



**OWNER:  
THE TATA POWER COMPANY LIMITED**

**TITLE OF WORK TO BE AWARDED:  
Procurement of Polymer type Lightning arrester along with grounding conductor  
(21 no.), clamps (21 no.) and LA counter (21 no.) for 220KV Trombay switchyard and  
transformer yard.**

**ENQUIRY REFERENCE NO.: CC25DDM071**

## NOTICE INVITING EXPRESSION OF INTEREST (EOI) FOR-

**Procurement of Polymer type Lightning arrester along with grounding conductor (21 no.), clamps (21 no.) and LA counter (21 no.) for 220KV Trombay switchyard and transformer yard.**

<b>Enquiry reference no.: CC25DDM071</b>
<b>Title of Work:</b> Procurement of Polymer type Lightning arrester along with grounding conductor (21 no.), clamps (21 no.) and LA counter (21 no.) for 220KV Trombay switchyard and transformer yard.
<b>Type of Bidding:</b> E-tendering (through Ariba online portal) / Two Part (Technical and Price bids under separate envelopes)
<b>Contact Details:</b> All communication including EOI submission shall be addressed to following officer/s: Ms. Dakshata Mhamunkar Email: <a href="mailto:dakshata.mhamunkar@tatapower.com">dakshata.mhamunkar@tatapower.com</a> Copy of all communications shall be marked to (Cc): Mr. Kailas Surve & Ms. Juhi Gaur Email: <a href="mailto:ksurve@tatapower.com">ksurve@tatapower.com</a> ; <a href="mailto:juhigaur@tatapower.com">juhigaur@tatapower.com</a>

The Tata Power Company Limited (“Project Manager”) on behalf of M/s Tata Power Company Limited (“Owner”) invites Expression of Interest (EOI) from interested parties for the Two-Part e-Tendering Process of following Relevant Work Package:

<b>Plant Details</b>	<b>Tender Fee</b>	<b>Bid Security</b>	<b>Estimated package value</b>
<b>The Tata Power Company Limited, Trombay Thermal Power plant Chembur</b>	INR 2000/- (INR Two Thousand Only)  To be submitted along with EOI.	INR 35,000/- (INR Thirty Five Thousand only).  Bid Security to be submitted as a Bank Guarantee at the BID stage (and not with EOI)	Approx. 35 Lakhs

Table 1

### **1. INTRODUCTION:**

The Tata Power Company Limited (TPC) is among the largest private sector Power Utility companies in India with presence in Generation, Transmission and Distribution of Power through conventional and renewable sources.

The tendering/ procurement activities for this Project are being managed from Tata Power’s following Office:

The Tata Power Company Limited,  
Trombay Thermal Power Station,  
Corporate Contracts,  
5<sup>th</sup> Floor, Station B, Chembur-Mahul,  
Mumbai 400074, Maharashtra, India.

## 2. BRIEF SCOPE OF WORK:

This Notice is for inviting Expression of Interest for construction of Procurement of Polymer type Lightning arrester along with grounding conductor (21 no.), clamps (21 no.) and LA counter (21 no.) for 220KV Trombay switchyard and transformer yard.

Detailed Scope of Work for this Contract shall be provided in the Tender / RFQ document to all potential buyers submitting the valid EOI with due tender fees.

## 3. TENDER FEE & TIMELINES:

a) Interested parties meeting the "Bidder Pre-Qualification Requirements" specified under point no. 4 in this document can request tender document and participate in the bidding process by submitting the Expression of Interest (EOI) Letter along with the Tender Fee Payment Details to the contact details mentioned below not later than deadline specified below. Request for extension of EOI submission date will not be entertained.

**b) Interested bidders should submit the Expression of Interest (EOI) letter and tender fee payment details to below mentioned email addresses:**

- Mails shall be addressed to (To): [dakshata.mhamunkar@tatapower.com](mailto:dakshata.mhamunkar@tatapower.com)
- Must Mark a copy to (Cc): [ksurve@tatapower.com](mailto:ksurve@tatapower.com) , [juhigaur@tatapower.com](mailto:juhigaur@tatapower.com)

EOI / requests without complete information and communication as above within deadline shall be liable to be rejected and will not be considered further.

c) Tender Fee, as indicated in the Table1 above may be paid through **NEFT** as per details for payment of Tender Fee given in Table2 below:

Table 2

Details for payment of Tender Fee:	
Bank details for submitting Tender fees through bank transfer / NEFT:	Beneficiary Name: The Tata Power Company Limited Bank Name: HDFC Bank A/c no: 00600110000763 IFS Code: HDFC0000060 A/c type: CC Branch Name & Address: HDFC Bank, Maneckji Wadia Building, Nanik Motwani Marg, Fort, Mumbai 400023

Deadline for tender fee payment and submission of EOI:	<b>12<sup>th</sup> September 2025</b>
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**d) Expression of Interest letter to be submitted along with tender fee payment details should include the following details:**

- A covering letter duly stamped and signed by an authorized signatory clearly indicating the Tender Reference number and your EOI to participate in the tendering process.
- Tender fee payment details / reference no (ensure that tender fee is received by us within specified deadline)
- Bidder to indicate authorized person name, contact number and e-mail id (mandatory) of the person to whom RFQ / tender and all other communications to be addressed for this tender.

e) Detailed Bid Document (also referred as RFQ) shall be issued through Tata Power e-tender portal (Ariba System) only to the parties submitting a valid EOI as per terms mentioned in this document.

**4. BIDDER PRE-QUALIFICATION REQUIREMENTS:**

Interested parties to note that Bidder shall be required to fulfill the following bidder pre-qualification requirement / criteria in order to qualify for the subject work. Bidder will be required to submit relevant supporting documents to demonstrate their qualification during the bid submission stage against Tender document / RFQ and bidders not found meeting the pre-qualification requirements given below will be disqualified from the tender.

**4.1 TECHNICAL REQUIREMENT:**

**BIDDER PRE-QUALIFICATION REQUIREMENTS:**

Interested parties to note that Bidder shall be required to fulfill the following bidder pre-qualification requirement / criteria in order to qualify for the subject work. Bidder will be required to submit relevant supporting documents to demonstrate their qualification during the bid submission stage against Tender document / RFQ and bidders not found meeting the pre-qualification requirements given below will be disqualified from the tender.

**Technical requirement:**

- A. Bidder must be an OEM of 145kV & above rating Outdoor type Lightning Arrestor with manufacturing facility/ assembly in India. –

(Self-undertaking to be submitted in this regard. Tata Power reserves the right to inspect the said manufacturing facility as a proof of compliance to this parameter.)

- B. Bidder shall have supplied at least 200 no. of 110 kV or higher rating Lightning Arrestors in last 5 years as on date of bid submission. Out of these minimum 100 nos of 110 kV or higher rating Lightning Arrestors shall be in satisfactory service for last 3 years as on date of bid submission. Indian Subsidiaries of global companies having plant in India are also eligible to bid if the qualification requirements stated above are met independently or in combination with the parent company. Declaration from parent company needs to be submitted. –

(Supply List & Performance Certificates from the utilities/ clients. Self-undertaking to be submitted in this regard. TATA Power reserves the right to inspect the said manufacturing facility as a proof of compliance to this parameter.)

- C. The bidder shall submit Type test reports obtained from NABU International Accredited Lab for the equipment/ material offered. The type tests should have been conducted on the equipment/ material manufactured at the same manufacturing Plant/s for the same design. The type tests should have been conducted within 5 years prior to the date of bid opening.

Time period for type test may be extended by another 5 years as a special case, if there is no change in design / material of construction (MOC).

In case the type test reports furnished are not for the quoted equipment / material but for the equipment / material with higher voltage class and/or different capacity, then type test shall be carried out for the offered equipment / material from NABL / international Accredited Lab without any cost implication to without any cost implication to the owner and the Type Test reports shall be submitted before dispatch of the equipment/ material.-

(Type Test Report.

Undertaking that there is no change in design / material of construction (MOC) if Type Test Report older than 5 years but less than 10 years prior to date of bid opening has to be considered (if applicable)

Undertaking that type test shall be carried out for the offered equipment / material from NABL / international Accredited Lab without any cost implication to the owner and the Type Test reports shall be submitted before despatch of the equipment / material, in case type test reports furnished are not for the quoted equipment/material but for the equipment/ material with higher voltage.)

- D. In case the package involves installation & commissioning of the equipment/ material, then the bidder shall have the following experience:
- a) He should have successfully completed one single order of value ..... (80% of estimated value of similar work in last three years) OR
  - b) He should have successfully completed two single orders of value ..... (50% of estimated value of similar work in last three years) OR
  - c) He should have successfully completed three single orders of value ..... ( 40% of estimated value of similar work in last three years)-

(Performance Certificates from the utilities/ clients.)

#### **4.2 FINANCIAL REQUIREMENT:**

The Bidder should have average annual financial turnover not less than INR 50 Lakhs (best three out of the last five financial years audited results).-

(Audited financial statements or CA-certified turnover certificate must be submitted as proof. Copy of audited Balance Sheet and P&L Account to be submitted in this regard. UDIN shall be mentioned on P & L statement.)

#### **5. BID SECURITY / EMD:**

Interested parties to note that Bidder will be required to furnish a Bid Security along with their Bid, in the format prescribed in Bid Document **in the form of EMD**, for an amount as defined in the covering page of this notice document. Bids not accompanied by an acceptable Bid Security shall be rejected by the Owner as being non-responsive and returned to the bidder without being opened.

**Interested parties to note that Bid Security is not required with the EOI and it is required to be submitted with the Bid only during Bid Submission stage**, once RFQ is released to the interested parties that have submitted a valid EOI.

#### **6. BIDDING PROCESS:**

Detailed Bid Document (also referred as RFQ) shall be issued through Tata Power e-tender portal (Ariba System) only to the parties that submitted a valid EOI as per terms mentioned in this document.

Bidder to note that commercials for subject tender may be conducted through e-auction. Detailed bidding and auction process shall be detailed in the RFQ / tender document.

**SCHEDULE OF QUANTITIES AND PRICES**

**Tender - CC25DDM071**

Sr. No	Materail Code	Description	Long Description	Qty	UoM	Unit Price (Rs.)	Item Price (Rs.)
1	2000088897	LIGHTNING ARRESTER 220KV OUTDOOR TYPE	Polymer type LA	21	no.		0
2	3000020634	CLAMP FXD FOR LA STUD TO 0.2 CU CON	ITEM NAME: CLAMP, TYPE/USED: FIXED, MATERIAL: HOT DIPPED TINNED COPPER, SUB EQUIPMENT: FOR LA STUD TO 0.2 CU CON	21	no.		0
3	2000033662	SURGE COUNTER	ITEM NAME: SURGE COUNTER, EQUIPMENT: CIRCUIT BREAKER, EQUIPMENT NOTE: VOLTAGE RATING: 220 KV	21	no.		0
Sub Total							0
GST@18%							0
Total							0

THE TATA POWER COMPANY LIMITED

STANDARD  
TECHNICAL SPECIFICATION  
FOR  
(96 kV and 198 kV Lightning Arresters)

(DOCUMENT NO - ENGG/ ELECT/STD-SPEC/04/15)



Tata Power

Engineering (T&D)

Rev. No	Date	Revision History	Prepared By (Name & Sign)	Checked By (Name & Sign)	Approved By (Name & Sign)
R0	21.01.2015	First Issue	PSA	SRM	MVK
R1	26.05.2017	Added QR & PRDC recommendations	PP	CPB	MVK
R2	13.03.2019	Datasheet updated for additional data req.	PP	PBT	AM
A	27.05.2019	Datasheet updated especially for 198kV NDC- 20 KA, CL-4 LA	PBT	SVD	AM
B	09.12.2019	Revised as per new format (Safety and MDL requirement)	PBT	SBL	AM
C	30.03.2020	PQR revised as per CFT recommendations	GPS	PBT/SBL	AM
D	14.06.2022	Datasheet updated for additional data req.	SS/NPT <i>Shubh Anand</i> <i>Nikhil</i>	UGP <i>UGP</i>	AAB <i>ABuddhiwant</i>

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11. **Inspection, Testing and Performance Requirements along with Warranty**
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(including list of key drawings with dates / period which are part of commercial compliance)
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**Enclosures: -**

1. Annexure - I: PQR
2. Annexure - II: Standard Quality Plan for LAs
3. Annexure - III: Standard Field Quality Plan for LAs
4. Annexure - IV: General requirements of Quality Assurance & Inspection

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**1. Introduction**

The specific requirement covers design, manufacture, testing at works, supply, transport to site of Lightning Arrester as per relevant IS and IEC standards. The bidder must supply the equipment being procured under this specific requirement.

**2. Pre-Qualifying Requirements**

Please refer attached Annexure – I.

**3. System Description and Scope**

- 3.1. The specific requirement covers design, manufacture, testing at works, supply, transport to site, installation and commissioning of 96kV & 198kV zinc oxide gapless, Polymeric Insulator type Lightning Arresters as per relevant IS and IEC standards.
- 3.2. All the necessary components and accessories for the satisfactory performance are in the scope of supply including Surge counter, Base insulator and necessary line terminal / clamp (suitable for conductor size 12 to 32 mm).
- 3.3. Submission of technical documentation related to design, installation, testing, operation & maintenance of the equipment for owner's review & approval.
- 3.4. Bidder must agree for handing over, to Purchaser, all project related drawings in AutoCAD format only. The pdf versions of above drawings shall be submitted through Wrench for formal approval process.
- 3.5. Acceptance minimum quality requirements defined in Tata Power Standard Quality Plans & Standard Field Quality Plans of technical specifications
- 3.6. Demonstration / testing of the system at Bidder's works as per the approved MQP before dispatch of the system at site (FAT).
- 3.7. Bidder should submit all the Type Test reports conducted as per attached SQP. The Type tests should have been carried out within the last five years from the date of bid submission. Undertaking that there is no change of design/material of construction if Type test report is older than 5 years but less than 10 years prior to date of Bid Opening will be considered.
- 3.8. Adherence to General requirements of Quality Assurance & Inspection (attached with the specifications).

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3.9. The bidder must confirm the technical & operational support for 25 years for the equipment being procured under this requirement.

3.10. Acceptance of Purchaser's preferred list of vendor / sub vendor / OEM, which will be shared as part of Technical Specifications. However, if Bidder introduces additional vendor/sub vendor the same will be evaluated separately. This vendor/sub vendor evaluation / assessment shall inter-alia include (i) document verification; (ii) Bidders work / manufacturing facilities visit (iii) manufacturing capacity, details of works executed, works in hand, anticipated in future and the balance capacity available for present scope of works; (iv) details of plant and machinery, manufacturing and testing facilities, manpower and financial resources; (v) details of quality systems in place; (vi) past experience and performance; (vii) customer feedback; (viii) response to complaint.

It is not the intent of this specification to specify completely herein, all details of design, construction of storage systems. However, the equipment shall conform in all respects to high standards of engineering, design & workmanship.

#### 4. Codes & Standards

Lightning Arrestors shall conform to the requirements of relevant standards of International Electrotechnical Commission (IEC) or equivalent national standards of country of manufacture. The list of relevant IS/IEC is given below:

Sr. no.	Brief Title	Ref. No. of Standard
1.0	Lightning Arrestors	IS 51086 Part 4, IEC 60099 Part 4, Part 5
2.0	Polymeric Insulators	IEC 62217, 60815, 61462, 61109
3.0	Porcelain insulator	IS 5621, IEC 233
4.0	Connectors	IS 5561
5.0	Hot Dip Galvanising	IS 2619, IS 2633
6.0	High voltage test techniques	IEC 60060 - 1 & 2, 60270
7.0	Environmental testing	IEC 60068 – 2
8.0	Insulation Co-ordination	IEC 60071-1 & 2

#### 5. Design Requirements

5.1 Lightning Arrestors shall be of the hermetically sealed type and of self-supporting construction. They shall be suitable for mounting on concrete or steel structures. They shall be provided with pressures relief devices and shall be capable of withstanding the internal pressures developed during various discharges or should safety vent the internal pressures associated with arrestors failure without violent shattering. The arresters should be of FRP tube design or Cage Design.

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- 5.2 All metal parts shall be of non-rusting and non-corroding metal. Bolts, Screws and pins shall be provided with lock washers, keys or equivalent locking facilities.
- 5.3 The lightning arrestors shall be suitable to withstand below mentioned seismic acceleration and wind pressure.
- |                               |                    |
|-------------------------------|--------------------|
| Seismic acceleration capacity | 0.5 G Horizontal   |
|                               | 0.25 G Vertical    |
| Wind Pressure                 | 55 mtrs./sec (Max) |
- 5.4 The insulator housing shall be of 'Shatter proof' high quality Silicon Composite material. The Silicon sheds shall exhibit hydrophobic property. The insulator housing shall be of a single piece construction without any joints or coupling. It should be void free and should have high resistance to acid corrosion. The base polymer shall be 100% Silicon Rubber prior to the addition of reinforcing fillers. The composite insulator shall be designed to prevent bird-bite and mouse-bite damages. Core of the Silicon composite insulator should be manufactured from Boron free, Electrically Corrosion Resistant (ECR) grade fiber glass reinforced plastic (FRP) rod having at least 70% fibres by weight.
- 5.5 The insulating base plate should be of minimum 11kV voltage rating. Size of base insulator should be greater than 300mm to avoid surface tracking.
- 5.6 Insulators of the shell shall be sound, free from defects thoroughly vitrified and smoothly glazed. The glaze shall be unaffected by sudden changes in temperature, and by atmospheric pollution or ozone acids, alkali, dust, chemical fumes, etc. The sealing shall be such that no moisture ingress shall take place and metal oxide blocks shall be completely free of moisture.
- 5.7 The sealing plate of HV chamber where ZNO blocks are kept is to be sealed by Silicon paste to prevent rusting and gasket failure.
- 5.8 The explosion vent cover also to be sealed with a thin plate and with Silicon paste to prevent water/moisture entry during rain or during cold line washing.
- 5.9 The connection between SA bottom plate & surge counter should be of 25 x 3 mm Copper flat, completely PVC insulated, 4/6.5 meters length for withstanding fault current of 40 / 50kA for 3sec.

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5.10 The grounding conductor also should be insulated from the structure and taken to the earth pit directly.

#### 5.11 ACCESSORIES

##### 5.11.1 Discharge counter

- a) Self-contained discharge counter shall be suitable for outdoor use and shall have a sealing which will be moisture proof. The counter shall not require any auxiliary power supply for its operation. The discharge counter shall be visible through an inspection window. The counter terminals shall be so located that incoming and outgoing connections are easily made with minimum possible bends. Suitably sized bypass shunts of copper to facilitate bypassing the discharge counter shall be furnished. The terminal connectors shall permit the connection of these shunts.
- b) The connection between lightning arrestor earth terminal and discharge counter terminal shall be PVC insulated for a minimum of 5kV and this insulated conductor shall be supplied along with the arrestors.
- c) A leakage current meter as an integral part of the discharge counter shall be supplied. The counter and the meter shall be so arranged that it possible to read the leakage current values from ground level. The meter shall be such that upto 3mA (safe continuous value) the scale is painted in green colour and beyond which it is red.
- d) Both surge counter and leakage current monitor shall have provision for connection with SCADA with potential free contact for counter & 4-20mA transducer for leakage current monitoring and price for same should be quoted as optional.

##### 5.11.2 Name Plate

Each lightning arrestors shall be provided with non-rusting and non-corroding name plate bearing identification as per the applicable standards.

#### 6. Layout Requirements for the equipment

6.1 Electrical clearance shall be as per CEA guidelines.

6.2 LA shall be provided with terminals at top for connections to customer's conductor.

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## 7. Safety Requirements

- 7.1 The insulator housing shall be of 'Shatter proof' high quality Silicon Composite material.
- 7.2 Lightning Arrestors shall be of the hermetically sealed type and of self-supporting construction. They shall be suitable for mounting on concrete or steel structures. They shall be provided with pressures relief devices and shall be capable of withstanding the internal pressures developed during various discharges or should safety vent the internal pressures associated with arrestors' failure without violent shattering. The arresters should be of FRP tube design or Cage design.
- 7.3 The connection between SA bottom plate & surge counter should be of 25 x 3 mm Copper flat, completely PVC insulated, 4/6.5 meters length for withstanding fault current of 40 / 50kA for 3 sec.

## 8. Operational Requirements

- 8.1 An electromagnetic cyclometric 5 digit non-resetting type counter is to be provided. It should not require for its operation any power sources like batteries or station ac/dc low voltage supplies (excluding Digital Surge counter).
- 8.2 It should have sufficient height so that surge counter can be mounted at appropriate level on the structure for easy visibility of counter & leakage Current reading.

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9. **Technical Parameters of Equipment including data sheet and make list for bought out items.**

9.1 **For 96 kV LA, 10kA, CL-3**

Sr.no.	Description	Tata Power Requirement	Data given by Bidder
1	Name of the Manufacturer	To be furnished by bidder	
2	Place of the manufacture	To be furnished by bidder	
3	Standards applicable	IEC 60099-4,5	
4	Arrestor voltage (kV)	96	
5	Reference voltage	96kV (min)	
6	Reference current (mA)	5 mA	
7	Rated Frequency	50Hz	
8	Application	Outdoor	
9	Type of Arrestors		
9.1	Gapless design	Yes	
9.2	Arrestor Design Type- FRP Tube / Cage Type	Required	
10	System voltage & Design Amb Temp		
10.1	Nominal voltage (kV)	110	
10.2	Highest voltage (kV)	145	
10.3	Design Amb Temp	50 Deg C	
11	Type of System Neutral Earthing	Solidly	
12	Short circuit current at arrestor location (KA)	40 kArms	
13	Maximum duration of Earth fault (Second)	3	
14	Withstand test voltages value of equipment to be protected		
14.1	One Minute Power frequency (kV)	275	
14.2	Lightning Impulse (kV Peak)	650	
15	Nominal Discharge Current, 8 x20 Microsecond wave (kA)	10 kA Heavy duty	
16	Pressure relief class (kAp)	Class – A	

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Sr.no.	Description	Tata Power Requirement	Data given by Bidder
17	Long duration current impulse withstand		
17.1	Discharge class	Class – III	
17.2	Peak current and virtual duration of peak (A/micro sec)	1000A/2400 micro second	
17.3	High current impulse (kA peak)	100kA	
18	Max. Continuous operating voltage- M.C.O.V (kV)	81	
19	Max. Continuous leakage current at M.C.O.V		
19.1	Resistive current (mA), Ir	0.01mA<Ir<0.6mA	
19.2	Capacitive current (mA), Ic	0.2mA<Ic<3mA	
20	Residual voltage corresponding to: As per IEC 60099-5, Table F.1		
20.1	Lightning Impulse (kV peak/Ur)	2.3 to 3.3	
20.2	Switching Current Impulse (kVpeak/Ur)	2.0 to 2.6	
20.3	Steep Current Impulse (kVpeak/Ur)	2.6 to 3.7	
21	Arrestor Housing		
21.1	Make (country) of Arrestor Housing	Required	
21.2	Material of Housing	Polymeric	
21.3	Withstand test voltages		
21.3.1	One Minute Power frequency (kV)	275	
21.3.2	Lightning Impulse (kV Peak)	650kVp	
21.4	Nominal Creepage Distance (mm)	31 mm/ kV	
21.5	Suitability for live washing	Required	
	Max PD at 1.05 x MCOV (pC)	<10	
22	Energy Discharge capacity (kJ/kV)	8	

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Sr.no.	Description	Tata Power Requirement	Data given by Bidder
23	Metal Oxide Details		
23.1	Make (country) of Metal Oxide Block	Required	
23.2	Type and shape of Metal Oxide Block	Required	
23.3	Dia of Metal Oxide Blocks	To be furnished by bidder	
23.4	Thickness of Metal Oxide Blocks	To be furnished by bidder	
23.5	Total Mass of Metal Oxide Blocks	To be furnished by bidder	
23.6	Composition & Percentage of Metal Oxide Blocks	To be furnished by bidder	
23.7	Nominal discharge current / Class	10kAP/ Class - III	
23.8	Rated voltage	To be furnished by bidder	
23.9	MCOV	To be furnished by bidder	
24	Lightning Impulse Residual voltage at		
24.1	0.5 X NDC (kV Peak)	To be furnished by bidder	
24.2	1.0 X NDC (kV Peak)	To be furnished by bidder	
24.3	2.0 X NDC (kV Peak)	To be furnished by bidder	
24.4	Residual voltage and corresponding value of Discharge current, in the range of 0.01 to 0.25 times the NDC (kVPeak), if complete arrester test cannot be carried out at one of the above currents.	To be furnished by bidder	
25	Maximum value of Temporary over voltages and their durations (kV Peak), with prior duty		
25.1	0.1 Sec	To be furnished by bidder	
25.2	1.0 Sec	To be furnished by bidder	
25.3	10.0 Sec	Should be greater than or equal to rated voltage	
25.4	100.0 Sec	To be furnished by bidder	

