\ sales + Unmetered\ consumption\ estimates + Excess\ distribution\ losses)] * k * 10,$

Where:

$Z_{FAC\ Cat} = Z_{FAC}$ component for a particular Tariff category/sub-category/consumption slab in 'Rupees per kWh' terms;

$k = Average\ Billing\ Rate / ACOS;$

Average Billing Rate = Average Billing Rate for a particular Tariff category/sub-category/consumption slab under consideration in 'Rupees per kWh' as approved by the Commission in the Tariff Order:

Provided that the Average Billing Rate for the unmetered consumers shall be based on the estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

ACOS = Average Cost of Supply in 'Rupees per kWh' as approved for recovery by the Commission in the Tariff Order:

Provided that the monthly Z_{FAC} shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

Provided further that any under-recovery in the Z_{FAC} on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future period as may be directed by the Commission....”

11.2 Accordingly, the Commission allows the FAC amount of Rs. (3.50) Crore for the month of July, 2024. As FY 2024-25 is already over and Provisional Truing-up of FY 2024-25 has also been done by the Commission in the recent MYT Order dated 28 March, 2025, the revised power purchase cost resulting in FAC is already adjusted in the said MYT Order.

11.3 In a view of above, the per unit Z_{FAC} for the month of July, 2024 to be levied on consumers of TPC-D is Nil.