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Sr.no.	Description	Tata Power Requirement	Data given by Bidder
26	Range of Milliammeter provided for Leakage current measurement (mA)	0-5mA	
27	Recommended clearance		
27.1	Phase to Phase (mm)	Min 1300 mm	
27.2	Phase to Earth (mm)	Min 1300 mm	
28	Maximum Permissible lengths of lead between Arrestors, Discharge counter and Earth (Mtr.)	4 meter	
29	Size of the above lead (sq.mm)	25X3 CU FLAT STRIP OF 4 METER	
30	Rated voltage of insulation of Lead (kV)	Upto 5kV	
31	Whether the Arrestors is suitable for		
31.1	Wind Pressure	Yes	
31.2	Seismic Acceleration	Yes	
31.3	Service conditions	Yes	
32	Additional Requirements		
32.1	Cantilever Strength (kN)	1.5kN	
32.2	Type of mounting	Vertical / Pedestal Mounting	
33	Accessories required		
33.1	Discharge counter	YES	
33.2	Clamps and connectors	YES	
33.3	Leakage current meter	YES	
33.4	Earth Lead Disconnecter	No	
34	Type of LA terminal connector suitable for purchaser's conductor		
34.1	Line side (mm)	To be Furnished by bidder	
34.2	Earth size (mm)	To be Furnished by bidder	
35	Total height of the arrestors	To be Furnished by bidder	
36	Total weight of the arrestors	To be Furnished by bidder	
37	Whether GA drawings enclosed	Required	

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	<b>96 kV and 198 kV Lightning Arresters</b>	

Sr.no.	Description	Tata Power Requirement	Data given by Bidder
38	Whether type test reports as specified enclosed	Required	
39	Whether Voltage-Current Characteristics enclosed	Required	
40	Whether Power Frequency Voltage vs. Time characteristics enclosed	Required	
41	Whether list of recommended spares as specified enclosed	Required	
42	Base plate insulator rating	Min 11 kV	
43	Polymer insulators are free from Bird-bite or Rodent-bite	Required	
44	Sealing plate of HV chamber (where ZNO blocks are kept) is completely sealed so that no moisture enters into ZNO blocks.	Required	
45	Sealing plate and explosion vent (pressure relief plate) are sealed by Silicon paste to prevent moisture ingress.	Required	
46	Make and Type Discharge counter	Required	

## 9.2 For 198 kV LA, 20kA, CL-4

Sr.no.	Description	Tata Power Requirement	Data given by Bidder
1	Name of the Manufacturer	To be furnished by bidder	
2	Place of the manufacture	To be furnished by bidder	
3	Standards applicable	IEC 60099-4,5	
4	Arrestor voltage (kV)	198	
5	Reference voltage	198kV (min)	
6	Reference current (mA)	5 mA	
7	Rated Frequency	50Hz	
8	Application	Outdoor	

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	<b>96 kV and 198 kV Lightning Arresters</b>	

Sr.no.	Description	Tata Power Requirement	Data given by Bidder
9	Type of Arrestors		
9.1	Gapless design	Yes	
9.2	Arrester Design Type- FRP/ Cage Type	Required	
10	System voltage & Design Amb Temp		
10.1	Nominal voltage (kV)	220	
10.2	Highest voltage (kV)	245	
10.3	Design Amb Temp	50 Deg C	
11	Type of System Neutral Earthing	Solidly	
12	Short circuit current at arrester location (KA)	50 kArms	
13	Maximum duration of Earth fault (Second)	3	
14	Withstand test voltages value of equipment to be protected		
14.1	One Minute Power frequency (kV)	460	
14.2	Lightning Impulse (kV Peak)	1050	
15	Nominal Discharge Current, 8 x20 Microsecond wave (kA)	20 kA Heavy duty	
16	Pressure relief class (kAp)	Class – A	
17	Long duration current impulse withstand		
17.1	Discharge class	Class – IV	
17.2	Peak current and virtual duration of peak (A/micro sec)	2000A/ 2800 micro second	
17.3	High current impulse (kA peak)	100kA	
18	Max. Continuous operating voltage- M.C.O.V (kV)	168	
19	Max. Continuous leakage current at M.C.O.V		
19.1	Resistive current (mA), Ir	0.01mA<Ir<0.6mA	
19.2	Capacitive current (mA)	0.2mA<Ic<3mA	

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	<b>96 kV and 198 kV Lightning Arresters</b>	

Sr.no.	Description	Tata Power Requirement	Data given by Bidder
20	Residual voltage corresponding to: As per IEC 60099-5, Table F.1		
20.1	Lightning Impulse(kVpeak)/Ur	2.3 to 2.8	
20.2	Switching Current Impulse (kV peak)/Ur	2.0 to 2.3	
20.3	Steep Cur.Impulse(kVpeak)/Ur	2.6 to 3.1	
21	Arrestor Housing		
21.1	Make (country) of Arrestor Housing	Required	
21.2	Material of Housing	Polymeric	
21.3	Withstand test voltages		
21.3.1	One Minute Power frequency (kV)	460	
21.3.2	Lightning Impulse (kV Peak)	1050 kVp	
21.4	Nominal Creepage Distance (mm)	31 mm/ kV	
21.5	Suitability for live washing	Required	
	Max PD at 1.05 x MCOV (pC)	<10	
22	Energy Discharge capacity (kJ/kV)	12	
23	Metal Oxide Details		
23.1	Make (country) of Metal Oxide Block	Required	
23.2	Type and shape of Metal Oxide Block	Required	
23.3	Dia of Metal Oxide Blocks	To be furnished by bidder	
23.4	Thickness of Metal Oxide Blocks	To be furnished by bidder	
23.5	Total Mass of Metal Oxide Blocks	To be furnished by bidder	
23.6	Composition & Percentage of Metal Oxide Blocks	To be furnished by bidder	
23.7	Nominal discharge current / Class	20kAP/ Class - IV	
23.8	Rated voltage	To be furnished by bidder	

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	<b>96 kV and 198 kV Lightning Arresters</b>	

Sr.no.	Description	Tata Power Requirement	Data given by Bidder
23.9	MCOV	To be furnished by bidder	
24	Lightning Impulse Residual voltage at		
24.1	0.5 X NDC (kV Peak)	To be furnished by bidder	
24.2	1.0 X NDC (kV Peak)	To be furnished by bidder	
24.3	2.0 X NDC (kV Peak)	To be furnished by bidder	
24.4	Residual voltage and corresponding value of Discharge current, in the range of 0.01 to 0.25 times the NDC (kVPeak), if complete arrester test cannot be carried out at one of the above currents.	To be furnished by bidder	
25	Maximum value of Temporary over voltages and their durations (kV Peak)		
25.1	0.1 Sec	To be furnished by bidder	
25.2	1.0 Sec	To be furnished by bidder	
25.3	10.0 Sec	Should be greater than or equal to rated voltage	
25.4	100.0 Sec	To be furnished by bidder	
26	Range of Milliammeter provided for Leakage current measurement (mA)	0-5mA	
27	Recommended clearance		
27.1	Phase to Phase (mm)	Min 2850 mm	
27.2	Phase to Earth (mm)	Min 2850 mm	
28	Maximum Permissible lengths of lead between Arrestors, Discharge counter and Earth (Mtr.)	6.5 meter	
29	Size of the above lead (sq.mm)	25X3 CU FLAT STRIP OF 6.5 METER	
30	Rated voltage of insulation of Lead (kV)	Upto 5kV	
31	Whether the Arrestors is suitable for		
31.1	Wind Pressure	Yes	

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Sr.no.	Description	Tata Power Requirement	Data given by Bidder
31.2	Seismic Acceleration	Yes	
31.3	Service conditions	Yes	
32	Additional Requirements		
32.1	Cantilever Strength (kN)	1.5kN	
32.2	Type of mounting	Vertical / Pedestal Mounting	
33	Accessories required		
33.1	Discharge counter	YES	
33.2	Clamps and connectors	YES	
33.3	Leakage current meter	YES	
33.4	Earth Lead Disconnecter	No	
34	Size of Purchaser's conductor		
34.1	Line side (mm)	To be Furnished by bidder	
34.2	Earth size (mm)	To be Furnished by bidder	
35	Total height of the arrestors	To be Furnished by bidder	
36	Total weight of the arrestors	To be Furnished by bidder	
37	Whether GA drawings enclosed	Required	
38	Whether type test reports as specified enclosed	Required	
39	Whether Voltage-Current Characteristics enclosed	Required	
40	Whether Power Frequency Voltage vs. Time characteristics enclosed	Required	
41	Whether list of recommended spares as specified enclosed	Required	
42	Base plate insulator rating	Min 11 kV	
43	Polymer insulators are free from Bird-bite or Rodent-bite	Required	
44	Sealing plate of HV chamber (where ZNO blocks are kept) is completely sealed so that no moisture enters ZNO blocks.	Required	

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Sr.no.	Description	Tata Power Requirement	Data given by Bidder
45	Sealing plate and explosion vent (pressure relief plate) are sealed by Silicon paste to prevent moisture ingress.	Required	
46	Make and Type Discharge counter	Required	

Sub vendor list for bought out items shall be submitted during bid stage only and will be approved by purchase. However, if Bidder introduces additional vendor/sub vendor, the same will be evaluated separately.

#### 10. **QUALITY REQUIREMENTS (including QAP & SQP)**

- 10.1 To ensure that a well-engineered and contractually compliant system is produced, **Bidder shall adhere to Approved Tata power SQP** for the preparation of all contract deliverables. The program shall provide for early detection of actual or potential deficiencies, timely and effective corrective action, and a method of tracking all such deficiencies.
- 10.2 **QUALITY REQUIREMENTS:** Bidder to prepare and submit Manufacturing Quality Plan (MQP) and Field Quality Plan (FQP) for approval of Owner to ensure that a well-engineered and contractually compliant system is produced. The program shall provide for early detection of actual or potential deficiencies, timely and effective corrective action, and a method of tracking all such deficiencies.
- 10.3 Tata Power Standard Quality Plan (SQP) and Field Quality Plan (SFP) are attached with this specification defining minimum quality inspection and testing requirements during shop and site inspection respectively. Bidder to ensure that these requirements are compiled in MQP and FQP submitted for approval.
- Standard Quality Plan (SQP) of LA
  - Standard Field Quality Plan (FQP) for LA

#### **Factory Acceptance Test (FAT)**

- a) Owner approved MQP shall be referred for shop inspection. The purpose is to ensure that the Bidder has interpreted the specified requirements correctly and that the FAT includes checking to the degree required by the user. The general philosophy shall

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be to deliver a system to site, only after it has been thoroughly tested and its specified performance has been verified, as far as site conditions can be simulated in a test lab.

- b) The purpose of Factory Acceptance Testing is to ensure trouble free installation at site. Prior to release for shipment of the equipment the Purchaser or his representative will witness Factory Acceptance Test (FAT) in which the system is checked against the specifications.
- c) Type and routine tests certificates shall be furnished. Tests for components shall be as per relevant standard specifications and approved MQP.
- d) System tests shall be performed on the completely assembled system. Type, routine and optional tests covered in the approved MQP and these specifications shall be conducted in addition to the system tests.
- e) Bidder shall incorporate all FAT comments prior to despatch. After Bidder confirms that all changes have been incorporated, Purchaser's Office will issue Despatch Clearance.
- f) The Test Reports as well as Test Certificates of OEM, third party, Bidder shall be submitted for approval / verification.
- g) FAT and Despatch Clearance by the Purchaser shall not relieve the Bidder from complete responsibility for the total system and its performance subsequently.

**11. INSPECTION, TESTING AND PERFORMANCE REQUIREMENTS ALONG WITH WARRANTY**

- a) Bidder should follow owner approved MQP and specification requirements.
- b) Bidder to submit type test reports as per SQP for purchaser review along with technical bid.

**Performance Guarantee Parameters**

- a) Satisfactory operation of the system offered shall be guaranteed for 5 years from the date of taking over of system by purchaser after SAT including trouble-free & intervention-free operation.

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- b) Bidder shall undertake to repair or replace any part, which is defective or unequal to the rated duties due to faulty materials, design or workmanship.

#### **Warranty**

- a) Bidder shall warrant that the equipment hardware is free of defects in material and workmanship or faults in design, in so far as the equipment fails to meet the requirements of this technical specification, for a period of 60 months from the date of final acceptance by the purchaser after completion of 30 days trouble free operation.
- b) With respect to defects in equipment part, Bidder's liability is to make good by replacing the faulty equipment. It is the responsibility of the Bidder to replace the faulty equipment within 30 working days.
- c) The Bidder will cover the cost associated with the shipping of defective or failed items during warranty period. The new equipment, parts shall be delivered free of charge.
- d) Bidder shall extend all warranties / guarantees to the purchaser, provided by sub-Vendors, of duration longer than that in this specification

#### **12. MANDATORY SPARES**

Not Applicable

Bidder to provide list of **recommended spares** required for trouble free operation of LA, if any.

#### **13. TOOLS AND TACKLES**

Bidder to provide special tools and tackles for Erection, commissioning, condition monitoring / maintenance of LA, if required.

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**14. Data Submission By Bidder (including list of key drawings with dates / period which are part of commercial compliance)**

**With the Bid**

- a) Filled up Technical datasheet and Technical Deviations of Specifications (in attached Excel format – Excel soft file to be sent with Technical Bid) & in PDF
- b) Confirmation to Standard Quality Plan
- c) General Arrangement Drawings for LA
- d) Internal GA Drawings for LA
- e) Type test reports for same rating of LA
- f) Project Schedule / Manufacturing & Delivery schedule
- g) Schedule of Technical Deviations

**After award of contract**

- a) Guaranteed Technical particulars (GTP) and Bill of Material (BOM)
- b) General outline dimension drawing of LA furnishing front and side elevation, top and bottom plan, views showing all accessories, mounting arrangement on steel structures, spacing and size of the bolts, total creepage distance of bushing, sealing arrangement, MOC, make of components, grounding terminals and lifting lugs, net and shipping weight, shipping dimension etc.
- c) Internal GA for equipment offered indicating ZnO block details, sealing arrangement, insulator details, Pressure Relief arrangement, MOC, make of components etc.
- d) Name and rating plate diagram of LA
- e) Insulator GA including MOC, BOM, construction details, Make
- f) ZnO block GA including MOC, BOM, construction details, Make
- g) Voltage-current and Voltage – Time characteristic of arrester
- h) Surge Counter GA and schematic diagram
- i) Clamps and connector details
- j) Manufacturing Quality Plan & Field Quality Plan

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- k) O&M Manual & Recommended Commissioning checklist
- l) All the Type Test Reports as per SQP in last 5 years from date of bid submission

**All above drawings / documents shall be submitted within 7 days of PO issue.**

Bidder must agree for handing over, to Purchaser, all project related drawings in PDF version. The pdf versions of above drawings shall be submitted through Wrench for formal approval process.

# Annexure -1

## Bidders Prequalifying Requirements for AIS 145 kV 245 kV Class Lightning Arrestors

Sheet 15 of 48

S No	Parameter	Tata Power Requirement	Documents To be submitted by Bidder to ascertain meeting of Pre-qualification requirement
1	2	3	4
1	Infrastructure	Bidder must be an OEM of 145kV & above rating Outdoor type Lightning Arrestor with manufacturing facility / assembly in India.	Self-undertaking to be submitted in this regard. Tata Power reserves the right to inspect the said manufacturing facility as a proof of compliance to this parameter.
2	Supply and Experience	<p>Bidder shall have supplied at least 200 nos of 110 kV or higher rating Lightning Arrestors in last 5 years as on date of bid submission. Out of these minimum 100 nos of 110 kV or higher rating Lightning Arrestors shall be in satisfactory service for last 3 years as on date of bid submission.</p> <p>Indian Subsidiaries of global companies having plant in India are also eligible to bid if the qualification requirements stated above are met independently or in combination with the parent company. Declaration from parent company needs to be submitted.</p>	<p>Supply List &amp; Performance Certificates from the utilities / clients</p> <p>Self-undertaking to be submitted in this regard. TATA Power reserves the right to inspect the said manufacturing facility as a proof of compliance to this parameter.</p>
3	Type Test	<p>The bidder shall submit Type test reports obtained from NABL/ International Accredited Lab for the equipment / material offered. The type tests should have been conducted on the equipment / material of the same design.</p> <p>The type tests should have been conducted within 5 years prior to the date of bid opening. Time period for type test may be extended by another 5 years as a special case, if there is no change in design / material of construction (MOC).</p> <p>In case the type test reports furnished are not for the quoted equipment / material but for the equipment / material with higher voltage class and/or different capacity, then type test shall be carried out for the offered equipment / material from NABL / International Accredited Lab without any cost implication to the owner and the Type Test reports shall be submitted before despatch of the equipment / material.</p>	<p>Type Test Report.</p> <p>Undertaking that there is no change in design / material of construction (MOC) if Type Test Report older than 5 years but less than 10 years prior to date of bid opening has to be considered (if applicable)</p> <p>Undertaking that type test shall be carried out for the offered equipment / material from NABL / International Accredited Lab without any cost implication to the owner and the Type Test reports shall be submitted before despatch of the equipment / material, in case type test reports furnished are not for the quoted equipment / material but for the equipment / material with higher voltage class and/or different capacity, (if applicable)</p>
4	Commercial Capability		Copy of audited Balance Sheet and P&L Account to be submitted in this regard.
5	EPC Experience (If applicable)	<p>In case the package involves installation &amp; commissioning of the equipment / material, then the bidder shall have the following experience:</p> <p>a) He should have successfully completed one single order of value ..... (80% of estimated value of similar work in last three years) OR</p> <p>b) He should have successfully completed two single orders of value ..... (50% of estimated value of similar work in last three years) OR</p> <p>c) He should have successfully completed three single orders of value ..... (40% of estimated value of similar work in last three years).</p>	Performance Certificates from the utilities / clients

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Aparbide  
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Acsball  
20/2/13

**TATA POWER**

The Tata Power Company Limited  
Corporate Engineering-Quality  
Assurance  
Inspection & Testing



TPQAIT-QAXX-00-EX-SQP-058  
REV.0

STANDARD QUALITY PLAN FOR  
METAL OXIDE SURGE ARRESTER  
(33KV & ABOVE)

Date of Issue:

Annexure -2

**Document Title**  
**STANDARD QUALITY PLAN FOR**  
**METAL OXIDE SURGE ARRESTER**  
**(33KV & ABOVE)**

		<i>Rohali</i> 31/05/2015	<i>CRBhanslay</i> 31/3/15	<i>Ahmed</i> 31/3/15	
0	Initial Submission.	RP	CRB (Head QAI- E)	SGP Chief (QAIT)	
Revision No.	Reason for revision	Prepared By & Date	Checked By & Date	Approved By & Date	Issued by & Date

<b>TATA POWER</b>	The Tata Power Company Limited Corporate Engineering-Quality Assurance Inspection & Testing	
TPQAIT-QAXX-00-EX-SQP-058 REV.0	<b>STANDARD QUALITY PLAN FOR METAL OXIDE SURGE ARRESTER (33KV &amp; ABOVE)</b>	

Sr. No	COMPONENT / OPERATION		CHARACTERISTICS CHECKED	TYPE / METHOD	REMARKS
1	2		3	4	5
1.0	<b>MATERIAL:</b>	(All material shall be as per approved drawing/ data sheet).			
1.1	Porcelain Bushings.	1	As per IS 5621/ IEC 233 including Artificial Pollution tests, Thermal Stability test & Environmental test.	To be carried by material/ component supplier.,	TC will be submitted by material / component supplier which will be verified by Main supplier.
	Composite insulator	1	As per IEC61109, IEC 60383-2, IEC-62217 including Weather Ageing test in case of silicon insulator.		
1.2	Base Plate & Intermediate Plates.	1	Dimensions.		
		2	Galvanizing checks (if applicable).		
		3	Material properties (Chemical & Tensile).		
1.3	Springs.	1	Mechanical properties.		
		2	Material type.		
1.4	Pressure Release Diaphragm/ Plate.	1	Dimension check.		
		2	Pressure test.		
1.5	Grading Rings / Corona Rings.	1	Visual & Dimensions		
		2	Mechanical tests		
1.6	Terminal Connector.	1	Dimensions.		
		2	Tensile test.		
1.7	Zinc Oxide electrode	1	Energy Capability curve.		
		2	Residual Voltage Test.		
		3	Line Discharge class Test.		
		4	High Current Test.		
		5	<b>Special Tests.</b>		
		5.1	Thermal Stability Test.		
		5.2	Watt loss or Resistive Current.		
1.8	Silicone Bumper/ FRP rod/ FRP tube.	1	Dimensions.		
		2	Hardness.		
1.9	Surge Counter	1	Operational checks.		
1.10	Insulating Base.	1	Dimensional check.		
		2	Voltage withstand test.		
2.0	<b>INPROCESS INSPECTION: (Generally in line with manufacturer standard)</b>				
2.1	Zinc Oxide Block	1	Long duration current impulse withstand test as per IEC 60099 clause no 8.4.2.	on 100% zinc blocks	Verification of records by TATA POWER.
		2	Lighting impulse residual Voltage Test as per clause IEC 60099-clause 9.1		
		3	Ageing test (Watt loss measurement)	On randomly selected samples of Zinc block	
		4	Reference Voltage Test as per clause IEC 60099-clause 9.1		
		5	DC Milliampere-test		
2.2	SA assembly test	1	Dimensional verification,	In-process test on final SA assembly	
		2	Quality checks for galvanizing (If applicable)		
		3	Seal leak test (Leakage test for sealed Housing).		
3.0	<b>ELECTRICAL TESTS: (as per IS 3070-3, IS 15086 &amp; IEC 60099-4, IEC-61643)</b>				
3.1	Routine Tests.	1	Sealing Test (Leakage test for sealed Housing).	To be carried out supplier as per clause IEC 60099-clause 9.1	Test reports to be submitted to TATAPOWER for review.
		2	Reference Voltage Test as per clause IEC 60099-clause 9.1		
		3	Lightning Impulse Residual Voltage test as per clause IEC 60099-clause 9.1		
		4	Partial discharge test as per clause IEC 60099-clause 9.1		
		5	Galvanizing (Uniformity and zinc coating) check (if applicable) as per IS 3070 clause no 7.15		

TPQAIT-QAXX-00-EX-SQP-058 REV.0

**STANDARD QUALITY PLAN FOR  
METAL OXIDE SURGE ARRESTER  
(33KV & ABOVE)**

Sr. No	COMPONENT / OPERATION	CHARACTERISTICS CHECKED	TYPE / METHOD	REMARKS
1	2	3	4	5
3.2	Acceptance Tests.	1 Visual & Dimensional including creepage measurement (including finishing check & Verticality).	Tests by supplier on random sample as agreed mutually between supplier and TATAPOWER.	Customer Hold Point
		2 Measurement of Power frequency Voltage test.		
		3 Lightning Impulse Residual Voltage test.		
		4 Partial discharge test.		
		5 Special Thermal stability checks.		
		6 Surge Counter acceptance Tests.		
		6.1 Visual checks.		
		6.2 Dimensional checks.		
		6.3 Counter Operation: Test at 100A & 10 kA, 8/20 micro sec		
		6.4 Ammeter Operation Test at 2mA.		
6.5 IP degree protection (TC review)				
3.3	Type Tests (Design Tests) (Porcelain housed & silicon housed Surge Arrestors)	1 Insulation withstand tests on Arrester Housing.	TC verification as per IEC 60099 clause no 8. Will be conducted as per mutual agreement between supplier and customer.	Valid TYPE tests certificate not older than 5 year is prerequisite.
		2 Residual Voltage Test as per IEC 60099 clause no 8.3.		
		2.1 Steep current impulse residual voltage test as per IEC 60099 clause no 8.3.1		
		2.2 Lighting impulse residual voltage test IEC 60099 clause no 8.3.2		
		2.3 Switching impulse residual voltage test IEC 60099 clause no 8.3.3		
		3 Long-Duration current impulse withstand test IEC 60099 clause no 8.4.2		
		4 Operating duty test IEC 60099 clause no 8.5.4/ 8.5.5		
		4.1 High current operating duty cycle IEC 60099 clause no 8.5.4.		
		4.2 Switching surge operating duty test as per IEC 60099 clause no 8.5.5.		
		5 Short circuit test as per IEC 60099 clause no 8.7		
		6 Tests on arrester disconnectors/ fault indicators as per IEC 60099 clause no 8.6		
		7 Bending Moment as per IEC 60099 clause no 8.9		
		8 Seal Leak rate test as per IEC 60099 clause no 8.11		
9 Radio Interference Voltage tests as per IEC 60099 clause no 8.12				

Any Separate Type/ Design validation tests shall be carried out in accordance with TATA POWER specification or as per mutually agreed in MQP.

<b>4.0 PACKING, PRE-SHIPMENT &amp; DISPATCH:</b>				
4.1	PACKING & PRE-SHIPMENT.	1 Visual Verification.	Measurement & Visual.	
		2 Packing in cartons.		
		3 Quantity Verification.		
		4 Identification.		
4.2	DISPATCH.	1 Issue of Release note / MDCC.		Customer Hold Point.

**NOTE**

A) ALL MATERIAL SHALL BE AS PER APPROVED DRAWING/ DATA SHEET.  
 B) STATUTORY REQUIREMENTS WILL BE COMPLIED BY THE CONTRACTOR.  
 C) TATA POWER / ITS REP IDENTIFICATION STAMP ON MATERIALS WILL BE PRESERVED, IF REQD, SAME SHALL BE TRANSFERRED BY TATA POWER / ITS REP ONLY FOR MATERIAL TRACEABILITY.  
 D) FINAL INSPECTION OF THE MAJOR ACTIVITIES ARE WITNESSED BY CLIENT AND IT IS HOLD POINT (AT THE DISCRETION TATA POWER).  
 E) MANUFACTURER SHALL PREPARE AND SUBMIT COMPLETE MANUFACTURING QUALITY PLAN IN PRESCRIBED FORMAT OR THEIR REGULAR FORMAT INDICATING THEIR REGULAR PRACTICES, TAKING CARE OF MINIMUM REQUIREMENT AS INDICATED ABOVE.  
 F) INSPECTION OF THE MAINTAINANCE SPARES SHALL BE OFFERED ALONG WITH THE MAIN SUPPLY AS PER THE INSPECTION STAGES OF 1 TO 4.  
 G) CALIBRATION CERTIFICATES OF THE EQUIPMENT USED FOR TESTING SHALL BE PROVIDED FOR REVIEW.  
 H) TATA POWER RESERVES THE RIGHT TO DEMAND / VERIFY/ AUDIT/ WITNESS ANY OF THE CHECK POINTS MENTIONED IN THE SCOPE OF SUPPLIER.  
 I) AS PER SPECIFICATION PROPER PAINTING & PACKING SHALL BE ENSURED BY VENDOR BEFORE SHIPMENT TO AVOID ANY TRANSIT DAMAGE.

Meant for (Internal Circulation / External – Stakeholders Circulation)

**Annexure-3**



The Tata Power Company Limited  
Corporate Engineering-Quality Assurance & Inspection

**TATA POWER**

**TPQA/IT-QA/XX-00-EX-FQP-127 REV.0**  
**STANDARD FQP FOR SURGE ARRESTER (SA) (up to 400KV)**

Sr. No	COMPONENT / OPERATION	CHARACTERISTICS CHECKED	CLASS OF CHECK	TYPE OF CHECK	EXTENT / FREQUENCY OF CHECK	REFERENCE DOCUMENTS / ACCEPTANCE NORM	FORMAT OF RECORD	REMARKS
1	2	3	4	5	6	7	8	9
1.0	<u>Receipt of Material</u>	Availability of Instruction manuals, drawings, quality dossier including IRN. Verification of main unit and all loose items / accessories / name plate rating for any visual damage and shortage during transit.	Minor Major	Physical	At the Time of Receipt.	IRN, MDCC, Bill of material, shipping list No damages.	Site inspection register	Any shortfall/ damage shall be analyzed & reported jointly with site FQC.
2.0	<u>Storage &amp; Preservation</u>	If Permanent location is not ready for placing the isolator assembly: Storage Type-2 Check availability of all tools, tackles and ropes, Hydra etc. required for erection works are available.	Major Major	Physical Physical	At the time of storage. Once before erection.	Manufacturer's Instruction Manual. Manufacturer's Instruction Manual.	Site inspection register Site inspection register	Vendor to define type of storage for components as attachment
3.0	<u>PRE-ERECTION</u>	Check the readiness of foundation and its leveling. Check surge arrester is free from all visible defects on physical inspection. Check Leveling and alignment of structure and base frame. Mount bottom support insulator Mount the surge arrester and surge counter Connect the surge counter to the earth Bottom stack shall be on an insulated base and connected to surge counter with a insulated cable. Check corona ring is installed as per drawing (if any)	Minor Major	Physical / Measurement Physical Measurement Physical	Once before erection.	Site Approved Drawing. Instruction Manual	inter dept. handing over protocol.	Check joint protocol for handing over of area from Civil to Elect and FQC *STR will be signed by contractor, construction representative
4.0	<u>ERECTION</u>				100%	Site Approved Drawing.	Site Test Report*	



The Tata Power Company Limited  
Corporate Engineering-Quality Assurance & Inspection

**TATA POWER**

TPQAIT-QAXX-00-EX-FQP-127  
REV.0

**STANDARD FQP FOR SURGE ARRESTER (SA) (up to 400KV)**

Sr. No	COMPONENT / OPERATION	CHARACTERISTICS CHECKED	CLASS OF CHECK	TYPE OF CHECK	EXTENT / FREQUENCY OF CHECK	REFERENCE DOCUMENTS / ACCEPTANCE NORM	FORMAT OF RECORD	REMARKS
1	2	3 Check Cable termination and tightness checked. All cable identification tags provided and all cores are provided with identification ferrule in marshalling box. Ensure that top end of the surge arrester is firmly connected to the line. Check the ground connection & resistivity of system earth mat.	4	5	6	7	8	9
5.0	<u>PRE-COMMISSIONING</u>	Check insulation resistance of all stacks. Ensure that one end of the surge arrester is connected to the line.	Critical	Testing & Measurement	100%	Factory test report.	Site Test Report*	*STR will be signed by contractor, construction representative and FQC representative
6.0	<u>COMMISSIONING</u>	Check for vibration and abnormal sound after energisation. Check the leakage current and counter reading	Critical	Testing & Measurement	100%	Approved Drg. Data sheet	Commissioning Report.	
7.0	<u>Handing Over</u>	Compilation of all stage inspection protocol, test reports including closure of non conformance.	Critical	Visual	100%	Approved Drg. Data sheet.	Commissioning Report.	
	<u>Final documentation</u>		Critical			NA	*SWCF	Site work completion file

**N O T E**  
A) STATUTORY REQUIREMENTS WILL BE COMPLIED BY THE CONTRACTOR.  
B) FOR STAGES WITNESSED / DOCUMENTS REVIEWED BY TATA POWER, COPIES OF RELEVANT DOCUMENTS WILL BE FURNISHED TO TATA POWER.  
C) TATA POWER / ITS REP. IDENTIFICATION STAMP ON MATERIALS WILL BE PRESERVED / GOT TRANSFERRED BY TATA POWER / ITS REP AT APPROPRIATE STAGES. (IF REQUIRED).  
D) THE EXTENT INDICATED IN COLUMN 6 IS IN CONTRACTOR'S SCOPE. TATA POWER MAY INSPECT AS PER THIS COLUMN OR RANDOM SAMPLES AT ITS DESCRIPTION.  
E) COLUMN 7 WILL BE AS PER TATA POWER APPROVED DRAWINGS / DATA SHEETS / CONTRACT DOCUMENTS WHEREVER APPLICABLE.  
F) INSTRUMENTS FOR LEAK TESTS AND PERFORMANCE TESTS WILL HAVE VALID CALIBRATION CERTIFICATE WITH TRACEABILITY TO NATIONAL LEVEL.

**Critical Category is HOLD point.**  
This activity required inspection / Verification & acceptance by inspection authority responsible for this stage before further processing is permitted. 24 Hrs advance notice to be given to FQC. Contractor / sub contractor shall not process activity beyond this point without written permission by TATA POWER FQC.  
This activity shall be formed by TATA POWER (Execution + FQC), Main & Sub- Contractor (Execution + FQC) .  
( Also Surveillance by Head FQC / Project Head )



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Sr. No	COMPONENT / OPERATION	CHARACTERISTICS CHECKED	CLASS OF CHECK	TYPE OF CHECK	EXTENT / FREQUENCY OF CHECK	REFERENCE DOCUMENTS / ACCEPTANCE NORM	FORMAT OF RECORD	REMARKS
1	2	3	4	5	6	7	8	9
	Major Category is Witness point.	This activity required inspection / Verification & acceptance by inspection authority responsible for this stage before further processing. 24 Hrs advance notice to be given to TATA POWER (Execution) . Contractor /sub contractor shall not process activity beyond Witness point without written permission by TATA POWER (Execution). This activity shall be performed by TATA POWER ( Execution ). Main and Sub- Contractor (Execution + FQC) . ( Surveillance by FQC )						
	Minor Category is Review point.	This activity required review of documents by TATA POWER for the compliance & acceptance, However 24 Hrs advance notice to be given to TATA power (Execution). This activity shall be formed by Main and Sub- Contractor (Execution + FQC) . ( Surveillance by Execution / Project Head ).						
	TATA POWER FQC is also authorized to carryout surveillance in any major & minor class of check at their discretion.							
	<b>STORAGE TYPE:</b>							
	TYPE-1: OPEN AREA & ABOVE GROUND ON WOODEN PLANK WITH SLOPE FOR WATER DISPOSITION.							
	TYPE-2: OPEN AREA & ABOVE GROUND ON WOODEN PLANK (WITH SLOPE FOR WATER DISPOSITION) AND COVERED WITH TARPAULIN.							
	TYPE-3: OPEN SHED WITH FULLY FORMED FLOORING/CEMENT FLOORING.							
	TYPE-4: COVERED SHED/STORE ROOM ON RACKS & IDENTIFIED LOCATION.							
	TYPE-4A: CLOSED CHAMBER WITH TEMPERATURE & HUMIDITY CONTROL.							
	NOTE: Items/equipments having shelf life like paints, alumina, desiccant etc. are to be stored separately for identification purpose.							
Rev. No	Reason for Revision	Prepared By & Date	Checked By & Date	Approved By & Date				
RO	ISSUE FOR USE	RRP / 22.07.2016	CRB/ 22.07.2016	SS /				

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# TATA POWER

## GENERAL REQUIREMENTS OF QUALITY ASSURANCE & INSPECTION

[SHALL BE A PART OF GENERAL TECHNICAL CONDITION]

Document No.: TPQAIT-QAXX-00-GN-QSP-214



Rev 02 Dated 19/05/2017	DP /RP/RG/PU <i>al</i>	SKJ/ RM/CRB <i>SD 19/05/17</i>	SS <i>Sundar 19/05/17</i>
Rev 01 Dated 21/07/2016	SKJ / DP	RG	SS
Rev 00 Dated 21/04/2015	RG / SKJ / PU	SS	SS
Revision no. & Date	Prepared By	Reviewed By	Approved by

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## 1.0 PURPOSE

Purpose of these requirements is to provide uniform general requirements for implementation of Quality Management System for projects being executed by OWNER.

## 2.0 SCOPE

- 2.1 Scope of these requirement covers pre-requisites of the Bidder's/ Supplier's/ Contractor's Quality Management System (QMS) applicable for all phases of contract execution including design, procurement, manufacture, testing, erection and commissioning, applicable other services and further to establish specific factors for which control shall be carried and put into continuing operation by the Bidder/ Supplier /Contractor to ensure that all supplies and services comply with the contract requirements.
- 2.2 The required/specified reliability & other characteristics of quality should initially be "designed in" and then "built in". It is emphasized that satisfactory product and system performance can be achieved only through strict control of all design, manufacturing and erection/installation processes as well as test and inspection.
- 2.3 During bid stage itself, BIDDER shall submit requisite documents to demonstrate that as a supplier/ contractor they have well defined and implemented QMS. They shall also establish that their QMS is taking care of their sub-supplier/agencies, and continually improve its effectiveness in accordance with the requirements of their QMS as per ISO 9001, or any other quality standard.

BIDDER shall submit a project specific organization chart defining the permanent positions responsible for QMS accompanied by a brief description of each position's function and responsibility.

## 3.0 DEFINITION

- **OWNER**  
Tata Power or its subsidiaries/ JV partners.
- **Bidder**  
An organization/ agency, who propose to submit their offer against RFQ/enquiry floated by OWNER. Only successful bidder will be converted to supplier/ contractor on award of contract by OWNER.
- **Supplier / Contractor**  
An organization referred as Supplier/ contractor, who execute the contract awarded by Contracts department of OWNER. It also covers the Agency involved in execution of site/ field activities or provides services (as a contractor) when awarded by Contracts department of OWNER. A Supplier can also be a manufacturer for part of supply for his in-house products.
- **Sub-Supplier/ Sub-vendor**  
An organization, who manufactures, supplies the system or equipment or item and provides services to the supplier. It also covers manufacturer who manufactures and supplies the equipment or its components or items to the sub-suppliers to complete the system supply. It

should also cover the agencies which also support execution of main supplier by providing qualified manpower/ services.

- **Third Party Inspection Agency (TPIA)**  
An third party organization or any neutral agency mutually agreed, deputed for conducting inspection or quality surveillance activities on case to case basic.
- **Inspection Agency (IA)**  
An organization or any agency deputed by OWNER for conducting inspection or quality surveillance activities on behalf of OWNER on case to case basic.
- **Inspection Categorization Plan (ICP)**  
This document shall categorize the Quality Plan and Inspection scope of all equipment/ items in the package. This will also include the schedule for submission and approval of all Quality related documents.
- **Standard Quality Plan (SQP)/ Standard Field Quality Plan (SFP)**  
SQP shall comprise of minimum basic requirements of all tests/checks to be carried out during manufacturing to meet/ conform technical requirement. SQP may be in the form of Inspection & Test Plan (ITP)/ Technical Specification as part of Bid Document.  
Similarly SFP shall comprise of minimum basic requirements of all field tests/checks to be carried out during execution of the project.
- **Manufacturing Quality Plan (MQP)**  
MQP shall comprise of all tests/ checks indicated in standard Quality Plan (SQP) and tech specifications. It shall also include any additional quality checks/ tests required as per discussions (pre & post bid) to be followed during manufacturing of particular item/ equipment.
- **Field Quality Plan (FQP)**  
FQP shall detail out the activities and steps to be performed at project site and shall be followed from receipt of material to pre-commissioning stage. FQP shall be prepared by contractor and to be submitted to OWNER at post award stage of contract for owner's approval.
- **Hold Point/ Customer hold point (CHP)**  
A check point for an activity mentioned in approved MQP/ FQP, which requires inspection/ verification, and acceptance by the OWNER or its representative for this stage before any further work is permitted.  
Supplier shall not process beyond a CHP without written acceptance & clearance of that activity by OWNER in writing
- **Witness Point**  
A check point for an activity mentioned in the approved MQP/ FQP, which will be witnessed by OWNER or its representative.  
Supplier will obtain consent from OWNER to proceed for further work, in case OWNER or its representative is not able to attend the activity within notification period.

- **Review / Verification Point**

A check point for an activity mentioned in the approved MQP/ FQP that requires review of document/ test record by OWNER or its representative performed by the Supplier for acceptance.

- **Test Report Record**

Such reports / record are document prepared by Supplier/ Sub-Supplier for test/ check conducted indicating details / types of test including test results, relevant codes etc.

- **Inspection Report (IRT)**

Such report which covers details of all the checks / activities carried out as per approved MQP. It also covers details of the observations and NCRs during those checks / inspection.

- **Inspection Release Note (IRN)**

IRN is a document issued on standard format after successful quality checks/inspection and confirming to compliances of all observations and NCs if any).

- **Non Conformity Report (NCR)/ Quality Correction Action Report (QCAR)**

It is a report on deviation/ non-compliance with respect to the requirements laid down in the PO/ Technical Specification, MQP, Codes & standards. NCR shall be applicable during inspection at Shop as well during site Audits and QCAR shall be applicable for site inspection / surveillance.

#### **4.0 QUALITY ASSURANCE PROGRAMME**

To ensure that the equipment and services under the scope of contract whether manufactured or performed within the Bidder/ Supplier /Contractor's works or at his sub-vendor's premises or at site or at any other place of work are in accordance with the specifications, the Bidder/ Supplier/ Contractor shall adopt suitable project specific QMS based on his organization's Quality Management System, regular practice, statutory requirements and as specified for this specific contract and submit the same for approval of OWNER, to control such activities at all points, as necessary. Such program shall be outlined by the Bidder/ Supplier/ contractor. Any deviation with respect to all above requirements (as specified in SQP, SFP, Technical specification as minimum quality requirements) shall be brought out clearly in the bid stage by bidder.

#### **5.0 SUPPLIER QUALITY MANAGEMENT SYSTEM (QMS)**

- 5.1 All materials, components and equipment covered under the contract including bought outs shall be procured, manufactured and tested at all the stages, as per a comprehensive Quality Assurance Programme. It is the Bidder/ Supplier / Contractor's responsibility to draw up and implement such program duly approved by the OWNER.
- 5.2 All items/equipment in the scope of the contract shall be classified into categories according to the criticality or other attributes of items/ equipment. A detailed proposal addressing vendor approvals and quality control of all such items/ equipment shall be proposed to OWNER for approval.
- 5.3 The detailed quality plans for shop manufactured items and for field activities including civil works (if applicable) shall be drawn up by the Bidder/ Supplier / Contractor separately.

All shop quality plans and field quality plans shall be submitted to OWNER for approval prior to start of manufacturing activities and site activities respectively.

- 5.4 Manufacturing quality plans shall detail out various tests/ inspections to be carried out as per the requirement of the specification, standards mentioned therein, quality practices and procedures followed by Supplier's/ his sub vendor's quality control department. MQP shall be prepared by manufacturer and submitted through supplier post award stage of contract for owner's approval. OWNER approved MQP to be referred during manufacturing & shop inspection. Typical format of Manufacturing Quality Plan is enclosed as **Exhibit A**.
- 5.5 Field quality plans shall detail out for all equipment, the quality practices and procedures etc. to be followed by the execution agency, during various stages of site activities right from receipt of materials/ equipment at site to commissioning stage covering receipt, storage, erection & pre-commissioning tests. It shall comprise of all tests / checks indicated in SFP & Technical Specification including any additional quality checks / tests required as per discussions (pre & post bid). It shall also take care of minimum basic requirement of OEM/manufacturer (as the execution agency may not be part of OEM/manufacturer). OWNER approved FQP is to be referred during execution of work. FQP shall have 5 stages: Receipt, Storage, Pre-erection/ pre fabrication, Erection/ Execution and pre commissioning checks with categorization of checks as Critical (Cr), Major (Mj) and Minor (Mn). Typical format of Field Quality Plan is enclosed as **Exhibit B**.
- 5.6 In these approved manufacturing and field quality plans, OWNER shall identify "Customer Hold Points" & "Witness Points". "Customer Hold Points" are test/checks which shall be carried out in presence of the OWNER's Engineer or its authorized representative and beyond which the work shall not proceed without consent of OWNER/ its authorized representative in writing. "Witness Points" are tests/checks which shall be carried out in presence of the OWNER's Engineer or its authorized representative but the work can proceed to next operation/ stage in case OWNER's Engineer doesn't attend on the mutually agreed date. The above procedure shall be applicable to the Bidder/ Supplier / Contractor's bought out equipment/ items also.
- 5.7 All the critical & major items shall be procured from the sub-vendors approved by OWNER by supplier/vendor/contractor. Detailed list of such sub-vendors offered by supplier/vendor/contractor shall be submitted not later than 7 days after the LOI/ Placement of order whichever is earlier and shall be frozen within 15 days of submission. Request for additional sub-vendors shall not be entertained from the Bidder/ Supplier / Contractor after the sub-vendor list is finalized and frozen. Only in case of Force Majure Condition, Supplier/ contractor shall establish such condition and propose new/ alternative source. Contractor / supplier shall provide requisite documents for consideration of OWNER. OWNER has right to accept/ reject based on review of details. If required, physical assessment shall be made before conveying such decision. Delays arising out of such exercises shall be entirely to the account of Supplier/ Contractor and shall not relieve him from any obligation, duty or responsibility under the contract. For intended manufacturer/ sub-vendors/ sub-suppliers, details to be submitted are indicated below:
- i. Rating, Range / type etc. of equipment/ item for proposed approval.
  - ii. Organisational structure including QA/QC inspection dept with man power & qualification details.
  - iii. In house design / R&D capability.
  - iv. List of sub-vendors for critical/ major bought out items.

- v. In-coming material inspection plan and Manufacturing Quality Plan.
- vi. In house manufacturing facilities, including process flows.
- vii. In house Testing facilities (including Type testing).
- viii. Experience (Past Track Record) list for last 3 yrs for similar product.
- ix. Performance certificates issued by other customers.
- x. Certification of/ by reputed agencies (ISO/ ASME/ CE/ UL/API/ etc) & also approval certificates from other customers etc.
- xi. Quality Manual.
- xii. Assessment report by contractor/ supplier and their own experience.

**5.8 Non Conformance Report (NCR) / Quality Correction Action Report (QCAR)**

Wherever the non-conformity is found during inspection either by Supplier or OWNER or its representatives, NCR / QCAR shall be issued in prescribed format. Manufacturer /Supplier shall indicate the Correction / CAPA and submit these NCRs/QCARs to OWNER or its representative for their review & resolution. Till such time identified item/equipment will be kept under quarantine. Upon satisfactory completion of the rectification work, final acceptance of the item/equipment shall be documented on the NCR/QCAR format.

Supplier has to close all NCR / QCAR in systematic & time bound manner including all corrective and preventive actions. Job shall progress only after effective resolution of NCR / QCAR.

**Note:** If OWNER observes that any material or equipment is unacceptable with respect to potential safety, reliability, interchangeability or workmanship, OWNER shall issue a non-conformance report NCR / QCAR in this regard to the Supplier/ Contractor. Such NCR/QCAR shall be dealt as above.

- 5.9 No material shall be dispatched from the Bidder's/ Supplier's/ Contractor's /manufacturer's works before the dispatch instruction is given in writing by the owner. subsequent to pre-dispatch inspection including verification of records of all previous tests/ inspections by OWNER/ authorized representative. Any such item/material dispatched by party without clearance from OWNER shall be at suppliers risk & cost only. No IRN/ dispatch clearance shall be issued for the same as post facto.
- 5.10 OWNER or its nominated representative reserves the right to carry out quality audit/ quality surveillance of the systems and procedures of the Bidder/ Supplier/ Contractor's or their sub-vendor's Quality Management System and control activities without prior intimation. The Bidder/ Supplier/ Contractor shall provide all necessary assistance to OWNER or its nominated representative to carry out such audit/ surveillance.
- 5.11 The Bidder/ Supplier/ Contractor shall be responsible for providing, controlling, calibrating, and maintaining the 'measuring & test equipment' required by them for demonstrating compliance of supplies within contract requirements at shop and at site. All the measuring instruments shall be calibrated at periodic intervals determined by Bidder/ Supplier/ Contractor/ sub-vendor on the basis of his suitability, purpose and usage as per the system adopted by him for calibration of such measuring and test equipment. However, in no case, shall the interval between successive calibrations be more than 12 months. All measuring and test instruments shall have valid calibration certificates and calibration data shall be made available to OWNER or its nominated representative on demand.

- 5.12 Quality surveillance/ approval of the results of the tests and inspection shall not, however, prejudice the right of the OWNER to reject the equipment if it does not comply with the specification when erected or does not give complete satisfaction in service and the above shall in no way limit the liabilities and responsibilities of the Bidder/ Supplier / Contractor in ensuring complete conformance of the materials/ equipment supplied to relevant specification, standard, data sheets, drawings etc.
- 5.13 For all spares and replacement items, the quality requirements as agreed for the main equipment supply shall be applicable. Inspection of all mandatory spares and commissioning spares shall be in line with the approved MQP of respective equipment/ item. Interchangeability Certificate shall also be part of quality records for all spares.
- 5.14 **Statutory Inspection**  
Supplier to ensure that Equipment/ items which fall under statutory requirements of country where the equipment will be installed, shall be inspected by statutory authority like IBR etc. In case of imported items, statutory inspection will be carried out by the agency as nominated by Statutory Authority or Statutory authority of the country of origin. Original certificates endorsed by statutory authorities shall be submitted to project manager as identified in the contract.  
Such items shall also be offered to OWNER for inspection irrespective of country of origin.
- 5.15 **Failure to Pass Tests**  
If any item/ equipment fail to pass any test, the Bidder/ Supplier shall rectify or replace the same and, unless OWNER agrees to dispense with repetition of the test, shall repeat the test following a further notice. The cost and expense of any such retest shall be fully borne by the Bidder/ Supplier only.
- 5.16 Major repair/rectification procedures to be adopted to make the job acceptable shall be subject to the approval of the OWNER/ its authorized representative.
- 5.17 All tests shall be carried out to the satisfaction of the OWNER/ its authorized representative either in their presence or as agreed by OWNER. All reports/ protocols, site and shop inspection reports shall be developed specific to the requirements of the project which is acceptable to OWNER. The same shall be applicable to erection testing and pre-commissioning reports and protocols also.
- Only tested, inspected and accepted (by owner) material as listed in PO / ICP shall be dispatched to project site.** Any diversion of such accepted material without any prior approval shall be considered as deviation/ breach of contract and a minimum penalty of 5 times the cost of inspection will be levied.
- 5.18 Approval of any concession shall be the prerogative of the OWNER and approval of concession for a particular case shall not be set as a precedent.

- 5.19 All the equipment shall be of proven design and type tested. Valid type test reports shall be furnished to engineering for review and acceptance prior to offering equipment for inspection.
- 5.20 All documents/ reports/ records shall be issued either in English language or bilingual with English.

## **6.0 INSPECTION CATEGORIZATION PLAN, WELDING & NDT REQUIREMENT**

### **6.1 Inspection Categorization Plan (ICP)**

This document shall be prepared by supplier and to be submitted to OWNER for approval in attached standard format for all package items within 15 days of award of contract. The schedule shall be prepared considering that all MQP should be approved at-least 15 days prior to start of any manufacturing activity and FQP with related procedures shall be finalized at least 15 days prior to dispatch schedule/ site mobilization.

ICP, MQP, FQP and related procedures shall form part of Master Drawing List (MDL)

All the items/equipment in the scope of the contract shall be classified into categories (A/ B/ C) according to the criticality or other attributes of items / equipment. A detailed proposal addressing vendor approvals and quality control of all such items /equipment shall be proposed to OWNER by the Supplier/ Contractor for approval.

Category “A”: Manufacturing Quality Plan (MQP) shall be approved by TATA POWER. Stage &/ or Final Inspection including document review by EPC Contractor and TATA POWER (or its appointed Inspection Agency) as per approved MQP.

Category “B”: Manufacturing Quality Plan (MQP) shall be approved by Tata Power. Stage &/ or Final Inspection including document review by EPC contractor or Tata Power (in case no EPC Contractor) as per approved MQP. Inspection report of EPC contractor/ Supplier with supporting documents review by Tata Power.

Category “C”: Supplier shall carry out inspection as per their regular practice/ standard manufacturing quality plan. Supplier shall submit test report and COC to EPC Contractor/ Tata Power for approval/acceptance. COC shall be in standard format of Tata Power.

### **6.2 Welding & Non-Destructive Testing (applicable for shop as well project site)**

- 6.2.1 Bidder / Supplier/ Contractor shall submit the following documents in requisite copies for review and approval of OWNER/ its authorized representative at least FOUR weeks prior to commencing fabrication/ manufacturing and finalize before start of job. All such submissions shall be made in ENGLISH language only.
- i. Welding procedures together with the relevant procedure qualification records.
  - ii. Non-destructive testing procedures.
  - iii. Heat treatment procedures.
  - iv. Any other special procedure (as applicable) proposed to be used during project execution  
Welding procedures and welders’ qualifications in accordance with the latest revision of ASME Boiler & Pressure Vessels Code, Section IX, (structural welding as per AWS D1.1)

or equivalent standard covering all essential & non- essential variables shall be acceptable to OWNER.

- 6.2.2 Only qualified welders shall be deployed. Welders shall be qualified as per approved WPS in presence of OWNER/ its authorized representative. Electrode/ welding rod used at project site shall be of owners approved. Supplier/ Contractor shall take prior approval.
- 6.2.3 Weld repair procedures are subject to approval of the OWNER. No welding is permitted on C.I. Castings. OWNER reserves the right to examine and witness acceptance tests, prior to and following weld repairs and subsequent post weld heat treatment, mechanical tests etc, at the material manufacturer/ Supplier works.
- 6.2.4 Should any of these welds prove to be defective on inspection, the number of welds to be tested in that system shall be twice that of originally selected. Should any of the second incremental welds prove to be defective, then 100 % of the welds in that system/ group shall be tested.
- 6.2.5 NDT operators shall be qualified in accordance with an agreed nationally accredited scheme such as the Personnel Certification in Non-destructive testing (PCN) scheme and shall be certified to level II or higher of that system.
- 6.2.6 Plate thickness  $\geq 32\text{mm}$  (for structure), Plate thickness  $\geq 25\text{mm}$  (for pressure vessel), Forging / Bar dia.  $\geq 40\text{mm}$  (finished) shall be UT tested.

## **7.0 INSPECTION AT SHOP**

### **7.1 Inspection Scope**

The scope of inspection shall be as per Witness/ Hold Point as defined in approved MQP/ SQP. Supplier has to ensure that all applicable and agreed approved Drawings, Data Sheet etc. are available for any inspection and equipment used for measurement are calibrated. Supplier shall intimate all such cases in advance (as inspection rolling plan) and also through inspection call as per contract agreement.

### **7.2 Inspection Coordination**

Supplier has to identify single point contact for coordination of the entire inspection activities on behalf of Supplier/ sub-supplier. Supplier to ensure that monthly and 3 monthly rolling inspection plan are prepared and submitted in advance to OWNER by 1<sup>st</sup> working day of each month for effective inspection coordination.

### **7.3 Inspection Request**

- 7.3.1 Depending upon the stages of inspection as agreed in manufacturing quality plan, supplier to send Inspection Requests (in OWNER standard format & through system) to OWNER Project Manager for inspection activities to be attended at supplier's / sub-supplier's premises. Supplier to submit all relevant approved reference documents (MQP, Drawings/ Data Sheet etc.) along with inspection request. Supplier has to give sufficient advance notice, as defined below for inspection of any stage. The date of receipt of inspection call by OWNER will hold good.

- 7.3.2 The minimum advance notice period for inspection shall be given below:

- i. Inspection within INDIA : 7 Days
- ii. Overseas (Outside India) Inspection : 30 Days

Supplier to strictly adhere the above mentioned minimum advance notice period.

7.3.3 Supplier shall plan the inspection visits required in a manner so as to achieve maximum inspection stages attended with minimum possible inspection visits/ time where-in more than one external inspection agencies are involved for single inspection activity, inspection by all agencies may be done concurrently.

#### 7.4 Inspection Methodology

7.4.1 Suppliers shall ensure internal inspection before offering inspection to OWNER or its representative. Internal test certificates and previous stage inspection reports to be made available during inspection.

7.4.2 During inspection, Supplier to produce copies of the latest revision of the approved MQP along with drawings, Data Sheet, Standard and accepted type test reports as indicated in approved MQP / agreement to ensure that the inspection is carried out as per the latest revision and approved documents. **If required, Supplier to arrange the necessary codes and standards for reference purposes.**

In case inspection cannot be completed or undertaken due to reasons such as non-readiness of material, back up documents, false inspection call etc. then such reason shall be recorded in Inspection Report. **If Supplier fails to offer the item / equipment for inspection as per the agreed date, he is liable to pay for the time and expenses for the abortive visit of the OWNER or its representative.**

7.4.3 All inspection related documents i.e. mill test reports, Supplier inspection/ tests reports, all inspection/ tests carried out including other records such as stress relieving charts, radiographic reports and other non-destructive testing records in accordance with provision of contract shall be submitted in original form. All such reports shall be duly endorsed/ certified by the main supplier.

7.4.4 Results of Tests and copies of Inspection Report, Test reports, original material test certificates (MTCs), calculations, performance curves etc. shall be promptly made available to the OWNER or its appointed representative by the Supplier, in accordance with this document and shall form part of the subsequent Manufacturers Test Record Book in accordance with the requirements of this document.

7.4.5 Supplier to ensure that all the materials are properly identified/ coded to confirm traceability and correlation purposes.

7.4.6 Supplier shall take special care including packing to protect the final painting and finish product (equipment / item) during handling, transportation, storage and execution stage so that there is no damage occur. In case of any such damage, joint inspection to be carried out at site and necessary action to be taken.

7.4.7 Supplier to ensure finish product is properly identified after completion of inspection and are suitably recorded in Inspection Report by inspection engineer.

## 7.5 Inspection Report & Clearance

### 7.5.1 Inspection Report (IRT)

All inspection visits by OWNER or its appointed agency shall be supported by an inspection report as per the standard format (sample enclosed). Any shortcoming observed w.r.t. approved MQP/ Drawing/ Data Sheet / specification etc. shall be recorded as NCR. IRT shall have detail references of all such NCRs. All such inspection report / NCR shall be jointly signed by supplier and Inspection Engineer. IRT shall be issued to all concern including Supplier and Sub-supplier/ Manufacturer.

### 7.5.2 Inspection Release Note (IRN)

IRN shall be issued only after satisfactory completion of Inspection by OWNER as defined below IRN shall be issued by Tata Power (QA&I dept) thru system in the standard format as closure of particular inspection.

IRN for Category 'A' item (as defined in ICP) shall be issued only after ensuring inspected Equipment / Item meets the requirements of the applicable documents and all NCs have been closed to the satisfaction of Owner. IRN shall be issued in the standard format as closure of particular inspection.

Similarly for Category 'B' items (as defined in ICP) IRN shall be issued after review of inspection report, compliance report and required applicable documents as per approved MQP & Closure of NCs if any are verified and accepted to the satisfaction of Tata Power.

For Category 'C' items (as defined in ICP), IRN shall be issued after review of original manufacturer test certificates, Certificate of Conformance (CoC) from supplier/contractor in Tata Power standard format and required applicable documents as per MQP approved by main supplier / as per their standard procedure are verified and accepted

## 7.6 Material Dispatch Clearance Certificate (MDCC)

Supplier shall obtain dispatch clearance (MDCC) from Project / Plant based on IRN prior to dispatch of any billable material / equipment/ item from manufacturer place to our project site / plant. One set of Quality Dossier (hard copy) for which MDCC has been issued, shall be sent to project site along with material / equipment/ item.

MDCC is not required for material / equipment/ item/ Part supply which are dispatched from one sub-supplier works to another sub-supplier/ supplier works for further assembly and testing (to make it billable). However, clearance in the form of Inspection Report (IRT) is needed in this regard.

## 8.0 QUALITY DOSSIER (FOR SUPPLY PORTION) [Package wise]

Supplier shall compile and submit all stage and final inspection reports as per approved MQP, duly reviewed and endorsed by inspection engineer for reference and records of OWNER. Documents shall be submitted with-in 4 weeks of issuance of final MDCC

Dossier shall consist of following documents, as minimum:

- i. Index Sheet
- ii. Approved bill of material of package.

- iii. All Approved documents (MQP, Drawings & Data Sheet etc.)
- iv. MDCC, IRN & IRT along with all closed NCR of all items.
- v. Factory Acceptance Test (FAT) reports.
- vi. Raw material and bought out item MTC's
- vii. Test Reports corresponding to IRT & MQP.
- viii. Supplier internal inspection reports as per MQP.
- ix. Copy of Statutory and IBR certificates as applicable.

**Note:**

- 1. Each package compilation shall be done on the basis of unit wise and common systems.
- 2. Each volume/ dossier shall be spiral/ hard bounded. Each sheet of dossier to have running numbers.
- 3. One hard copy (in addition to the dossier dispatch with material / equipment/ item) and 2 Soft copies of documents to be submitted as final dossier.

**9.0 FQC DURING CONSTRUCTION AND PRE-COMMISSIONING.**

- 9.1 Supplier Quality Management System is applicable for field activities also and for his further sub agencies deputed at project / plant. Refer clause no: 5.0 (applicable part). Supplier/ Contractor shall deploy sufficient no of QA/ QC persons to take care of daily activities as per agreed/ approved Quality documents. Some of such activities are detailed below. Also QA/ QC head shall regularly co-ordinate with OWNERs FQC team.
- 9.2 Raising of inspection calls on regular basis for various activities as indicated in approved FQP/ other document, carrying out inspection activities along with OWNER's execution / FQC department and maintaining the records duly signed by all concerned.
- 9.3 Various inspection/ quality assurance procedures/ methods at different stages of erection and pre-commissioning will be as per OWNERs approved field quality plans/ codes/ IBR and other statutory provisions and as per OWNER's engineer's instructions.
- 9.4 Preparation of quality assurance log sheets and protocols, welding logs, NDE and post weld heat treatment records, testing & calibration records and other quality assurance documentation as per OWNER's engineer's instructions is within the scope of work/ specification. These records shall be submitted to OWNER for approval from time to time.
- 9.5 A daily logbook of all measurements and testing/ calibration should be maintained by contractor on the job inspection details for various equipment.
- 9.6 All the workers of contractor / sub contractor/it's agencies shall carry identity cards as per the Performa prescribed by OWNER. Only workers duly authorized by OWNER shall be engaged on the work.
- 9.7 Contractor shall provide all the measuring and monitoring devices (MMD) required for completion of the work satisfactorily. These MMDs shall be calibrated & conform to job requirement in respect of measurement range, accuracy level & any other specification.

- 9.8 Re-work necessitated on account of use of invalid MMD shall be entirely to the contractor's account. Contractor shall be responsible to take all corrective actions, including resource augmentation if any, as specified by OWNER to make-up for the loss of time.

**OWNER's FQC team / QAI representative will have the right to carry out Surveillance Audit of supplier/contractor and their agencies including their store without any prior intimation.**

- 9.9 Regular Internal audit shall be conducted by supplier/ contractor QA/QC team of their agencies and their other dept. Such audit reports shall be made available whenever ask for by OWNER FQC team. OWNERs FQC/ QA&I have the right to carryout 2<sup>nd</sup> party audit of supplier/ contractor and their agencies as per predefined Audit schedule.

In course of work OWNER may counter/ finally check the measurements with their own MMDs. Contractor shall render all assistance in conduct of such counter check/ final measurements.

9.10 **Communication**

Direct, formal communication between the SUPPLIER's field QC and OWNER's field QC representative is mandatory. All inspection activities as per field quality plan shall be intimated to OWNER in the form of Request for Inspection (RFI) at least 24 hrs. in advance with intimation to OWNER execution group.

Whenever any major issues / deviations related to design or fabrications are noticed, the same shall be immediately informed to OWNER's field QC by supplier's field QC/ Supplier Project Head. On completion of above activity, joint inspection reports/ protocol shall be made and circulated to concern agencies. Any part of work at the site shall not be **covered up or made inaccessible** without the OWNER Representative's prior approval in the form of joint protocol or otherwise.

SUPPLIER/ Contractor's in-progress inspection reports, log book, follow up/ punch out sheets; records of all DT & NDT etc. shall be made available to OWNER field QC during the course of the work. At the end of the work, SUPPLIER/ Contractor's standard inspection reports, check off sheets, radiographs, master copy of loop diagrams, electrical testing data sheets, etc. shall be handed over to OWNER in an organized and agreed format. SUPPLIER/ Contractor shall verify that all of the required documentation of the equipment has been received and placed in the equipment files. The SUPPLIER/ Contractor is responsible for obtaining any outstanding documentation from his sub-supplier/ agencies.

9.11 **Dealing with open Punch Points NCR/QCAR:**

All open points in the form of observations, non-conformities (NCR, QCAR etc.) that are not responded / closed in time as well as, those were not put up by supplier/ Contractor for resolution/ agreement to OWNER, the same will be considered as violation of contractual obligations and will be dealt suitably during closure of contract. Penalty clauses (if any) shall be applicable as per contract.

Supplier/ Contractor's Performance rating will be impacted as per prevailing policy of OWNER in this regard.

**10.0 ATTACHMENT**

1. Exhibit A – MQP Format
2. Exhibit B – FQP Format
3. Exhibit C – Shop Inspection Request Format
4. Exhibit D – ICP Format
5. Exhibit E – IRN Format
6. Exhibit F – Suggested MDCC Format
7. Exhibit G – RFI Format (For Site Inspection Request)
8. Exhibit H – NCR Format
9. Exhibit I – QCAR Format
10. Exhibit J – Weekly Progress Report format

Exhibit - A

Supplier Logo	<b>THE TATA POWER COMPANY LIMITED</b>	 <b>TATA</b> <b>TATA POWER</b> Document No Page 1 of 1
Supplier Document No	<b>PROJECT NAME</b>  <b>Supplier Name &amp; Address</b>	

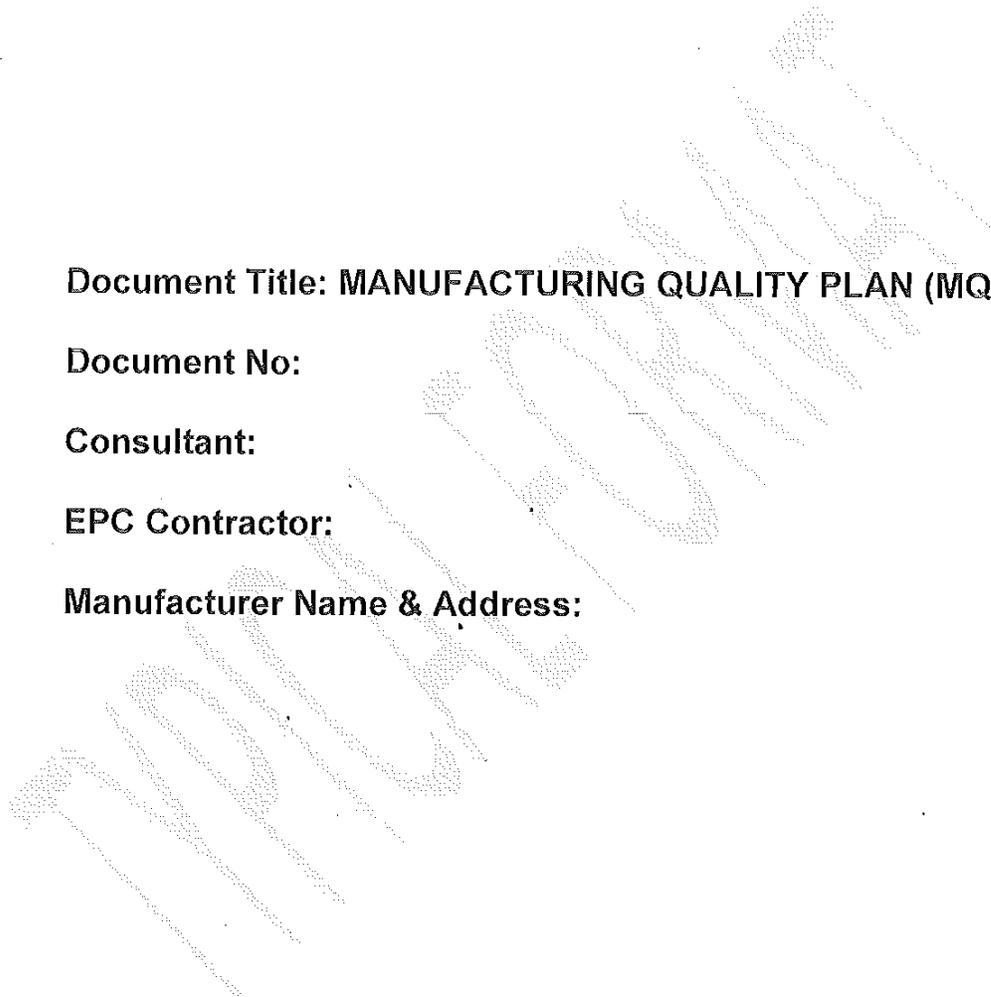
**Document Title: MANUFACTURING QUALITY PLAN (MQP)**

**Document No:**

**Consultant:**

**EPC Contractor:**

**Manufacturer Name & Address:**



R1					
R0					
Revision	Date	Reason for Revision	Prepared By	Checked By	Approved By

Supplier Logo

Manufacturing Quality Plan for .....

Document No.  
(As given by PDM, Tata Power)

Supplier Document No

Manufacturer Name & Address

Date & Revision

PACKAGE NAME

Page .. of .....

SR. NO.	COMPONENT Description / Activity	CHARACTERISTICS	TYPE OF CHECK	EXTENT OF CHECK	REF. DOCUMENT / ACCEPTANCE NORM	FORMAT OF RECORD	AGENCY			REMARKS
							M	S/C	O	
1	2	3	4	5	6	7		8	9	
	1.0 MATERIAL:							P	R	R
	2.0 IN-PROCESS INSPECTION:									
	3.0 FINAL INSPECTION:									
	4.0 ISSUANCE OF IRN (BY REVIEWING OF QUALITY DOSSIER)									

- N  
O  
T  
E
- a). Statutory requirements will be complied by the contractor/ Supplier.
  - b). Material samples drawn for check testing will be witnessed by TATA POWER or its representative.
  - c). For stage inspections, copies of relevant documents will be furnished to TATA POWER for review.
  - e). The extent of check for manufacturer shall be 100%.
  - f). Column 6 will be as per TATA POWER approved drawings / data sheets / contract documents wherever applicable.
  - g). All instruments shall have valid calibration certificate with traceability to national level.

Legends: M – Manufacturer, S – Supplier C – EPC Contractor, O – Owner (Tata Power), P – Perform, W – Witness, R – Documents Review, H – Hold point, Rw (%) – Random Witness

**Exhibit - B**

	TATA POWER CO. LTD. (QA, I & T DEPARTMENT)	<b>DIVISION:</b>
	FIELD QUALITY PLAN	Document No. :-
		Rev :    Date :

**Document Title: FIELD QUALITY PLAN (FQP)**

**Document No:**

**Consultant:**

**EPC Contractor:**

**Contractor's Name & Address:**

Rev No.	Date	Reason for Revision	Approvals		
			Prepared By	Checked By	Approved By



**TATA POWER**

The Tata Power Company Limited  
Corporate Engineering-Quality Assurance Inspection & Testing.



Doc. No.:

**STANDARD FQP FOR**

Date of Issue:

Sr. No	COMPONENT / OPERATION	CHARACTERISTICS CHECKED	CLASS OF CHECK	TYPE OF CHECK	EXTENT / FREQUENCY OF CHECK	REFERENCE DOCUMENTS / ACCEPTANCE NORM	FORMAT OF RECORD	REMARKS
1	2	3	4	5	6	7	8	9

**N O T E**

A) STATUTORY REQUIREMENTS WILL BE COMPLIED WITH BY THE CONTRACTOR.  
 B) FOR STAGES WITNESSED / DOCUMENTS REVIEWED BY TATA POWER, COPIES OF RELEVANT DOCUMENTS WILL BE FURNISHED TO TATA POWER.  
 C) TATA POWER / ITS REP. IDENTIFICATION STAMP ON MATERIALS WILL BE PRESERVED / GOT TRANSFERRED BY TATA POWER / ITS REP. AT APPROPRIATE STAGES. (IF REQUIRED).  
 D) THE EXTENT INDICATED IN COLUMN 6 IS IN CONTRACTOR'S SCOPE. TATA POWER MAY INSPECT AS PER THIS COLUMN OR RANDOM SAMPLES AT IT'S DISCRETION.  
 E) COLUMN 7 WILL BE AS PER TATA POWER APPROVED DRAWINGS / DATA SHEETS / CONTRACT DOCUMENTS WHEREVER APPLICABLE.  
 F) INSTRUMENTS FOR LEAK TESTS AND PERFORMANCE TESTS WILL HAVE VALID CALIBRATION CERTIFICATE WITH TRACEABILITY TO NATIONAL LEVEL.

**Critical** Category is HOLD point.

This activity required inspection / Verification & acceptance by inspection authority responsible for this stage before further processing is permitted.. 24 Hrs advance notice to be given to TATA POWER FQC. Contractor /sub contractor shall not process activity beyond HOLD point without written permission by TATA POWER FQC.  
 This activity shall be performed by Main & Sub- Contractor (Execution + FQC) & witnessed jointly by TATA POWER (Execution + FQC).  
 (Surveillance by Head FQC / Project Head).

**Major** Category is Witness point.

This activity required inspection / Verification & acceptance by inspection authority responsible for this stage before further processing. 24 Hrs advance notice to be given to TATA POWER (Execution) . Contractor /sub contractor shall not process activity beyond Witness point without written permission by TATA POWER (Execution).  
 This activity shall be performed by Main and Sub- Contractor (Execution + FQC) & witnessed by TATA POWER Execution & Surveillance by FQC.

**Minor** Category is Review point.

This activity required review of documents by TATA POWER for the compliance & acceptance. However 24 Hrs advance intimation to be given to TATA power (Execution).  
 This activity shall be performed by Main and Sub- Contractor (Execution +FQC) .  
 ( Surveillance by Execution / Project Head ).

TATA POWER reserves the right to carryout surveillance at any point of time through FQC.

**TATA POWER**

The Tata Power Company Limited  
Corporate Engineering-Quality Assurance Inspection & Testing.



Doc. No.:

STANDARD FQP FOR

Date of Issue:

Sr. No	COMPONENT / OPERATION	CHARACTERISTICS CHECKED	CLASS OF CHECK	TYPE OF CHECK	EXTENT / FREQUENCY OF CHECK	REFERENCE DOCUMENTS / ACCEPTANCE NORM	FORMAT OF RECORD	REMARKS
1	2	3	4	5	6	7	8	9

**STORAGE TYPE:**

- TYPE-1: OPEN AREA & ABOVE GROUND ON WOODEN PLANK WITH SLOPE FOR WATER DISPOSITION.
  - TYPE-2: OPEN AREA & ABOVE GROUND ON WOODEN PLANK (WITH SLOPE FOR WATER DISPOSITION) AND COVERED WITH TARPAULIN.
  - TYPE-3: OPEN SHED WITH FULLY FORMED FLOORING/CEMENT FLOORING.
  - TYPE-4: COVERED SHED/STORE ROOM ON RACKS & IDENTIFIED LOCATION.
  - TYPE-4A: CLOSED CHAMBER WITH TEMPERATURE & HUMIDITY CONTROL.
- NOTE: Items/equipments having shelf life like paints, alumina, desiccant etc. are to be stored separately for identification purpose.

Rev. No	Reason for Revision	Prepared By & Date	Checked By & Date	Approved By & Date	Issued By.
RO	ISSUE FOR USE				

Confidential and Proprietary -- The Tata Power Company Limited

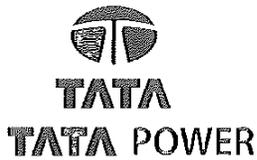


Exhibit - C

Tata Power QA&I  
Request No:  
Date:

Corporate Engineering – QA&I  
Factory Inspection Request Format

<b>Project Name:</b>	
<b>Main Supplier</b>	
<b>Package Name:</b>	
<b>Tata Power P. O. / LOI No.</b>	<b>Date</b>
<b>Item / Equipment offered for inspection:</b>	
<b>Inspection Category:</b>	A / B / C
<b>Sub-supplier (Manufacturer) name &amp; PO Number:</b>	
<b>Type of Inspection:</b> (Please mention the stage number of MQP which will be completed during this inspection)	<b>Stage / Final</b>
<b>Proposed Date of Inspection:</b>	
<b>Place of Inspection:</b> (Please give completed address where material will be inspected, attach route map if required)	
<b>Contact Person for this Inspection along with Mobile No.:</b>	
<b>MQP Doc. No. :</b> <b>Rev. No.:</b> <b>MQP Approval Status:</b>	<b>Yes / No</b>
<b>Inspection Reference Document No:</b> <b>(Drawing/ Data Sheet etc.) approval status</b>	<b>Yes / No</b>
<b>Tata Power PO Item numbers / Billing Breakup No./ Tag No</b> <b>(as applicable) and quantity to be inspected:</b> (Please attach separate list if necessary)	
<b>Current Manufacturing Status (in brief) of item / equipment being offered in this Inspection:</b>	

We hereby confirm that the items have been fully inspected / tested by us, all stages of inspection as per approved MQP have been done and all material test certificates, Q.C. records, approved Drawing / Data Sheet, test reports and valid calibration reports of measuring / testing instruments with traceability are ready with us.

(Signature)

[Name & Designation of Contractor's Representative]

Supplier Logo  Supplier Document No.	<b>THE TATA POWER COMPANY LIMITED</b>	 <b>TATA</b> <b>TATA POWER</b> Document No Page 1 of 1
	PROJECT NAME	
	<b>Supplier Name &amp; Address</b>	
	ICP - PACKAGE NAME	

**Document Title: INSPECTION CATEGOROZATION PLAN (ICP)**

**Document No:**

**Consultant:**

**EPC Contractor:**

**Supplier:**

R1					
R0					
Revision	Date	Reason for Revision	Prepared By	Checked By	Approved By

*Document No: Given as per procedure of Tata Power*



Supplier Logo  Supplier Document No.	<b>THE TATA POWER COMPANY LIMITED</b>	 <b>TATA</b> <b>TATA POWER</b> Document No Page 1 of 1
	PROJECT NAME	
	<b>Supplier Name &amp; Address</b>	
	ICP - PACKAGE NAME	

Sl. No.	Item Description	Imported / Domestic	Manufacturing / Bought Out	Manufacturing Quality Plan No. (No. given as per TATA Power Procedure)	Inspection Category	First Schedule Submission Date*	Final Approval Date*
1	Example: PUMP				A / B / C		
2							
3							
4							
5							
6							

\*Dates indicated are for monitoring purposes of Tata Power Quality Team.

Category "A"	Definition: Manufacturing Quality Plan (MQP) shall be approved by TATA POWER. Stage &/ or Final Inspection including document review by EPC Contractor and TATA POWER (or its appointed Inspection Agency) as per approved MQP.
Category "B"	Definition: Manufacturing Quality Plan (MQP) shall be approved by Tata Power. Stage &/ or Final Inspection including document review by EPC contractor or Tata Power (in case no EPC Contractor) as per approved MQP. Inspection report of EPC contractor/ Supplier with supporting documents review by Tata Power.
Category "C"	Definition: Supplier shall carry out inspection as per their regular practice/ standard manufacturing quality plan. Supplier shall submit test report and COC to EPC Contractor/ Tata Power. COC shall be in standard format of Tata Power.
Note:	1. Any item which is not appearing in above list, however, identified during detailed engineer, same need to be categorized as above. 2. If supplier is not able to submit test report for any Category "C" item, same needs to be finalize during ICP approval.

Document No: Given as per procedure of Tata Power





 <b>THE TATA POWER COMPANY LIMITED</b> <b>MATERIAL DISPATCH CLEARANCE CERTIFICATE</b>			
<b>TATA POWER</b>			
MDCC REFERENCE:			DATE:
PROJECT			
P.O. REF.			
PACKAGE		QAI&T "Clearance For MDCC" REF No.	
SUPPLIER		SUB-SUPPLIER	

Dispatch clearance is hereby given for following equipment/ items:

Sr. No	PO Item No./ BBU	Item Description	Unit	Quantity	Identification/ S. No./ Remarks

PACKING AND DISPATCH INSTRUCTIONS			SUBMIT FOLLOWING TO TATA POWER		
1	Complete assembly with drive, base plate, accessories etc.	1	Quality Dossier	7	As built drawings.
2	Protect machined surfaces against corrosion.	2	Erection, O&M manual.	8	Calibration reports.
3	Blank nozzles and other openings.	3	T.C. for performance / leak tightness / balancing.		
4	Complete painting, affix name plates, tag no., sr. no., etc.	4	Performance calculations, curves.		
5	Pack to prevent damage/ deterioration in handling, transit & storage	5	Guarantee certificates.	9	Dispatch details.
6	Paint dispatch markings and weight.	6	Manufacturing Test Records/ Test Certificates/ COC		

(Please tick above Packing & Dispatch instructions and Documents Requirements as applicable)

**Special Dispatch Instructions (If any):**

	Prepared By:	Approved By:
Signature		
Name		
Designation		
Date		

**NOTES:**

- Acceptance / release of the above items is without prejudice to the terms and conditions of the contract and does not relieve the CONTRACTOR/ SUPPLIER of his guarantees and responsibilities to supply the items in accordance with the specifications, approved drawings, data sheets and other relevant contract documents / conditions.
- CONTRACTOR/ SUPPLIER shall comply with the packing and dispatch instructions and documentation requirements given above.



	<b>Field Inspection Requisition</b>		Requisition No.:
	Project :		Date:
	Name of package & Unit No:		
	Agency:		
	Sub Agency:		
<b>INSPECTION/ TEST REQUISITION DETAILS</b>			
1. FQP No. with Rev. & Category of Approval			
2. Test reference of FQP			
3. Category of Test nas per FQP			
4. Applicable Drawing No. with Rev:			
5. Location			
Date and time for inspection / test			
7. Open QCAR/NCR No. (if any) & date against this item/equipment			
It is hereby certified that all previous tests / checks are cleared and no QCAR other than above is pending against this item / equipment			
(Signature) Agency Representative		(Signature) OWNER (Execution)	
8. Post Inspection/ Test (Joint Protocol) : ACCEPTED / NOT ACCEPTED / ACCEPTED WITH CONDITION			
Brief Description:			
(Signature) Agency Representative		(Signature) OWNER (Execution)	(Signature) OWNER (FQC)



	TATA POWER COMPANY LIMITED	Corporate Engineering - QAIT
	Non Conformity Report	NCR No: Date
Project / Plant:		
Tata Power PO No.		Package/Equipment:
Supplier:		Location:
Inspection Report Reference:		Date of issuance of NCR:
Reference Documents: (QA Manuals, Specification, Procedure, Drawing, etc.)		
Requirements as per approved documents, codes and standards:		
Details of NC (Provide complete description, i.e. what, where, how many , item no. etc):		
Root Cause Analysis:		
Corrective Action Proposed:		Preventive Action Proposed:
Supplier Representative Sign. / Date		Tata Power / TPIA Representative Sign. / Date
Engineering Review & Approval for proposed corrective action:		
Engg. Representative Sign. / Date		
Corrective Action Taken:		
Supplier Representative Sign. / Date		
Verification of Correction Action:		
Tata Power / TPIA Representative Sign. / Date		



**Exhibit - I**

	<b>TATA POWER COMPANY LIMITED</b>	<b>Corporate Engineering-QAI&amp;T</b>
	<b>Quality Corrective Action Report ( QCAR )</b>	Doc No.: QAI & T /QCAR Rev.0      Date : 10/09/12

<b>Project / Plant:</b>		<b>Report No.:</b>	
<b>Supplier/Package/Equipment:</b>		<b>EPC Contractor:</b>	
<b>Date of observation:</b>		<b>Date of issuance of QCAR:</b>	
<b>Discipline: Mechanical</b>		<b>Mechanical/Electrical /Civil/C&amp;I: Civil (Structural Work's)</b>	
<b>From</b>		<b>Email ID</b>	
<b>To</b>		<b>Email ID</b>	

**Quality Observations :**

<b>Supplier Sign /Date &amp; Time</b>	<b>EPC Contractor Sign /Date &amp; Time</b>	<b>TATA POWER COMPANY LTD</b>	
	<b>Construction Rep                      QA/QC Rep</b>	<b>Construction Rep</b>	<b>QC Rep.</b>

**Root Cause Analysis :**

<b>Corrective Action Proposed :</b>	<b>Preventive Action Proposed :</b>

<b>Supplier Sign /Date &amp; Time</b>	<b>EPC Contractor Sign /Date &amp; Time</b>	<b>TATA POWER COMPANY LTD</b>	
	<b>Construction Rep                      QA/QC Rep</b>	<b>Construction Rep.</b>	<b>QC Rep.</b>

**Engineering Review & Approval for proposed corrective action: (Applicable: YES/NO)**

Tata Power Engg. Rep.  
Sign. / Date & Time

**Corrective Action Taken:**

<b>Supplier Sign /Date &amp; Time</b>	<b>EPC Contractor Sign /Date &amp; Time</b>	<b>TATA POWER COMPANY LTD</b>	
	<b>Construction Rep                      QA/QC Rep</b>	<b>Construction Rep.</b>	<b>QC Rep.</b>

**Verification of Correction & Preventive Action:**

Tata Power Head- Construction.  
Sign. / Date & Time

Tata Power Head- QC  
Sign. / Date & Time

Copy to HOD –QAI&T, Mumbai.



Exhibit - J

Name of the Project FQC Team		Name of the Project Weekly Field Quality Report (00/00/2015 - 00/00/2015)											
FIELD QUALITY REPORT (CIVIL/ MECH./ELECT.)													
<b>A. FIELD INSPECTIONS</b>													
Sl. No.	Contractor/ Dept.	Work Area	FQ Activity/Test	UOM	Recd.	Acc.	Rep/Rej	Hold	Observations/Remarks				
<b>B. RA BILLS / GRN CLEARANCES</b>													
Sl. No.	Contractor/ Dept.	Package	Description	UOM	Recd.	Acc.	Rep/Rej	Hold	Observations/Remarks				
<b>C. QCAR'S RAISED / AUDIT / DELTAS</b>													
Sl. No.	Contractor/ Dept.	Package	Description	Date	Observations/Remarks								
<b>D. MEETINGS - INTERNAL AND WITH CONTRACTORS</b>													
Sl. No.	Contractor/ Dept.	Package	Date of meeting	Description									
<b>E. AREAS OF CONCERN</b>													
Sl. No.	Contractor/ Dept.	Package	Description										
<b>F. OTHER ACTIVITIES</b>													
Sl. No.	Contractor/ Dept.	Package	Description										

Note: Areas of concern/highlights shall also include long pending and critical non-conformities.



The Tata Power Company Limited is hereunder referred to as the "Purchaser" or "Company". The person, firm or company selling the goods, the subject of this purchase order is referred to as "Vendor" or "Contractor". The subject of this purchase order is hereinafter referred to as the "Material(s)" or "Goods".

The Contract shall mean the contract as derived from the following:

1. Purchase Order (with 'Commercial Notes' and Annexures to the Purchase Order referred thereon)
2. Technical Specifications.
3. General Terms & Conditions

The documents including all reference document (s) and Annexures forming the Contract are to be read together as a whole and are to be taken as mutually explanatory.

### 1. Price:

Unless otherwise specifically stipulated, the price shall be firm and shall not be subject to escalation for any reason till the validity of this Contract.

Unless otherwise specifically stipulated, the price shall be inclusive of road/ rail worthy water-proof packing & forwarding charges up to effecting delivery at FOT/ FOR despatch point, GST and shall also be inclusive of inland freight, terminal taxes and entry taxes as leviable on the transportation or entry of goods into any local area limits pursuant to the Contract.

### 2. Taxes and Duties:

- 2.1 The Contract Price shall be inclusive of all taxes, duties, including but not limited to GST or any local taxes, levies imposed by State/Central/Local governments
- 2.2 Taxes as mentioned in the Contract Price or Price Schedule shall be paid to the contractor subject to the Contractor complying with all the statutory requirements and furnishing the relevant documents including error free invoices containing detailed break-up of the taxes
- 2.3 However the payment of GST or local levies shall be restricted to the total amount as indicated in the price schedule.
- 2.4 Any duties, levies or taxes not mentioned in Contract Price or Price Schedule but applicable as per any statute (s) shall be deemed to be

Rev. date: 25 July 2017

included in the Contract price and shall be to the account of the Contractor.

- 2.5 Any statutory variation in duties, levies or taxes if applicable and specified in this Contract till the scheduled date for supply of Goods and limited to direct invoices of the Contractor shall be to the account of Purchaser. The Contractor shall have the obligation to provide the necessary documentary evidence / supporting by way of gazetted notifications etc. to prove the change in such levies or taxes between the due date of submission of the Bid and the scheduled date of supply of goods to claim the difference.
- 2.6 The Contractor shall pass on to the Purchaser all the benefits of either reduction in tax rates, exemptions, concessions, rebate, set off, credits etc. or introduction of new tax rates exemptions, concessions, rebate, set off, credits etc. pertaining to all taxes, duties, imposts, fees and levies in respect of the supplies of Goods or performance of obligations under the contract. This would specifically include reduction of tax rates as a result of statutory changes or judicial rulings.
- 2.7 Any other taxes, levies and duties not mentioned in Contract Price or Price Schedule but applicable as per any statute (s) or introduction (omission) of new taxes, levies and duties shall be deemed to be included in the Contract Price and shall be to the account of the Contractor.
- 2.8 For facilitating availment of a credit, set-off, rebate, drawback or like benefit available to the Purchaser, the Contractor will facilitate the Purchaser by providing the necessary documentary and/or procedural support. In any process of assessment or re-assessment, of taxes payable by the Purchaser. Wherever expressly agreed the purchaser would provide the statutory form 'C' to the seller for availing the concessional rate of Central sales tax.
- 2.9 The Contractor shall bear and pay all the costs, liabilities, levies, interest, penalties in respect of non-compliances of any legal requirements as per various statutory provisions. The contractor shall keep the owner indemnified at all times from any tax liability, interest, penalties or assessments that may be imposed by the statutory authorities for non-compliances or non-observation of any statutory requirements by the Contractor.
- 2.10 Purchaser shall pay the invoices to the Vendor after necessary deductions as prescribed under the applicable law, income - tax or other

deductions under the State Tax laws as may be applicable to the Contract.

### **3 Packing details:**

Packing details: The material must be packed in suitable packing to suit the mode of transport and to ensure its safe receipt at point of delivery. Any damage to material noticed at the time of delivery at site, due to improper packing or any other reason whatsoever shall be the responsibility of the Vendor. Such damaged goods shall be replaced within 14 days from intimation from the Purchaser.

### **4 Transportation and Unloading at Site:**

The Vendor shall deliver the Material(s) at site/ Stores as per the delivery address specified in the Purchase order. The unloading at delivery shall be organised by the Purchaser unless otherwise specified. The receipt of the material/ equipment is subject to inspection and rejection if Material(s) is found unsatisfactory or any of the clauses under this purchase order are violated.

### **5 Insurance:**

Unless otherwise specified, Purchaser will be responsible to obtain transit insurance for the Material(s). The Vendor shall intimate the Order Manager (as mentioned in the Purchase Order) along with Invoice, packing list, the Railway Receipt/Truck or Lorry Receipt etc. immediately after the consignment is booked, at the e-mail id mentioned in the Purchase order.

### **6 Payment Terms:**

100% payment shall be made within 60 days from the receipt and acceptance of the material at the Consignee Stores/ Site/ Location as per the Contractual terms and conditions herein.

### **7 Bills and invoice:**

The tax invoices should contain the details to comply with the GST Law. The supplier shall:

- i) Furnish (electronically) and communicate to the Owner, the details of Goods or Services supplied by the 10th of the month succeeding the said tax period,
- ii) Upon discovery of any discrepancy, rectify it and shall pay the tax and interest thereof,
- iii) Furnish the returns (electronically), for the inward and outward supplies of

Goods and/or Services, before the specified dates as per the GST Law,  
iv) Communicate the tax paid, credits etc. as and when credited.

v) The Invoice should clearly state the description of the goods, quantity, sale price, tax %, and tax amount;

vi) The Invoice should be signed by an Authorized Signatory.

Bills/Invoices in the name of The Tata Power Company Ltd. with packing lists in triplicate shall be forwarded along with the equipment.

Contractor to furnish GST Registration no. in all invoices as well as Purchaser's (Tata Power's) GST no.

### **8 Transfer of Title and risk:**

The transfer of property and risk of Material(s) shall be deemed to take place as follows:

a. For delivery F.O.R. or F.O.T. despatch point: Transfer of property on handing over the Material(s) to the carrier against receipt of clean Railway Receipt/Truck or Lorry Receipt and such receipt having been handed over to Purchaser. However, the risk of loss shall pass to the Purchaser on delivery of goods at the specified destination.

b. In case the Material(s) are procured by the Vendor from sub-vendors on receipt of duly endorsed documents of title to the goods.

### **9 Contract Performance Bank Guarantee (In case applicable):**

9.1 The Vendor shall within 15 days of issue of this Purchase Order furnish an unconditional irrevocable bank guarantee duly stamped and strictly as per the prescribed format of the Purchaser from any nationalized bank or any scheduled bank having a branch in Mumbai and approved by the Purchaser for a sum equivalent to 10% of the Total value of Order valid for a period not less than 6 months from the expiry of the Warranty period.

9.2 Irrespective of the performance demonstrated as part of the Factory Acceptance Tests Take-over tests / Performance Tests etc, the Purchaser may call for re-validation of performance of the system during the performance guarantee period by conducting fresh performance tests if in its opinion, the

system is not able to deliver the designed performances based on its operational performance results. If the equipment fails to prove the performance during such performance tests, the Purchaser may allow the Vendor to either rectify the system by addition / modification of equipment etc at the Vendor's costs & risk to restore the performance levels. Failure to rectify the system to achieve the designed performance levels may result in imposition of penalties including revocation of the Performance Bank Guarantee and forfeiture of the entire amount under the Performance Guarantee.

- 9.3 In case the Vendor fails to furnish the requisite Bank Guarantee as stipulated above, then the Company shall have the option to terminate the contract besides other contractual remedies.

#### **10 Price reduction:**

- 10.1 The Vendor agrees that time of supply of Material(s) is of prime importance. If the Vendor fails to supply Material(s) before the respective scheduled / fixed date for supply. Company may without prejudice to any other right or remedy available to the Company: -

10.1.1 Recover from the Vendor ascertained and agreed, genuine pre-estimate liquidated damages, and not by way of penalty, a sum equivalent to 1% (of total value of order) per week or part thereof for each week's delay, beyond the scheduled supply date each subject to maximum of 10% of the total order value, even though the Company may accept delay in supply after the expiry of the scheduled supply date. The Company may, at its discretion, set off the aforesaid amounts from any other amounts owed by the Company to the Vendor or recover such amounts in other manner as may be permissible under applicable laws.

10.1.2 Arrange to get supply from elsewhere on account and at the sole risk of the Vendor, such decision of the Company being final and binding on the Vendor; or

10.1.3 Terminate the contract or a portion of supply of the supply work thereof, and if so desired, arrange for the supply in default by the Vendor to be attained from elsewhere at the sole risks and costs of the Vendor.

10.2 Liquidated damages for performance shortfall (if applicable) shall be specified in the Technical Specifications.

10.3 The Liquidated Damages referred in this clause 10 may be recovered by the Company from the Vendor as set off against any monies owed by the Company to the Vendor or in any other manner permissible under applicable laws.

#### **11 Warranties:**

11.1 Materials and Workmanship: Vendor shall fully warrant that all the stores, equipment and component supplied under the order shall be new and of first class quality according to the specifications and shall be free from defects (even concealed fault, deficiency in design, materials and workmanship).

11.2 Should any defects be noticed in design, material and/or workmanship within 12 months after the Material(s) or any portion thereof as the case may be have been commissioned or for 24 months from the date of delivery, whichever period concludes earlier. Purchaser shall inform Vendor and Vendor shall immediately on receipt of such intimation, depute their personnel within 7 days to investigate the causes of defects and arrange rectification/ replacement/modification of the defective equipment at site, without any cost to Purchaser within a reasonable period. If the Vendor fails to take proper corrective action to repair/replace defects satisfactorily within a reasonable period, Purchaser shall be free to take such corrective action as may be deemed necessary at Vendor's risk and cost after giving notice to the Vendor, including arranging supply of the Goods from elsewhere at the sole risk and cost of the Vendor.

11.3 In case defects are of such nature that equipment shall have to be taken to Vendor's work for rectification etc., Vendor shall take the equipment at his costs after giving necessary undertaking or security as may be required by Purchaser. After repair Vendor shall deliver the equipment at site on freight paid basis. Any taxes applicable in relation to this repair shall be to the Vendor's account. All risks in transit to and fro shall be borne by the Vendor.

11.4 Equipment or spare parts thereof replaced shall have further warranty for a period of 12 months from the date of acceptance.

#### **12 Quality, Testing, inspection, installation:**

12.1 All Material(s) supplied under this Contract shall be new and unused.

- 12.2 Wherever a specific Quality Assurance Plan is provided with the Request for Quotation (RFQ) or agreed as part of the commercial/ technical discussions, the same shall be binding on the Vendor.
- 12.3 The material shall be inspected
- a. At consignee end by Purchaser.
  - b. At factory premise of the Vendor/ sub-vendor by Purchaser or third party duly nominated by Purchaser. The Vendor shall extend all necessary co-operation to Purchaser/ third party inspector carrying out the inspection. The Inspector(s) shall have the right to carry out the inspection or testing, which will include inspection and testing of the raw materials at manufacturers shop, at fabricators shop and at the time of actual despatch before and/or after completion of packing.
- 12.4 The Vendor will inform Purchaser at least eight (8) days in advance of the exact place, date and time of tendering the Material(s) for required inspection and provide free access to the Inspector(s) during normal working hours at Vendor's or his/ its sub-Suppliers works, and place at the disposal of the Inspector(s) all useful means for undertaking the Inspection, checking the results of tests performed, marking the Material(s), getting additional tests conducted and final stamping of the Material(s).
- 12.5 Even if the inspection and tests are fully carried out, the Vendor shall not be absolved from its responsibilities to ensure that the Material(s), raw materials, components and other inputs are supplied strictly to conform and comply with all the requirements of the Contract at all stages, whether during manufacture and fabrication, or at the time of Delivery as on arrival at site and after its erection or start up or consumption, and during the defect liability period. The inspections and tests are merely intended to prima facie satisfy Purchaser that the Material(s) and the parts and components comply with the requirements of the Contract.
- 12.6 *All costs associated with the inspection shall be included in cost of Material(s).*
- 12.7 Original material test certificate/ performance test certificate/ fitment certificate/ test reports etc. relevant/ applicable as per the specifications/ standards shall be dispatched along with the material supply failing which the material may be rejected.
- 13 Rejection:**
- 13.1 Rejected goods shall be removed and replaced within 14 days of the date of communication of rejection.
- 13.2 Claim in respect of breakage/shortages in any cases shall be referred on the Vendor within ninety (90) days from the date of receipt of Goods by the Purchaser which shall be replaced/made good by the Vendor at his own cost. All risk of loss or damage to the material shall be upon the Vendor till it is delivered to the purchaser/consignee.
- 14 General Indemnity:**
- The Vendor shall indemnify and keep the Purchaser indemnified from and against any and all claims, costs, liabilities (financial), litigations, compensations, judgments, expenses or damages (including attorney's fees and other related expenses) arising out of any breach or alleged breach of any of the conditions of this Contract, performance of the obligations hereunder, or any representation or misrepresentation made by the Vendor or any third party with regard to the subject of this Contract.
- 15 Indemnity against IPR:**
- The equipment, system, drawings, and other materials that shall be supplied against the order will become the Purchaser's property. Without limitation of any liability of whatsoever nature, the Purchaser shall be indemnified and kept indemnified against any claim for infringement or breach of any of the statues, rules & regulations by the use of or sale of any article or material supplied by the Vendor. The indemnity shall include any infringement of patent, trade mark, design, copyright or other property rights whether in Country of Origin, or elsewhere resulting from the Vendor's design, manufacture, use, supply or re-supply & would also cover use or sale of any article or material supplied by the Vendor to the Purchaser under the Purchase Order. The Indemnity shall cover any claim/action taken by a third party either directly against the Purchaser or any claim/action made against the Vendor & where under the Purchaser is made liable. The

Indemnity shall be for losses, damages, and costs including litigation costs, attorney fees etc incurred by the Purchaser in relation to the Purchase Order.

#### **16 Latent Defects Liability period (if applicable):**

Notwithstanding the inspections, acceptance tests, quality checks etc carried out by the Vendor and witnessed/accepted by the Purchaser, the Vendor shall further warrant the equipment for any latent defects in its design, material or workmanship against the specifications set forth and shall make good any such defects by way of repair or replacement of the part or whole of the defective product at its own cost & risks as and when such latent defects are observed and intimated by the Purchaser and intimated to the Vendor within 36 months of completion of warranty period.

#### **17 Force Majeure:**

- 17.1 In the event of either party being rendered unable by force majeure to perform any obligation required to be performed by it under this Contract the relative obligation of the party affected by such force majeure shall, after notice under this articles be suspended for the period during which such cause lasts. The term 'Force Majeure' as employed herein shall mean acts of God, wars (declared or undeclared), riots or civil commotion, fire, floods, and acts and regulations of the Government of India or State Government or any of the statutory agencies. Both the party shall pay to the other party, the amount payable upon the date of the occurrence of such force majeure.
- 17.2 Upon the occurrence of such cause and upon its termination, the party alleging that it has been rendered unable as aforesaid, thereby shall notify the other party in writing immediately but not later than twenty four (24) hours of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of the claims.
- 17.3 During the period, the obligations of the parties are suspended by force majeure, the contractor shall not be entitled to payment of any rate.
- 17.4 In the event of the force majeure conditions continuing or reasonably expected to continue for a period more than thirty (30) days, Purchaser shall have the option of terminating the contract by giving seven (7) days notice thereof to the contractor.

#### **18 Variation:**

Except for any provisions in this Purchase Order, any change /modification to the terms and conditions of this Order can be issued only by Purchaser or with the prior written approval from Purchaser.

#### **19 Termination**

- 19.1 The Contract shall be deemed to be terminated on completion of delivery of Material(s)
- 19.2 Termination of Default by Vendor:  
Purchaser may terminate the contract at any time if the Vendor fails to carry out any of his obligations including timely delivery under this Contract. Prior to termination, the Vendor shall be advised in writing of the causes of unsatisfactory performance to be improved upon 15 days of the receipt of notice. In case, if the Vendor fails to bring about the improvement to the satisfaction of the Purchaser, then the order shall be terminated.
- 19.3 Without prejudice to the rights and remedies available to Purchaser, Purchaser may terminate the Contract or part thereof with immediate effect with written notice to the Vendor if,:
- 19.3.1 The Vendor becomes bankrupt or goes into liquidation.
- 19.3.2 The Vendor makes a general assignment for the benefit of creditors.
- 19.3.3 A receiver is appointed for any substantial property owned by the Vendor.
- 19.3.4 The Vendor has misrepresented to Purchaser, acting on which misrepresentation Purchaser has placed the Purchase Order on the Vendor.

The Vendor/ Contractor shall not be entitled to any further payment under the Contract if the Contract is terminated. If the order is terminated under clause 19.2 and 19.3, the Vendor shall not be entitled to any further payment, except that, if Purchaser completes the supply of Material(s) and the costs of completion are less than the Total Order value, the Purchaser shall pay Vendor an amount properly allocable to supply of Material(s) fully performed by Vendor prior to termination for which payment was not made to Vendor. In case, the cost of completion of Material(s) exceed the total Order value, the additional cost incurred by Purchaser for such completion shall be paid by the Vendor.

19.4 Purchaser shall be entitled to terminate the Contract at its convenience, at any time by giving thirty (30) Days prior notice to the Contractor. Such notice of termination shall specify that termination is for Companies convenience and the date upon which such termination becomes effective. Upon receipt of such notice, the Contractor shall proceed as follows:

- 19.4.1 cease all further work, except for such work as may be necessary and instructed by the Company/ Company's representative for the purpose of protecting those parts of the supplies already manufactured;
- 19.4.2 stop all further sub-contracting or purchasing activity, and terminate Sub-contracts;
- 19.4.3 handover all Documents, equipment, materials and spares relating to the supply of goods prepared by the Contractor or procured from other sources up to the date of termination for which the Contractor has received payment equivalent to the value thereof; and
- 19.4.4 handover those parts of the supplies manufactured by the Contractor up to the date of termination.

Upon termination pursuant to clause 19.4, the Vendor shall be entitled to be paid the full value on the Material(s) delivered in accordance with the Contract.

19.5 The Contractor shall not be released from any of his obligations or liabilities accrued under the Contract on termination. For the avoidance of doubt, the termination of the Contract in accordance with this clause shall neither relieve the Contractor of his accrued obligations for Warranty or his accrued liability to pay (liquidated) damages for Delay nor shall entitle him to reduce the value of Performance Security.

## **20 Sub letting and assignment:**

The contractor shall not without prior consent in writing of the Purchaser, sublet, transfer or assign the contract or any part thereof or interest therein or benefit or advantage thereof in any manner whatsoever, provided nevertheless that any such consent shall not relieve the contractor from any obligation, duty or responsibility under the contract.

## **21 Dispute Resolution:**

Dispute or differences arising out or relating to this Order shall be resolved amicably by the parties. Failing such amicable resolution of dispute / differences either party may refer the matter to arbitration of a Sole Arbitrator to be appointed jointly by both the parties. The award of the Arbitrator shall be final, binding and conclusive on the parties. The venue for arbitration shall be Mumbai. The Arbitration proceedings will be governed and regulated by the provisions of Indian Arbitration and Conciliation Act, 1996 as amended from time to time and the rules framed there under.

## **22 Governing laws**

This Contract shall be construed in accordance with and governed by the Laws of India without giving effect to any principle of conflict of law.

## **23 Jurisdiction**

This Contract and the transaction contemplated herein shall be subject to the exclusive jurisdiction of the competent Courts in Mumbai only.

## **24 Limitation of Liability**

Notwithstanding anything contained in the Contract, the Contractor's aggregate liability under this Contract shall be limited 100% of the Total order value. This shall however, exclude liability arising pursuant to clause 2.8- tax indemnity, clause 14- General Indemnity, clause 15- Indemnity against IPR, clause 25 – Confidentiality and liabilities arising due to wilful misconduct, gross negligence, third party claims and corrupt acts attributable to the Vendor.

## **25 Confidentiality:**

The Vendor shall use the Confidential Information of the Purchaser only in furtherance of this Contract and shall not transfer or otherwise disclose the Confidential Information to any third party. The Vendor shall (i) give access to such Confidential Information solely to those employees with a need to have access thereto; and (ii) take the same security precautions to protect against disclosure or unauthorized use of such Confidential Information that the party takes with its own confidential information but, in no

event, shall a party apply less than a reasonable standard of care to prevent such disclosure or unauthorized use.

## **26 Consequential Damages:**

Unless otherwise specified, neither Party shall be responsible for and nor shall be liable to the other Party for indirect/consequential losses and damages suffered by such Party including for loss of use, loss of profit whether such liability or claims are based upon any negligence on the part of the other Party or its employees in connection with the performance of the Purchase Order.

## **27 New Legislation (The Micro, Small and Medium Enterprise Development Act 2006)**

- a. This Act has been enacted and made effective from 2nd October 2006. The Interest on Delayed Payments to Small Scale and Ancillary Industrial Undertaking Act, 1993 is repealed.
- b. Vendor is requested to inform the purchaser if vendor fall under The Micro, Small and Medium Enterprises Development Act, 2006 legislation and provide the purchaser, registration number and date to enable purchaser to take necessary care. The vendors are also requested to mention the same on their invoice / bill.

## **28 Relation between parties:**

The Purchase Order shall be entered into on a principal-to-principal basis only. The Purchase order shall not be construed as a partnership or an association of persons. There is no agent and principal relationship between the parties. Each party shall be responsible for its own conduct. The Vendor shall ensure at all times that all the work carried out under this contract either by its own person or through any of its sub-Vendors shall be always done under its own direct supervision.

## **29 Environment / ISO 14001 Certification:**

The Vendor to confirm whether their organization is ISO 14001 certified. If not, the Vendor must certify that the handling, use and disposal of their product / by-products conform to practices consistent with sound environmental management and local statutes. The Vendor shall ensure that all the wastes are disposed in environmental friendly way with strict compliance to applicable laws including

adherence to MoEF guidelines with respect to disposal of batteries, lead waste, copper cables, ash, waste oil, e-waste etc which shall be disposed through MoEF approved parties only. The Vendor shall also be responsible to collect and recycle all the e-waste generated at the end of the product life cycle at its own costs and risks as per the MoEF guidelines/ orders.

## **30 Tata Code of Conduct**

The Purchaser abides by the Tata Code of Conduct in all its dealing with stake holders and the same shall be binding on the Purchaser and the Vendor for dealings under this Purchase Order. A copy of the Tata Code of Conduct is available at our website: <http://www.tatapower.com/aboutus/code-of-conduct.aspx>. The Vendor is requested to bring any concerns regarding this to the notice of our Chief Ethics Officer on the e-mail ID: [cecounsellor@tatapower.com](mailto:cecounsellor@tatapower.com).

## **31 Responsible Supply Chain Management:**

The Purchaser is committed for a cleaner environment and respect of Human rights through its Responsible Supply Chain Management policy. The Vendor is required to comply with all the environment & Human rights related laws, including emission norms, Labour and environmental regulations. The Purchaser encourages its Vendors/ Contractors/ Business partners to pay more attention to green design, green supply, green production, green logistics and green packaging in performing their business obligations.

The Vendor is required to abide by the Tata Power Corporate Environment policy, Energy Conservation and Corporate Sustainability Policy.

A copy of the Responsible Supply Chain Management Policy along with Environment policy, Energy Conservation policy, Sustainability policy, Health & Safety policy and Human Rights policy is available at website: <http://www.tatapower.com/sustainability/policies.aspx>.

Vendor/Bidder is required to completely fill the attached "Supplier Sustainability Questionnaire" in support of their Green Supply Chain Management initiatives and submit the same with their offer.

The Owner recognizes that diversity in the workplace positively impacts business. The Owner is committed to help people from SC/ST background either by helping them to become entrepreneurs or by engaging workforce from SC/ST community under the contracts agreed herein. To encourage engaging SC/ST community, the owner may consider on the merit to incentivize the Contractor by paying additional 1% of the service contract portion if the number of SC/ST workforce engaged in the contract exceeds 30% of the total deployed strength and 2%, if the strength goes beyond 50%. While the Contractor will assist the workforce so engaged to become self-reliant in meeting the work expectation, the Owner may also volunteer its training resources to the extent possible to improve their employability. The Contractor shall maintain the proper documentation of such category of the workforce engaged and the owner may consider to pay the incentive after its verification.

The Owner may also consider extending price preference of 5% in the bid evaluation for an order value up to Rs.50 Lacs, provided the company is owned by a person from SC/ST community having minimum 50% holding in the company.

### **32 Vendor rating**

You are requested to ensure compliance to the terms of the individual orders with regards to timely delivery, provision of all applicable documents / challans / test certificate, quality of the material etc. Your performance with respect to the said factors will be taken into consideration for future business.

### **33 Vendor Feedback:**

- 33.1 In this dealing Vendors feedback is important for the purchaser to improve its processes. If vendor have to report any grievance, problem or require any clarification, information, vendor is requested to contact purchaser at email ID: [CC\\_CUSTOMERFEEDBACK@tatapower.com](mailto:CC_CUSTOMERFEEDBACK@tatapower.com)
- 33.2 Vendor is requested to ensure compliance to the terms of the individual orders with regards to timely delivery, provision of all applicable documents / challans / test certificate, quality of the material etc. Vendor performance with

respect to the said factors will be taken into consideration for future business.

### **34 Non-Waiver:**

Failure of Purchaser or its representatives to insist upon adherence to any of the terms or conditions incorporated in the Contract or failure or delay to exercise any right or remedies herein or by law accruing, or failure to promptly notify the Vendor in the event of breach or the acceptance of or the payment of any Material(s) hereunder or approval of any design or Material(s) shall not release the Vendor and shall not be deemed a waiver of any right of Purchaser to insist upon the strict performance thereof or of any of its rights or remedies as to any such Material(s) regardless of when the Material(s) are shipped, received or accepted not shall any purported oral modification or revisions of the Contract by Purchaser or its representative(s) act as waiver of the terms hereof.

### **35 Repeat Order:**

Purchaser may place the repeat order for 100% of ordered quantities within a span of 6 months from the date of issue of this Purchase Order & Vendor shall execute it at same rates, terms and conditions.

### **36 Severability**

If any provision of this Contract is invalid, unenforceable or prohibited by law, this Contract shall be considered divisible as to such provision and such provision shall be inoperative and shall not be part of the consideration moving from any Party hereto to the others, and the remainder of this Contract shall be valid, binding and of like effect as though such provision was not included herein.

# **ESG FRAMEWORK FOR BUSINESS ASSOCIATES**

Tata Power's Sustainability philosophy sits at the core of its Business Strategy. Tata Power Sustainability Model has an overarching objective of 'Leadership with care' with key elements of 'Care for the Environment'; 'Care for the Community'; 'Care for our Customers / Partners' and 'Care for our People'. These sustainability objectives encompass the Environmental, Social and Governance objectives driven as integrated elements.

Tata Power, together with its stakeholders is determined to achieve sustainable growth while creating shared value for all.

As a part of future ready roadmap, Tata Power has targeted following as our Environment, Social and Governance priorities:

- Being Carbon Net Zero before 2045
- Growing Clean capacity (80% by 2030)
- Customer centricity
- Becoming water neutral before 2030
- Achieving zero waste to landfill before 2030
- No net loss of biodiversity before 2030
- Positively impacting 80 million lives by 2027

In order to create a sustainable business ecosystem, Tata Power expects that all its Business Associates (BA) which includes its suppliers, vendors, consultants and service providers to align to its ESG and sustainability commitments.

Tata Power encourages improved efficiencies and scaling up of green initiatives through technology and innovation taking us farther on the journey of reducing carbon emissions and preparing the entire eco-system towards products and services that would have net positive impact on the environment and communities that we operate in.

The Vendors/ bidders wishing to associate with Tata Power are expected to share their own sustainability and ESG journey. We at Tata Power promote all Business Associates to have a sustainable procurement policy for their supplier and service providers to contribute to our integrated approach in achieving a sustainable supply chain. The BA is encouraged to carry out the assessment of their sub-contractors and sub-vendors on sustainability readiness so that they are aware of the expectation/ business requirement.

The Vendor/ Bidder shall fill-in the 'Environment, Social and Governance Compliance Screening Questionnaire for Business Associates' attached at Annexure-I and submit the same along with the Bid in Ariba online platform.

### **Responsible Supply Chain Management:**

Tata Power is committed for a cleaner environment and respect of Human rights through its Responsible Supply Chain Management policy.

Tata Power Business Associate (BA) shall comply with all the environment & Human rights related laws, including emission norms, Labour and environmental regulations.

Tata Power encourages its BA to focus on green design, green supply, green production, green logistics and green packaging in performing their business obligations. The BA is expected to abide by the Tata Power Corporate Environment policy, Energy Conservation and Corporate Sustainability Policy (enclosed with this document as Annexure-II).

The BA is expected to:

- Strive towards Conservation of Energy, Water, Resources and optimize transportation of Men & Materials to minimize environmental impact and reduce carbon footprint.
- Carry out the assessment of materials used for construction, operation & maintenance, consumables and accordingly phase out those materials which are environmentally hazardous.
- Be cognizant that diversity in the workplace positively impacts business.
- Promote affirmative action by supporting people from SC/ ST background by engaging workforce from SC/ ST community under the contracts agreed herein.
- Share the commitment of 'No child labour', 'No forced labour', Non-discrimination on the basis of caste, colour, religion, gender, disability, maternity or pregnancy or any other factor unrelated to the requirements of the job
- Pay the wages or remuneration to the workforce, personnel deployed in compliance to all applicable laws and regulations.
- Provide its employees/ deployed labor with an employment environment that is free of physical or psychological harassment.
- Carry out the assessment of their Sub-contractors on their Sustainability Readiness so that they are aware of the above expectation/ standards
- To ensure usage of suitable package material which is more environmentally sustainable. Further the packing material shall be recycled to the extent possible. The material used for packing is expected to suit the mode of transport and to ensure its safe receipt at point of delivery.

#### **Waste Disposal:**

The BA is expected to follow best practices for disposal of waste, few of which are listed below:

- Have a detailed project plan that includes the waste management, segregation of all designated waste material (Recyclable/ Non-Recyclable), collecting, storing, disposing and transferring the same to pre-arranged facility/ destination in timely and safe manner as per environmental legislations. The project plan shall also include the innovative construction practice to eliminate or minimize waste, protect surface/ground water, control dust and other emissions to air and control noise.
- Have purchase policy to encourage the procurement of material with recycled and minimum packaging of goods during delivery and appropriate means for site-to-site transportation of materials to avoid damage and litter generation.
- Ensure that the residents living near the site are kept informed about proposed working schedule and timings/ duration of any abnormal noise full activity that is likely to happen.
- Ensure the regular maintenance and monitoring of vehicles and equipment for efficient fuel use so that emissions and noise are within acceptable limits to avoid air pollution.

#### **Water Management:**

The BA is expected to follow best practices for water management, few of which include a management and monitoring system for water withdrawals and consumption, procedures to reduce water usage or reuse/recycle water, and pretreatment of wastewater before disposal.

**Compliance to Law:**

The BA shall adhere to responsible business practices and comply with the provision of all the Statutory Acts Applicable. Special attention of the BA is drawn towards the compliance of provision of the following statues: (along with the latest amendments/additions, as applicable):

- The Child Labour (Prohibition and Regulation) ACT, 1986.
- The Contract Labour (Regulation and Abolition) ACT, 1970.
- The Employee's Pension Scheme, 1995.
- The Employee's Provident Funds and miscellaneous provisions Act, 1952.
- The Employees State Insurance Act, 1948.
- The Equal Remuneration Act, 1976.
- The Industrial Disputes Act, 1947.
- The Maternity Benefit Act, 1961.
- The Minimum Wages Act, 1948.
- The Payment of Bonus Act, 1965
- The Payment of Gratuity Act, 1972.
- The Payment of Wages Act, 1936.
- The Shops & Establishment Act, 1954.
- The Workmen's Compensation Act, 1923.
- The Employer's Liability Act, 1938.
- and any other applicable statutory act

**Social Accountability (SA 8000):**

Tata Power expects its BAs to follow guidelines of SA 8000:2014 on the following aspects

- Child Labour
- Forced or Compulsory Labour
- Health & Safety
- Freedom of Association & Right to Collective Bargaining
- Discrimination
- Disciplinary Practices
- Working Hours
- Remuneration
- Management System

**Health and Safety**

The BA is expected to ensure the health and safety of his and his Sub-contractor's staff and labour. The BA shall, in collaboration with and according to the requirements of the local health authorities, ensure that medical staff, first aid facilities, sick bay and ambulance service are available at the accommodation and on the Site at all times, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics. The BA shall maintain records and make reports concerning health, safety and welfare of persons deployed, and damage to property, as the Owner's Representative may reasonably require. The BA shall be responsible for the medical treatment / hospitalization of his and his Sub-contractor's staff/ labour.

The BA shall appoint a qualified Safety officer at the Site to be responsible for maintaining the safety, and protection against accidents, of all personnel on the Site. Such Safety officer shall have the authority to issue instructions and take protective measures to prevent accidents.

The BA shall comply in toto with the Tata Power's Contractor Safety Terms & Conditions, Health Safety & Environment Manual while working on Tata Power Site/ Services/ Contracts.

### **Grievance Mechanism**

The BA is expected to have grievance procedures that allow stakeholders to anonymously bring environmental and/or work-related violations and/or concerns to the attention of management. In addition, the BA is expected to have procedures for examining reports of environmental and/or work-related violations or concerns and/or privacy complaints.

### **Data Protection**

The BA is expected to have a formal process to address data security or privacy issues.

## **ANNEXURE-I**



Sr. No.	Question Description	Response (Y/N)	Remarks
<b>Organization</b>			
1	Does your Company have Sustainability Policy at Organization Level? If Yes, Please attach		
2	Do you have sustainable procurement policy in place for your own suppliers? If Yes, Please attach		
3	Does your company do regular assessment of its suppliers on ESG parameters?		
4	Are there ESG risks, or negative impacts identified in your supply chain		
<b>Governance</b>			
1	Is diversity taken into consideration when appointing board members/ senior management? Do you have an independent director/s?		
2	Has your company taken initiatives to ensure ethical practices at workplace? Please share the details, Policies etc.		
3	Does your company have a formal process to address data security or privacy issues? Please share the details, Policies etc.		
4	Does your company have grievance mechanism for stakeholder issues and track resolution?		
<b>Environment/ Planet</b>			
1	Does your company have Environmental Policy? If Yes, Please attach		
2	Do you have a formal process for waste management including solid wastes, liquid wastes and hazardous waste?		
3	Does your company track greenhouse gas emission? Also, what percentage of own consumption comes from the renewable energy?		
4	Does your company have a formal process for water management including monitoring of water consumption and withdrawals, and if applicable, pretreatment of wastewater?		
<b>Green Technology/ Innovation</b>			
1	Are your facility/ Product/ Services provided by you is based on green design, green production, green packaging or green logistics considerations? Please elaborate.		
2	Do your products or services have any environmental or social features or benefits (e.g. environmental/energy certification, ecolabels, fair trade certification, etc.)?		
<b>Social/ People</b>			
1	Does you facility/ Company have written personnel policies in place Are you an equal opportunity employer?		
2	Please describe any formal programme / campaign in place to promote company involvement with the community (volunteering, etc.). What is the percentage of profit spend on community activities?		
3	Does your company have a written Health & Safety Policy or Program? If Yes, Please attach		
<b>Certifications: Does your company have following certifications (valid till date-please mention validity)</b>			
1	ISO9001 accreditation		
2	SA8000 or equivalent		
3	ISO 14001 certification		
4	ISO 18001/45001 or equivalent		
5	ISO/IEC 27001 or equivalent		
6	Any Other (Please specify)		

Signature

Business Associate Name

## **ANNEXURE-II**

## CORPORATE SUSTAINABILITY POLICY

At Tata Power, our Sustainability Policy integrates economic progress, social responsibility and environmental concerns with the objective of improving quality of life. We believe in integrating our business values and operations to meet the expectations of our customers, employees, partners, investors, communities and public at large

- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the customers and adhere to our promised standards of service delivery
- We will respect the universal declaration of human rights, International Labour Organization's fundamental conventions on core labour standards and operate as an equal opportunities employer
- We shall encourage and support our partners to adopt responsible business policies, Business Ethics and our Code of Conduct Standards
- We will continue to serve our communities:
  - By implementing sustainable Community Development Programmes including through public/private partnerships in and around our area of operations
  - By constantly protecting ecology, maintaining and renewing bio-diversity and wherever necessary conserving and protecting wild life, particularly endangered species
  - By encouraging our employees to serve communities by volunteering and by sharing their skills and expertise
  - By striving to deploy sustainable technologies and processes in all our operations and use scarce natural resources efficiently in our facilities
  - We will also help communities that are affected by natural calamities or untoward incidence, or that are physically challenged in line with the Tata Group's efforts

The management will commit all the necessary resources required to meet the goals of Corporate Sustainability.



(Praveer Sinha)  
CEO & Managing Director

Date: 15<sup>th</sup> June, 2018



## **Supplier Code of Conduct**

Tata Power follows the Tata Code of Conduct (TCoC) and the Whistle blower Policy and expect all its Suppliers to adhere to the same principles. “Supplier” here means any business, company, corporation, person or other entity that provides, sells or seeks to sell, any kind of goods or services to Tata Power, including the Supplier’s employees, agents and other representatives.

**Tata Code of Conduct- (TCoC):** <https://www.tatapower.com/pdf/aboutus/Tata-Code-of-Conduct.pdf>

**Whistle Blower Policy:** <https://www.tatapower.com/pdf/aboutus/whistle-blower-policy-and-vigil-mechanism.pdf>

**Anti-Bribery & Anti-Corruption Policy:** <https://www.tatapower.com/pdf/aboutus/abac-policy.pdf>

The suppliers are expected to adhere to the following Do’s and Don’ts:

### **Do’s**

1. The Suppliers shall be committed to supplying products and services of high quality that meet all applicable standards and laws, including product packaging, labelling and after-sales service obligations.
2. Comply with all applicable laws and regulations, both in letter and in spirit, in all the territories in which it operates.
3. Strive to provide a safe, healthy and clean working environment for its employees.
4. Strive for environmental sustainability, particularly with regard to the emission of greenhouse gases, consumption of water and energy and the management of waste and hazardous materials.
5. The Supplier shall represent our company (including Tata brand) only with duly authorised written permission from our company.
6. Safeguard the confidentiality on the use of intellectual property, information and data of the Company.
7. Gifts and hospitality given or received should be modest in value and appropriate as per Company Policy.
8. The assets of Tata Power shall be employed primarily and judiciously for the purpose of conducting the business for which they are duly authorised.
9. All actual or potential conflicts due to financial or any other relationship with a Tata Power employee shall be disclosed.

### **Don’ts**

1. The Supplier shall not make unfair or misleading statements about the products and services of competitors.
2. Children shall not be employed at workplaces.
3. Forced labour shall not be used in any form.
4. The Suppliers shall neither receive nor offer or make, directly or indirectly, any illegal payments, remunerations, gifts, donations or comparable benefits that are intended, or perceived, to obtain uncompetitive favours for the conduct of its business with Tata Power.

### **Reporting Violations**

The Supplier shall notify the Company regarding any known or suspected improper behaviour of other suppliers or employees relating to its dealings with Tata Power, by email to: [cecounsellor@tatapower.com](mailto:cecounsellor@tatapower.com). The same can also be raised through our 3<sup>rd</sup> party ethics helpline facility:

<b>Toll-free Number</b>	1800 267 4065
<b>Email</b>	<a href="mailto:tatapower@tip-offs.in">tatapower@tip-offs.in</a>
<b>Website &amp; Chatbot</b>	<a href="http://www.tatapower.tip-offs.in">www.tatapower.tip-offs.in</a>
<b>Postal address</b>	Attn to: Mr. Puneet Arora, Deloitte Touch Tohmtsu India LLP, 6 floor, AIPL Business, Sector 62, Gurugram, Haryana 122102

## **Special Terms and Conditions**

### **Item No D.2**

1. The information contained in this Tender Document or subsequently provided to Bidder, whether verbally or in documentary or any other form by or on behalf of The Tata Power Company Limited herein referred to as Tata Power, or any of its employees, is provided to Bidder on the terms and conditions set out in this Tender Document and such other terms and conditions subject to which such information is provided.
2. Tata Power also does not accept any liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any Bidder upon the statements contained in this Tender Document.
3. Tata Power, and its employees make no representation or warranty and shall have no liability to any person including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this Tender Document or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the Tender Enquiry and any assessment, assumption, statement or information contained therein or deemed to form part of this Tender Document or arising in any way in this Selection Process.
4. Tata Power may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this Tender Document.
5. Though adequate care taken while issuing this Tender Document, Bidder should satisfy himself for completeness of the document in all respects. Intimation of any discrepancy should be given to Tata Power Concerned Person immediately. If no intimation received by this office within 3 days from the date of issue of the Tender Document, then Tata Power shall consider that the document received by the Bidder is complete and to the satisfaction of the Bidder in all respects.
6. Tata Power reserves the right to change any or all of the provisions of this Tender Document before date of submission. Such changes, if any, would be intimated to Authorized Person of Interested Bidder through E-Tender System only.
7. The issue of this Tender Document does not imply that Tata Power is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Contract and Tata Power reserves the right to reject all or any of the Proposals without assigning any reasons and or making any correspondence on this account whatsoever.
8. Bidder shall bear all costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses

associated with any demonstrations or presentations which may be required by Tata Power or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Bidder and Tata Power shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Bidder in preparation or submission of the Proposal, regardless of the conduct or outcome of the Selection Process.

Any Bidder wishing to undertake site visits for familiarization with site conditions, may do so. All costs towards site visits, conference and submission of documents shall be borne by the Bidder themselves.

9. No claim shall be entertained on account of disruption of internet services being used by bidders. Bidders are advised to upload their bids well in advance to avoid last minute technical snag.
10. The decision of Tata Power Management regarding the opening of offers, evaluation and acceptance of the offer shall be final and binding on all the Bidders.
11. Tata Power reserves the right to extend the date of uploads/opening of tenders without assigning any reason thereof, and also reserves the right to distribute the work among more than one bidder.
12. Tata Power reserves the right to accept or reject any offer, and to annul the offer process and reject all offers at any time prior to award of Offer, without thereby incurring any liability to the affected Bidder or any obligation to inform the affected Bidder of the grounds for the Tata Power decision.
13. Tata Power reserves the right to invite open or limited tenders and when tenderers are called to accept a tender in whole or in part or reject any tender or all tenders without assigning any reasons for such action.
14. The authority for the acceptance of the tender will rest with the Tata Power. It shall be obligatory on the said authority to accept the most suitable bid or any other bid and no Bidder shall demand neither any explanation for the cause of rejection of his / their tender nor Tata Power undertake to assign reasons for declining to consider or reject any particular tender or tenders.
15. Local Conditions: It will be imperative on each Bidder to fully acquaint himself with all the local conditions and *factors* which would have any effect on the performance of the contract. Tata Power shall not entertain any request for clarifications from the tenderer regarding such local conditions. No request for the change of price, of time schedule of completion of work on account of any local conditions or factor shall be entertained after the offer is accepted by Tata Power.

16. The intending bidder will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that rates he enters in the tender papers are adequate and all inclusive, for the completion of works to the entire satisfaction of Tata Power.
17. Bidder who is Black listed / Banned / Debarred as on originally scheduled date of this bid opening or whose Agreement / Work order has been terminated on account of performance, or a bidder against whom there is adverse report about its performance under an existing contract or a bidders performance security has been forfeited by any company/organization for non-performance at any time shall not be eligible, within 5 (five) years of originally scheduled date of this bid opening by any State / Central Govt. / Govt. Undertaking / Public sector Undertaking in India for similar type of work, will not be eligible for participating in this tender. The Bidder should submit an affidavit on Letter Head (Format F1) as a proof in this regard.
18. The bidder should provide detailed information on any litigation or arbitration arising out of contracts completed or under execution by it over the last five years. A consistent history of awards involving litigation against the Bidder may result in rejection of Bid.
19. Conditional and incomplete tenders shall not be accepted. Bid must be in conformity with schedules / formats of this tender.
20. At any stage if it is found that bidder
  - a. have submitted false document for the purpose of qualifying in the tender or non-execution of project as per contract,
  - b. Have not provided relevant details (for example litigation history etc)action as per Law will be taken and the pending payment, Bank Guarantee, EMD, Security amount of the bidder will be forfeited by Tata Power at any stage of execution. Also Bidder will be Blacklisted for future Tenders by Tata Power.
21. Issuance of Tender document does not construe that Bidder will be qualified for award of work.
22. Tata Power reserves the right to verify all statements, information and documents, Submitted by the Bidder in response to Tender Document. Any such verification or the lack of such verification by Tata Power to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of Tata Power there under.

<b>The Tata Power Company Ltd</b>	 		 	<i>Appendix 3 to CSCC Safety Terms and Conditions</i>
<i>Document No. TPSMS/GSR/STC/009 REV 05</i>				<i>Date of Issue: 01/08/2023</i>

## Appendix 3: Safety Terms and Conditions

Reason for Change	Date of Last Revision	Prepared By	Reviewed By	Approved by
Inclusion of Odisha Discom and periodic Revision	<u>10-Jan-2021-R4</u>	All Discom and CFT members	Debi Prasad Acharya (Head-Safety-Odisha Discom)	Suresh H Khetwani <i>(Chief safety and Environment)</i>

Clause	Sub-clause	Description	Page No
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2.0		Scope	3
3.0		Safety Organization & Responsibilities	3
	3.1	Contractor Site Management and Supervision	3
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16.0		<u>Safety Conditions for the major contract work in Commercial Department like - MMG, RRG, EAG, etc(R5)</u>	17
17.0		<u>Safety Conditions for Major Projects in Distribution Network(R5)</u>	18
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The Tata Power Company Ltd	TPCODL	 <b>TATA</b>	TPNODL	Appendix 3 to CSCC Safety Terms and Conditions
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## 1.0 Objective:

The Objective of Safety Terms and Conditions is to apprise the Business Associates about various critical procedures of the Tata power Division/Discoms and the expectations from the BA to implement such procedures without fail. Certain terms and conditions are also mentioned to ensure a safe work atmosphere round the year. Refer Contractor's Safety Code of Conduct- Document no TPSMS/GSP/ CSM/015

## 2.0 Scope:

This procedure applies to all operating and project sites of The Tata Power Company Ltd and Group companies including new businesses like Electric Vehicle charging, Home Automation, Microgrid, Roof top solar etc. This Code of Conduct also applies to all operating and project sites of four Odisha Discoms and New business based on mutually agreed timeline for implementation. R5

## 3.0 Safety Organization & Responsibilities

### 3.1 Contractor Site Management and Supervision

Each Contractor will be responsible for fulfilling all statutory and safety requirements as per the laws of the land and not limited to Factory Act, Electricity Act, Electricity Rules and Regulations, Shop and Establishment Act etc.

Each Contractor shall provide at least one competent full-time safety supervisor for workforce of every 50 workers or less than that. When workforce ranges to 500, the contractor must provide at least one qualified safety officer (This may be subjected to change as per applicable act). Thus, for work force of 500 workers there will be one qualified safety officer and 10 safety supervisors. For every 500 additions in workforce, the contractor must add 1 safety officer and 10 safety supervisors. The Order Manager or Safety Department of the Tata Power Division /Discoms will review and approve the appointment of all safety officers and supervisors. The safety supervisors/officers will work with the guidance from Tata Power Division /Discoms Safety Department and align themselves with Tata power Division/Discom safety requirements.

For O&M related AMC activities, minimum one qualified safety officer to be deployed for each Division of the Discoms.

Qualified safety officer means he or she has completed PDIS or ADIS from a recognized institute.

Site Safety Officer/Safety Supervisor / Safety Coordinator shall be interviewed by the Order Manager/ Safety head of the Tata Power Division/Discom and then gate passes shall be issued if the interview is successful.

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Site Manager of Contractor/Subcontractor is responsible, and will be held accountable, for the safety of their own workforce as well as that of sub-contractors. He should also ensure that all equipment, materials, tools, and procedures remain in safety compliance at job site.

Responsibility of Site manager includes, but not limited to:

- 3.1.1 Holding officer/supervisors accountable for safety and actively promote safe work performance.
- 3.1.2 Participate in and cooperate with all safety program requirements to be implemented to meet Tata Power Division /Discoms safety objectives
- 3.1.3 Ensure timely reporting of safety incidents, near misses, unsafe acts, and conditions.
- 3.1.4 Identify the training needs of BA employees and maintain all safety training documents.
- 3.1.5 Provide Safety Performance Report at an agreed frequency.
- 3.1.6 Stopping of unsafe work (Acts and/or Conditions) immediately. Work to start only after corrective actions are implemented.
- 3.1.7 Ensure and participate in daily toolbox talk for all the jobs.
- 3.1.8 Ensure that only tested and certified tools and equipment are issued to the workers and being used at the site.

### 3.2 Contractor Supervisors and General Staff.

Contractors' site supervisors and general staff members in charge of job site functions such as field engineering, warehousing, purchasing, costing, and scheduling etc. are responsible for the safe performance of the work of those they supervise. They must set an example for their fellow employees by being familiar with applicable sections of the Site Safety program and ensuring that all site activities are performed with SAFETY as the primary objective.

Each site supervisor is responsible and will be held accountable for identifying, analyzing, and eliminating or controlling all hazards through implementation of an aggressive, pro-active Health, Safety and Environmental Program. Each supervisor will proactively participate in the Safety program by observing, correcting, and recording unsafe acts and conditions at plant / sites.

### 3.3 Contractor Workforce

- 3.3.1 Contractors shall provide adequate quality and quantity of manpower as mutually agreed. (R5)
- 3.3.2 All the contractor employees shall attend "SHE L0(Other than new business and Odisha Discom)/L1 Foundation Course in Safety". Depending on the critical procedure in job employees shall also be required to attend "SHE L2 course of critical/high risk operations". All Supervisors shall be required to attend "SHE L3 Supervisory Training". All the above trainings will be conducted by TPSDI/Skill development institute of Disco, or other equivalent institute approved by Tata Power.

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<b>TATA POWER</b>				

- 3.3.3 Contractor employees shall be required to attend any other additional training if suggested by Order manager or Site Safety Head. The cost of such additional training shall be borne by the Vendor.
- 3.3.4 Contractor / Vendor shall mobilize their manpower well in advance to complete the training through TPSDI/Sill development Institute.
- 3.3.5 The Vendor / BA shall arrange or bear the conveyance and food expenses incurred during training of BA employees in Odisha Discom. (R5)
- 3.3.6 The validity of the training L1, L2 and L3 is 3 years. There will be competency assessment as Revalidation test in every three months for Tata Power Division and six months for Odisha Discom till one year from implementation of CSCC.(R5) Those who fail in the competency assessment shall undergo training again.
- 3.3.7 Supervisors/Welder/Electricians/Line man /Fitters /Radiographers/Riggers engaged by the contractor shall have valid competency certificates issued by authorized agency/Institute.
- 3.3.8 Contractor workforce must make safety a part of their job by following safety rules and regulations and by using all safeguards and safety equipment. They must take an active part in the Safety programs for the Site.
- 3.3.9 Every member of the workforce is expected to report for work without influence of any Drug/Alcohol. Failure to comply with this requirement shall result in immediate termination of employees under the influence of drug and alcohol plus show cause notice/penalty to the vendor.
- 3.3.10 All employees shall report hazardous conditions, practices and behaviours in their work areas and correct wherever possible.
- 3.3.11 Workforce is responsible for active participation in safety and health programs, suggestion systems, trainings and reporting of unsafe act/practices, Unsafe conditions incidents and injuries to their supervisors.

### 3.4 Vendor/Contractor/sub-contractor

- 3.4.1 Vendors/Contractor shall always comply with and ensure that their workforce comply with all site safety rules and regulations. Specifically, with applicable provisions of the Site Safety Management Plan and all statutory safety rules and regulations.
- 3.4.2 After receiving the work order/ purchase order vendor/contractor/bidder shall not appoint Sub-contractor without safety assessment of the sub-contractor through safety concurrence group Under Contractor Safety Code of Conduct. Penalty of 5% of contract value will be applicable to the contractor if subcontractor is appointed without the permission of SCG and without evaluation through CSCC process.

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#### **4.0 Tools and Tackles(R5)**

- 4.1 Tools & Tackles used to carry out the job shall be checked and inspected by Order Manager and safety Officer.
- 4.2 Vendor must submit a valid Certificate from Competent person under the Factories Act 1948 and State Factories Rule for all Lifting Tools and Tackles (like Hoist, D Shackles, chain Block, wire ropes etc.).
- 4.3 All Electrical Hand Tools must be tested for leakage of current by a person /agency authorized by Tata Power Division /Discoms. Electrical power must be taken though RCCB of 30mA. Electrical hand tools should not have cord more than 3 meters in length. If power source is at > 3 meters, extension boards with RCCB of 30 mA and ON/OFF switch, shall be used.
- 4.4 Removal or inclusion of tools any new tool /tackles / machinery / equipment at site should only be done with concurrence of the order Manager / Head Safety.

#### **5.0 Site Safety Rules and Procedures:**

The work in the safest possible manner can only happen when it has been carefully planned and all applicable procedures are followed. The Tata Power Safety Procedures are derived from Tata Power best practices and the applicable Government acts regulations. In each case, the most stringent regulation is used. All safety rules and procedures developed from time to time shall be mandatorily followed by the vendor and his employees while working at Site.

**6.0 Critical safety Rules and Procedures:** Following is the list of Tata Power's critical Safety Rules and Procedures. Contractor shall refer to approved Rules and Procedures for detailed requirements and ensure conformance

##### **6.1 Lock Out and Tag Out Procedure.**

This procedure is intended to be used for the protection of Personnel while servicing or performing maintenance on distribution network/ equipment / pipeline / vessel / process systems. This is a general procedure that shall be used as the minimum requirements for isolation of equipment, pipelines, machines, system from all possible sources of hazardous energy and / or material such as Steam, Hot Water, Compressed Air, any other process fluid / chemical energy /Mechanical energy or Electrical energy. For complete procedure kindly refer Procedure Document No. **TPSMS/CSP/LOTO/001**

##### **6.2 Excavation Safety (Shoring and Sloping) Procedure**

This procedure is developed to cover the safe practices required for shoring and sloping in excavation and trenching jobs. This procedure is developed to establish mandatory requirements for practices to protect personnel, property and equipment from hazards associated with above activities. For complete procedure kindly refer Procedure Document No **TPSMS/CSP/EXS/002**

##### **6.3 Confined Space Entry Procedure:**

This procedure outlines the steps required to perform the confined space entry and to protect personnel from the hazards of entering and conducting operations in confined spaces. For complete procedure kindly refer Procedure Document No – **TPSMS/CSP/CSE/003**.

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#### **6.4 Working at Height Procedure:**

This procedure describes the rules and procedures to protect employees from the hazards of working at heights. This procedure is developed to cover the safe practices required for Working at Heights. This procedure is developed to establish mandatory requirements for practices to protect personnel from hazards associated in this area. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/WAH/004.

#### **6.5 Heavy Equipment Movement Safety Procedure.**

Heavy equipment lifting and movement is an activity involving loading, unloading, storage and movement from one place to another including lifting and erection or repairing of equipment with cranes or hoists. Material, machinery and equipment handling operations are being carried out by large capacity cranes and hoists, which make the job safer and faster. This procedure addresses the hazards and precautions associated with such equipment and their use. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/HEMS/005.

#### **6.6 Mobile Crane Safety Procedure.**

Mobile cranes are responsible for many incidents, injuries. Falling loads from mobile cranes pose a severe hazard to operators and nearby workers and property. Many types of cranes, hoists, and rigging devices are used for lifting and moving materials. To maintain safe, appropriate standards must be adhered to and only qualified and licensed individuals shall operate these devices. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/MCS/006.

#### **6.7 Scaffold Safety Procedure.**

This procedure is developed to provide information on the safe erection, use, dismantling and maintenance of access scaffolding in the workplace. It is developed to establish mandatory requirements for practices to protect personnel from hazards associated with erection, use and dismantling of scaffolds. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/SCAF/007.

#### **6.8 Permit to Work Procedure.**

Given the inherent hazards of the power generation and distribution industry, a significant number of TATA POWER operations and installations are critical. Work Permit (WP) System is an essential element in controlling the workplace risks in an effective manner. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/PTW/008.

#### **6.9 Job Safety Analysis (JSA) Procedure.**

This objective of this procedure is to have a task-based risk assessment process in place that identifies, evaluates and controls the risks associated with work activities, and as a result, prevents those involved in the task or those potentially affected by the task, from being harmed. For complete procedure kindly refer Procedure Document No- TPSMS/CSP/JSA/009 REV 01.

#### **6.10 Electrical Safety Procedure.**

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The objective of these standards is to specify minimum mandatory requirements and advisory guidance for identifying and controlling hazards to ensure 'Zero Harm' regarding operation maintenance and testing of electrical equipment. For complete procedure kindly refer Procedure Document No- TPSMS/CSP/ELEC/010

**6.11 Fire Safety Management Procedure.**

Objective of This standard is to specify the minimum mandatory requirements and advisory guidelines to ensure prevention of fire related incidents and managing / controlling their impacts if they do occur. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/ELEC/011

**6.12 Hazard Identification & Risk Assessment (HIRA) Procedure(R5):**

Objective of this procedure is to define guidelines for Hazard identification, Risk assessment and determination of controls. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/HIRA/012.

**6.13 Management Of Change (MOC) Procedure(R5):**

The objective of this document is to establish the procedures necessary to ensure that HSE risks are managed to an acceptable level in Tata Power Management of Change (MOC) process. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/MOC/013.

**6.14 Pre-Start-up Safety Review (PSSR) Procedure(R5).**

Objective of this procedure is to provide guidelines for safe initial startup of a new facility or restart of a modified facility. The PSSR process verifies that the new/modified facility meets the original design and operating parameters. The intent is to prevent incidents caused by inadequate, incomplete, unauthorized design, construction, installation, and/or commissioning. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/MOC/014.

**6.15 Road Safety procedure(R5):**

To provide Safety Rules for road travel management and safe usage of all types of vehicles viz. passenger/ commercial, owned/ hired by company, driven by employees or contractors. For complete procedure kindly refer Procedure Document No - TPSMS/CSP/RSP/015.

**7.0 General safety Rules and Procedure:**

**7.1 Lift (Elevator) Safety Procedure:**

To provide safe operating procedure for taking control of lift car before entering and existing the pit of OTIS make elevators. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/LIFT/001,

**7.2 Working on conveyor belt Procedure:**

This procedure is developed to cover the safe practices required for Working on live equipment and to protect personnel from hazards associated with it. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/CONV/003

**7.3 Batteries Handling & Disposal(R5)**

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To provide procedure for recycling and / or safe disposal of used / waste batteries in compliance with all legislation. For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/HAZM/003**

**7.4 Material Handling and Storage Procedure:**

The purpose of this document is to provide procedures to assist the safe handling of materials (manual handling and mechanical handling). For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/MATL/004**.

**7.5 Office Safety Procedure(R5):**

The objective is to provide a safe working environment to those working in office premise, who may be exposed to emergency situations and other chronic / cumulative risks that may arise due to various reasons of unsafe act, unsafe condition, fire and or pandemic crisis like COVID-19 etc. For complete procedure kindly refer Procedure Document No - **TPSMS/GSP/OFS/006**

**7.6 Earth Leakage Circuit Breaker (ELCB) Testing Procedure(R5):**

The objective of this procedure is to define the minimum requirements for testing of Earth Leakage Circuit Breaker (ELCB). For complete procedure kindly refer Procedure Document No - **TPSMS/GSP/ELCB/008**.

**7.7 Occupational Health & Safety Legal Compliance Procedure(R5):**

Objective of this procedure is provide guidelines for compliance of Occupational Health & Safety (OH&S) legal requirements and all ratified protocols and agreements are incorporated in Tata Power Safety Management System (SMS). For complete procedure kindly refer Procedure Document No - **TPSMS/GSP/LEGL/009**.

**7.8 Incident Reporting & Investigation Procedure(R5):**

Objective of this procedure is to outline the process for reporting, recording and investigating an incident, recommending corrective and preventive actions and to communicate the lessons learned to prevent recurrence of similar incidents. For complete procedure kindly refer Procedure Document No - **TPSMS/GSP/IRI/011**.

**7.9 Contractor Safety Management Procedure.**

The purpose of this document is to engage with contractors in a way to create safe work environment for everyone working for Tata Power. For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/CSM/015**.

**7.10 Tree Trimming Procedure(R5):**

The objective of this procedure is to define guidelines and minimum requirements for Tree trimming. For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/TTRM/017**

**7.11 Safe Lone Working Procedure(R5):**

Objective of this procedure is to lay down guidelines for reduction and safe managing of any additional risk arising from lone working. For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/LONE/019**.

**7.12 Good Housekeeping(5S) Procedure(R5):**

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Objective of this procedure is to explain the meaning, importance and provide guidelines for implementation of Good Housekeeping(5S) at workplaces across organization. For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/GHK/022**.

**7.13 Personal Protective Equipment(R5):**

This procedure describes the basic requirements, applicability, minimum specifications of Personal Protective Equipment (PPE). For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/PPE/023**.

**7.14 Process Safety Management Procedure(R5):**

The objective of this document is to provide a standardized & uniform guideline to implement Process Safety Management in Tata Power, its JVs, and subsidiaries to prevent or minimize the consequences of releases of toxic, flammable, pressurized or uncontrolled chemicals/Steam/Water or any other material which may result in toxic, fire, explosion, burn or flood like situation. For complete procedure kindly refer Procedure Document No – **TPSMS/GSP/PSM/024**

The above procedures will be updated time to time and the updated version of the procedures as well as any additional critical procedure will be available on official website of Tata Power ([www.tatapower.com](http://www.tatapower.com)) for your reference.

**8.0 Training and Capability Building.**

Safety Training and capability building of workforce is a major component of safety management program. All training required must be provided and documented as specified by Tata Power and Indian Regulations. Tata Power Division /Discoms Safety department will audit contractors training and related documentation to assure its adequacy.

**8.1 Tata power Odisha Discom Site Safety Orientation.R5**

All Tata Power contractor and subcontractor workforce is required to attend Site Safety Orientation Training to receive a Safety Training Card, which is required to obtain a Gate Pass to the site, prior to entry. This Safety Orientation Course will be for duration of minimum half day. The information provided during the orientation will include, but is not limited to following:

- 8.1.1 Job rules, personal safety, and conduct
- 8.1.2 Hazard's reporting
- 8.1.3 Reporting of injuries
- 8.1.4 Emergency procedures
- 8.1.5 Safety Activities and Program including disciplinary measure and incentives.
- 8.1.6 Critical safety procedure relevant to the job

**8.2 Capability Building:**

- 8.2.1 All Tata Power contractor and subcontractor workforce is required to attend L1 Training to receive a Safety Training Card, which is required to obtain a Gate Pass to the site, prior to entry.
- 8.2.2 Appropriate practical training such as SHE L1, L2& L3 is given to ensure that a jobholder, either supervisor or worker, is competent to do his/her job safely. The skill training is provided through TPSDI, and other agencies authorized

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by Tata Power on the list of 15 critical Safety procedures mentioned under safety procedures. Duration of course is as specified by Division/Discom

- 8.2.3** Contractor shall ensure that concerned workmen are provided with adequate training before he/she is allowed to execute the work. An evaluation test will be conducted after the completion of the training. Those employees who meet the minimum required competency will be provided with Certificate (Card), which will be valid for 3 years, post which the workmen have to reappear for assessment.
- 8.2.4** If the workman is not able to qualify the assessment, he/she will be given 3 additional attempts to clear in 3-month time failing which he/she will not be allowed to work in the Division /Discoms.
- 8.2.5** After expiry of Certificate or Training /Competency Card again one day recertification of L1, L2 and L3 skill training will be provided. R7.
- 8.2.6** Quarterly /Half yearly(For Odisha and New business) Revalidation Test - "SHE L1 Revalidation test" will be conducted for the contractor's employees to revalidate their safety awareness and knowledge.
- 8.2.7** Order Manager and Safety In charge of the Division/Site /Plant will conduct a Competency Assessment of all workforces, going to be deployed at site / plant for high-Risk job.
- 8.2.8** The Contactor shall bear the conveyance and food expenses of his staff for attending training sessions and capability building sessions in new business-like Odisha Discom.
- 8.2.9** The Contactor shall bear the entire cost of L1/L2/L3, the costs towards training, salaries/wages, boarding and lodging of his staff for attending training sessions and capability building sessions. These trainings are offered on nominal chargeable basis payable by Contractor and rates shall be decided by TPSDI from time to time in case of training through TPSDI. Generally, L0 is of one day, L1 is for 2 days for each critical procedure and L3 is for one day. Around Rs 700+GST is approx. cost /Day/Candidate. -R5
- 8.2.10** Competency assessment of all critical workforce to be carried out for all who has taken L2 training. R5

#### **9.0 Recognition to the Prior Learning in Safety-R5**

If "Order Manager" recommends and "Head of the Safety Department of Discom" is satisfied with the safety knowledge and competency of the employee of contractor, a test may be conducted by Tata power Skill development Institute/ other recognized institute to assess the prior learning in safety. If employees of the contractors pass in such test, he will be exempted from appearing in SHE L1 training. This assessment is on nominal chargeable basis and rates are decided by TPSDI from time to time.

#### **10.0 Safety performance retention(R5) and Safety Performance Evaluation: A certain percentage of the bill value will be retained against every running bill as safety performance retention. The amount will be released with the last invoice or every six-month based on Safety Performance Score of contractors. This is as per CSCC Document no TPSMS/GSP/ CSM/015**

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*This safety retention shall be waived for Contractors who have either submitted a Contract Performance Bank Guarantee or have a retention from each running bill for an amount not less than 10% of each bill subject to the express undertaking / understanding that if there are any deductions required to be made for safety non-performance as per the Safety Performance Score, then Tata Power shall recover any such deductions against safety non-performance directly from the monthly bills / final settlement as the case may be failing which it shall be within its right to recover such sum from accounts payable or the CPBG or the retention of the Contractor available with Tata Power for the said contract or any other contract between the Contractor and Tata Power.*

### **11.0 Pre-Employment and Periodic Medical check-up:**

Contractor shall arrange to conduct a pre-employment and periodic medical check-up for its entire workforce by Tata Power medical officer or Tata Power authorized medical officer. The contractor shall be able to produce the certificate prior to the employment. The contractor shall also organize to conduct periodical medical checkup (six monthly) for the following category of employees:

- Drivers (Check for Vision & Hearing)
- HEM Equipment Operators (Check for Vision & Hearing)
- Workforce working at Height (Check for Vision, Hearing, Vertigo & Height Phobia)
- Workforce Handling the hazardous substances - Coal, ash and chemicals (Chest X-ray and Lung Function T)
- Workforce in high Noise area (> 90 Decibel), Check for Hearing
- Workforce handling radiography equipment for conducting NDT.
- Workforce, working in specific areas requiring specific medical attention should conduct the medical tests test as laid down in the respective Site Safety Management Plan.

### **12.0 Other Conditions:**

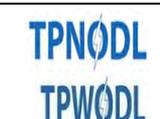
- 12.1. The manpower/vehicles/Tools & Tackles/Equipment provided shall be as per mutually agreed SLA.
- 12.2. No Supervision No work policy should strictly be followed.
- 12.3. Test Before Touch must be ensured every time a job is being carried out in electrical network.
- 12.4. HIRA /JSA as per the job scope must be prepared in detail and submitted along with Site Safety Plan by the successful bidder.
- 12.5. Personal protective equipment (PPE) must always be checked before use to ensure that they are in good condition and clean. Replace them if necessary.
- 12.6. All relevant PPE shall be provided by the vendor while working at the site.
- 12.7. Housekeeping shall be maintained all the time while execution of work. All the unwanted material shall be removed from the site at the end of the day's work. Old/damaged parts if taken out of the system shall be kept at

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identified placed and it shall be shifted to scrap yard or disposed of as per instruction of order manager.

- 12.8. Site Safety Plan shall be prepared by successful bidder along with order manger. Appendix 1 to be filled by successful bidder and submitted to Tata Power safety in-charge, before mobilization of team at site and start of the work.
- 12.9. The Owner or Proprietor of BA must visit worksite at least once in a month and meet Order Manager every month. In case of incidents, the Owner or Proprietor of BA is required to attend Time Out Meetings to understand the gaps that contributed to the incident.

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**General Safety Conditions for various contracts Specific to Odisha Discom(R5)**

**13.0. Safety Conditions for maintenance of STS (Sub Transmission System) Network.**

A BA awarded a major contract work of maintenance of sub – transmission network in area of a power system will be required to fulfil the following conditions:

- Availability of Discharge Rods - Minimum 6 Nos. in each maintenance vehicle, fit for purpose and in good conditions and defective rods are removed from service.
- Availability of Neon tester - Minimum one Neon Tester in each Maintenance Vehicle, in good and working condition and defective or non-standard neon testers are removed from service.
- Electrical hand Gloves - Minimum two sets of 33 KV and two sets of 11 KV in maintenance vehicles.
- The BA linemen must be having required ELBO certification for the voltage level involved.
- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4<sup>th</sup> March, National Fire Service Day on 14<sup>th</sup> April and Theme based safety campaigns undertaken by the Discoms every month.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not employ a new workman without training and issue of ID card.
- BA shall conduct safety audits & inspections as per Discom procedures.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to approved by Discom Safety Department.
- BA shall ensure to depute Safety Staff for managing safety in worksites. In case the BA has been awarded work in more than one area power system, then the following safety structure will be adopted.
- Safety manager and Safety engineer must be having PDIS or ADIS.

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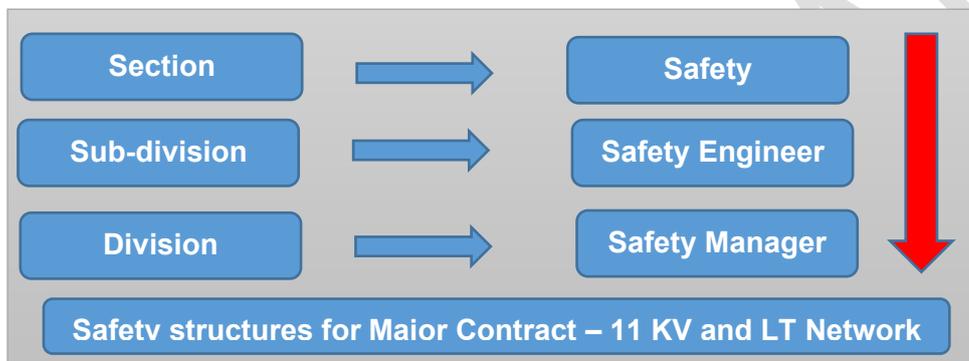
#### 14.0 Safety Conditions for maintenance of 11 KV and LT Network.

A BA awarded a major contract work of maintenance of 11 KV and LT Network in area of a power system will be required to fulfil the following conditions:

- Availability of Discharge Rods - Minimum 6 Nos. in each PSS/FCC and maintenance vehicle, fit for purpose and in good conditions and defective rods are removed from service.
- Availability of Neon tester - Minimum one Neon Tester in each PSS/FCC/ Maintenance Vehicle, in good and working condition and defective or non-standard neon testers are removed from service.
- Electrical hand Gloves - Minimum two sets of 33 KV and two sets of 11 KV in each PSS/Maintenance vehicles and two sets of LT hand gloves at each FCC.
- The BA linemen must be having required ELBO certification for the voltage level involved.
- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not engage new workman without training and issue of ID card.
- PSS operator shall not be involved in maintenance activities.
- BA shall conduct safety audits & inspections as per Discom procedures.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4<sup>th</sup> March, National Fire Service Day on 14<sup>th</sup> April and Theme based safety campaigns undertaken by the Discoms every month.
- BA to ensure that all LT complaints are routed through Call Centre and recorded in FCC. Rectification of fault shall be done only after call centre logging and with the knowledge of BA supervisor.
- No one will work alone or unsafely under public pressure or otherwise.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.

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- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to approved by Discom Safety Department.
- BA shall ensure to depute Safety Staff - One safety supervisor per section, One safety engineer per sub-division and one safety manager per Division Safety manager and Safety engineer must be having PDIS or ADIS.



#### 15.0 **Safety Conditions for the major contract work in Civil Projects:**

A BA awarded a major contract work of / in civil project will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not employ a new workman without training and issue of ID card.
- BA shall conduct safety audits & inspections as per Discom procedures.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.

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- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4<sup>th</sup> March, National Fire Service Day on 14<sup>th</sup> April and Theme based safety campaigns undertaken by the Discoms every month.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to approved by Discom Safety Department.
- BA shall refer Construction Safety Manual of the Discom for details.
- BA shall ensure to depute a Safety Supervisor (for workforce up to 100 at site) / a safety engineer (for workforce up to 250 at site) / safety manager (for more than two safety engineers) for managing safety at the project site. In case the BA has been awarded more than one major contracts, then the following safety structure will be adopted.
- Safety Engineers and Safety Managers must be having PDIS or ADIS.



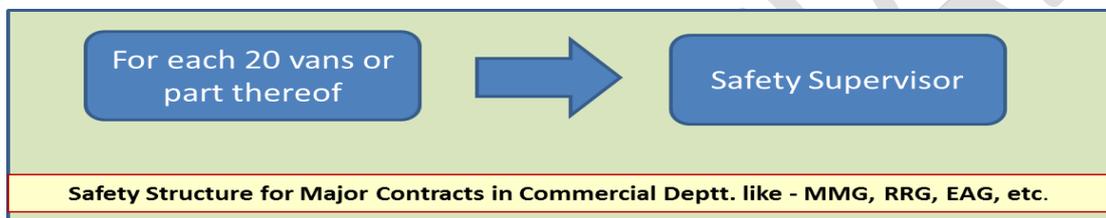
**16.0 Safety Conditions for the major contract work in Commercial Department like - MMG, RRG, EAG, etc.:**

A BA awarded a major contract work in meter management group & energy auditing group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not employ a new workman without training and issue of ID card.
- BA shall conduct safety audits & inspections as per Discom procedures.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4<sup>th</sup> March, National Fire Service Day on 14<sup>th</sup> April and Theme based safety campaigns undertaken by the Discoms every month.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.

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- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to be approved by Discom Safety Department.
- BA shall ensure to depute a Safety Supervisor for managing safety at worksite.
- The BA for the RRG work shall depute one Safety supervisor.



#### 17.0 Safety Conditions for Major Projects in Distribution Network

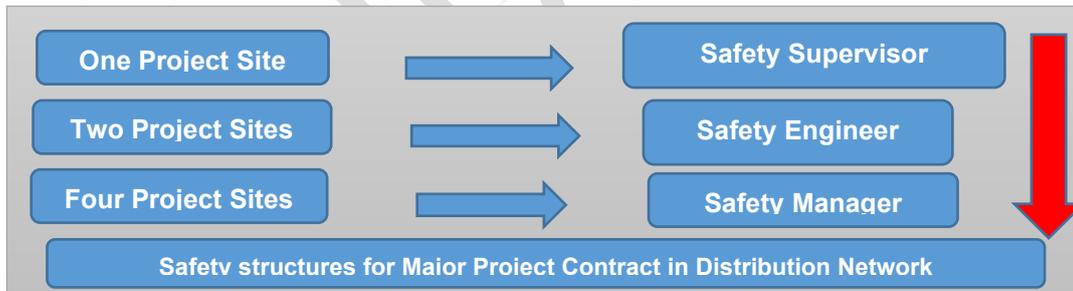
A BA awarded a major Projects in Distribution Network shall be required to fulfil the following conditions:

- Availability of Discharge Rods - Minimum 6 Nos. for each project site, fit for purpose and in good conditions and defective rods are removed from service.
- Availability of Neon tester - Minimum one Neon Tester in each project site, in good and working condition and defective or non-standard neon testers are removed from service.
- Electrical hand Gloves - Minimum one sets of 33 KV, 11 KV and LT in each project site.
- The BA linemen must be having required ELBO certification for the voltage level involved.
- BA shall provide Safety Policy, Safety Objectives, Organogram showing structure and responsibility of Safety management of his company and shall document the work practices and procedures in terms of Safety Management.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, Labour laws, etc.
- BA shall abide by Safety manuals and guidelines of Discom issued from time to time.
- BA shall ensure safety training and induction program for the employees. The BA employees must carry safety training card / competency card to the worksite and produce the card on demand.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4<sup>th</sup> March, National Fire Service Day on 14<sup>th</sup> April and Theme based safety campaigns undertaken by the Discoms every month.
- All BA employees must be given valid ID card issued by BA cell of Discom who will check statutory compliances before issuing ID cards.
- BA shall not employ a new workman without training and issue of ID card.
- BA shall conduct safety audits & inspections as per Discom procedures.
- BA shall provide proper PPEs as per CSM F-8 ensure periodic inspection of PPE, Tools and tackles to ensure their serviceability.

- BA shall ensure the adherence to standard operating procedures or guidelines laid down by the Discoms.
- BA shall ensure that no job shall be carried out without efficient supervision.

Sr. No	Type of Audit	Frequency
1	Tool Bag and PPE audit	Weekly
2	First Aid Box Maintenance Record	Fortnightly
3	Fire Extinguisher Record(Applicable for the BA involved in major construction works and have storage of flammable material at worksite)	Monthly
4	Safety Talk Register	Weekly
5	Site Safety Audit	Daily

- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident, or accident to engineer in-charge and SAFETY team of the Discom.
- BA shall provide safety performance and Safety MIS to engineer in-charge and Discom SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- The BA shall participate in Safety promotional activities like celebration of Lineman day on 4th March, National Fire Service Day on 14th April and Theme based safety campaigns undertaken by the Discoms every month.
- BA safety staff shall work as per the guidance of the Discom safety department and functionally report Safety Head of Discom. Any leaves by safety staff of the BA shall have to approved by Discom Safety Department.
- BA shall ensure to depute Safety Staff for managing safety in worksites. One safety supervisor per project site or 100 persons, one safety engineer for 2 project sites of 250 persons, and one safety manager for four project sites or 500 persons.
- Safety manager and Safety engineer must be having PDIS or ADIS.



**18.0 Schedule of Safety Audits by BA Safety Staff**

**Safety Undertaking of BA by way of Affidavit**

I \_\_\_\_\_ s/o \_\_\_\_\_ R/o \_\_\_\_\_ (AUTHORIZED REPRESENTATIVE/PARTNER/DIRECTOR/PROPRIETOR ) of M/S \_\_\_\_\_(name of company/firm)\_\_\_ having its office at (Complete address of Company), authorized vide power

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of attorney dated -----/Board resolution dated----/letter of authority dated----, hereinafter referred to as **Contractor [or Business Associate (BA)]** which expression shall, unless it be repugnant to or inconsistent with the meaning or context thereof, be deemed to include its heirs, executors, administrators, and assigns do hereby affirm and undertake as under :

1. The present undertaking shall remain in force from the date of execution of contract and shall be valid till the date of termination of the said contract by either party. The undertaking is binding on me (contractor) as well as my sub-contractor and its employees, representatives etc.
2. That I (the contractor) will be responsible and liable to comply and abide by all the safety rules, instructions and regulations as may be specified and laid down by the Discom to achieve its goal of Zero for on-site incidences.
3. That the Contractor shall be fully responsible for ensuring occupational health and safety of its employees, representatives, agents as well as of its subcontractor's employees, at all times during the discharge of their respective obligations under the contract including any methods adopted for performance of their tasks / work.
4. That Contractor shall ensure ,at its own expense to arrange for and procure, implement all requisite accident prevention tools, first aid boxes, personal protective equipment, fire extinguisher, safety training, Material Safety Data Sheet, pre-employment medical test, etc. for operations & activities including as & when so specified by Discom specifically. , failing which Discom shall be entitled, but not obliged, to provide the same and recover the actual cost thereof from the Contractor's payments.
5. That the Contractor shall engage adequate and competent Safety – Supervisor / Engineer / Manager / Skilled persons at site as per the Para 5 (Qualification and experience of safety personnel) and Annexure 3 of Contract Safety Management.
6. That the Contractor shall engage the competent Site – Supervisor with each group of workers for safe and correct workmanship, proper co-ordination of material and site work as per contract.
7. That the Contractor shall immediately replace supervisor in case it is found to be not up to the level of skill and experience required, but any such replacement shall be only with the prior concurrence of the Discom representative.

The Tata Power Company Ltd	TPCODL TPSODL		TPNODL TPWODL	Appendix 3 to CSCC Safety Terms and Conditions
Document No. TPSMS/GSR/STC/009 REV 05				Date of Issue: 01/08/2023

8. That the Contractor and its subcontractors shall abide by all the safety guidelines as per Safety Manual, Contract Safety Management and other guidelines issued from time to time by Discom during the contract period.
9. That in case the Contractor and/or any of its Subcontractor fail to ensure the compliance as required in terms of this undertaking the Contractor shall keep and hold Discom / its directors / officers / employees indemnified against any / all losses / damage / expense / liability / fines / compensation / claims / action / prosecutions or the like which might be suffered by Discom or to which Discom might get exposed to as a result of any breach /wilful negligence /deliberate default on the part of the Contractor /Subcontractor in complying with the same. Contractor shall also furnish any press release, clarification etc. if sought by Discom for any near miss or safety violations, accidents, which are attributable to fault of Contractor.

DEPONENT

VERIFICATION

Verified at .....on this \_Day of \_\_\_\_\_20\_\_ that the contents of the above affidavit are true and correct and nothing material has been concealed therefrom

CONFIDENTIAL

The Tata Power Company Ltd	  	Contractor's Safety Code of Conduct
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### **Appendix 8: CSM F8 - PPE requirements-(R7)**

The Contractor shall ensure that the following PPE of Approved standards shall be always available and shall be used by his employees with no exception whatsoever. • PPE shall be conforming to BIS/DGMS/DIN specifications, in good condition and shall be comfortable to his employees, when used. This is indicative. For better clarification refer PPE procedure-TPSMS/GSP/PPE/023. as per safety terms and condition Appendix 3 CFM 3 in detail. R7

#### **PPE Requirement**

1	All contractor's employees at site	Safety Florescent Jacket (orange color), Safety helmet & safety shoes with composite or steel toe cap
2	Workers mixing asphalt, cement, lime / concrete	Safety goggle & protective Hand gloves and footwear, Nose mask.
3	Welders / Grinders/Gas cutters	Welding screen/goggles, safety shoes, leather hand gloves, aprons, leg guard
4	Stone breaker	Protective goggle, hearing protection, anti-vibration hand gloves and Protective clothing.
5	Electricians / Linemen	Rubber hand gloves <i>with correct voltage rating and expiry date normally one year from Manufacturing date-(R7)</i> & Electrical resistant shoes, Safety helmet with induction strip to alert about presence of voltage for those linemen who climb the poles or work on electrical equipment
6	Workers working at a height of 1.8 Meter or above.	Double lanyard full body harness, fall arrestor and safety net made of reinforced nylon fiber ropes firmly supported with steel structures, Work positioning attachment

#### **PPE Type and Testing Frequency**

Sl. No.	Name of PPE	IS / EN Standard	Testing Frequency	Remarks
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298 (Part-2)	Monthly and visual check every day for any crack or damage in the leather or sole.	

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02	HDPE Safety helmet with chin strap and ratchet type for adjustment for non-Electrical work	IS:2925-1984	Monthly and visual check every day for any crack in shell.	
03	Full body harness (Safety belt)	EN 361	Monthly and visual check every day of the bends and the harness.	
04	Electrical Safety Gloves	EN: 60903 CE marked	Weekly and visual check for any crack and blow test before every work.	Manufactured not beyond 12 months.
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	Monthly and visual check every day for any crack in shell.	Clear acrylic visor attached with safety helmet.
06	Fireproof jacket for chest protection		Monthly and visual check every day.	
07	Safety helmet with induction Strip for linemen and working for electrical work-Class E	EN 397/2012	Monthly and visual check everyday	Induction Strip alerts presence of voltage
08	Shorting clamps, crocodile clamps, Discharge Rod and Neon tester		Monthly and visual check everyday	For discharging the residual voltage and test before touch

**Pictorial View of PPEs for reference purpose**

Sl. No.	Name of PPE	IS / EN Standard	Picture
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298(Part-2) and with test report of electrical resistance.	

02	HDPE Safety helmet with chin strap and ratchet type for adjustment for Nonelectrical work and electrical work	IS:2925-1984/ EN 397/2012	
03	Full body harness (Safety belt)  The straps at shoulder and thigh shall have full pad for comfort. The back shall be so designed that harness straps do not tangle with each other.	EN 361:2002 EN 358 : 2000  IS: 3521:1991/2002	
04	Electrical Safety Gloves – Composite type Soft electrical gloves as per size of individual.	EN: 60903 CE marked	
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	
06	Fireproof jacket for chest protection		
08	Reflective jacket to each workman	As per Tata Power standard	

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**These pictures are indicative. Actual product may vary.**

**Note:**

1. Any other Personal Protection Equipment required beyond above list will be according to BIS or EN Standards.
2. All Personal Protection Equipment will be checked by the engineer in-charge or SAFETY group of company.
3. Safety Representative of the BA must maintain the record of the availability, condition and checking of the PPEs.
4. All tools required as per the contract must be according to respective IS / EN standards.
5. Company may revise or add the above list of PPE and their specifications as and when feel necessary. The information about new specifications /models will be circulated by the Engineer In-charge (EIC), which shall adhere by the business associated in the shortest possible time. The EIC shall issue a memo / instruction to BA with timeline for implementation. Any delay will be treated as non- compliance / safety violations.

**Appendix 9: CSM F9 - Site Safety Management Plan / Method Statement**

**Site Safety Plan / Method Statement (Template)**

This Method Statement describes the specific safe working methods which will be used to carry out the described work. It gives details of work procedure with control measures to counter health and safety issues related to this work. The listed content of this Method Statement can be changed/modified subjected to job scope / specifications, but task specific method statement once finalized & approved, that should not be modified during work execution without permission from the approving authority.

Project/Job Name		
<b>Scope of work: -</b>		
Drawing References: -		
Detail of Sub contractors involved: -		
Method Statement Prepared By: - Designation: - (e.g., Site Manager)	<u>Signature</u>	<u>Date</u>

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**1.0 Introduction** (*Describe purpose of the work, give details of type and scope of work being carried out*)

**2.0 Location of Work** (*Give site address and precise location on site where work is to be carried out*)

**3.0 Safety Document /Specific Approval Required** (*Details of any safety documents or specific approval i.e., Client specific approval required to undertake the work*)

**5.0 Role & Responsibilities of Personnel/Parties Involved in activities:** *Clearly define roles and responsibilities of all personnel involved in activity i.e., Site management staff including subcontractors' staff, Project Manager/Site Manager of principal contractor, Sub Contractor Site Manager, Project Engineer, Safety officer, Competent Supervisory Staff etc.)*

**6.0 Working/Activity Description:** - *It is important that all operatives should have clear idea of those operational sequences and responsible supervisor must verify their competency prior to their engagement in operation.*

**6.1 Pre-Working Checks**

**6.2 Resources (Equipment, tools including manpower) Details** *i.e., Equipment and Tools, specific operational equipment, test kits, lifting resources, Details of materials to be used in operation, including any reference to COSHH assessments in case of use of any chemicals, Details of the manpower allocated to the task, e.g., titles, qualifications, competences, direct manpower, contractors. Details of plant, tools, and equipment to be used for the work, including the availability of relevant statutory documents, checks or inspections etc. Details of fencing, barriers, cones, chains, dangers notices, warning signs etc.*

**Tools required for work:**

Sr.No	Tools /Equipment /Machine	UOM	Required Qty.	Remark
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

**6.4 Operational Sequence of work:** - *Full description of the work, setting out the methodology in a sequential manner, including any reference to any identified operational restraints. Also refer here sec. 5.0 responsibilities part for every step of work sequence).*

S. No	Activity	Details of job sequence	Risk Involved	Control Checks
1.				
2.				
3				
4				
5.				

**6.7 Final Checks & restoration of work area after completion of work:** *Those checks to be carried out by responsible supervisor in witness of his line hierarchy by use of specific checklist of certain operational checks and once those completed satisfactory, PTW (if applicable) to be closed and isolation arrangements to be restored by removing barricades/cautionary tags.*

**7.0 Task Specific Hazards:** - *Refer to Task Specific Risk Assessment and attach in appendix*

**Attachment:** - Specific Risk Assessment

In addition, please provide below control measures in risk assessment *(as applicable)*.

<b>Fall Protection Measures: (Where Work at height cannot be avoided)</b>	
<b>Control Measures for Electrical Hazards</b>	
<b>Others Hazard if any (please provide details)</b>	

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<b>Hazardous Substances to be used in job:</b> (Attach MSDS if required)	 Acute Toxic	 Health Hazard	 Corrosive	 Dangerous For the environment	 Oxidising	 Highly flammable	 Explosives
	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N

**7.0 Emergency Provisions:** *Relevant operational possibility of a programme in the case of emergency situation i.e. electrical supply restoration. In addition, emergency response provisions i.e., first aiders, firefighting, and first aid arrangements, nearest onsite/offsite emergency response also to be considered during emergency planning.*

**8.0 "5S issues" / Waste Disposal/ Housekeeping and Environmental issues:** *Details waste disposal processes and or housekeeping activities, Details of environmental impacts and control measures.*

**9.0 Personal Protective Equipment (PPE):** *Tick on PPE requirements for the task/Job*

Safety Helmet / Hard Hats		Safety Shoe / Safety Boots	
Gum Boot		Double Lanyard Safety Harness with work positioning attachment	
Electrical Hand gloves		Other hand gloves	
Eye protection		Respiratory protection	
Ear Protection		Electrical Arc flash suit	
Chemical resistant suit		Reflective Jackets	
Any Other		Any Other	

**10.0 First Aid facilities and Nearby Hospitals Details**

- Name of On Site First Aider
- First Aid Box Location
- Location of nearest hospital

**11.0 Occupational Health, Fitness and COVID-19 related Preparedness:**

- Please give a brief writeup / methodology of your organization's plan to avoid impact of the COVID-19 pandemic at Tata Power working site.
  - Please give brief details of occupational health and hygiene related interventions planned by your organisation to ensure good health and fitness of workforce at Tata Power site.

## CORPORATE ENVIRONMENT POLICY

**Tata Power is committed to a clean, safe and healthy environment, and we shall operate our facilities in an environmentally sensitive and responsible manner. Our commitment to environmental protection and stewardship will be achieved by:**

- Complying with the requirements and spirit of applicable environmental laws and striving to exceed required levels of compliance wherever feasible
- Ensuring that our employees are trained to acquire the necessary skills to meet environmental standards
- Conserving natural resources by improving efficiency and reducing wastage
- Making business decisions that aim towards sustainable development
- Engaging with stakeholders to create awareness on sustainability

A handwritten signature in black ink, appearing to read 'Praveer Sinha', with a horizontal line underneath.

(Praveer Sinha)  
CEO & Managing Director

Date: 15<sup>th</sup> June, 2018



## CORPORATE SUSTAINABILITY POLICY

At Tata Power, our Sustainability Policy integrates economic progress, social responsibility and environmental concerns with the objective of improving quality of life. We believe in integrating our business values and operations to meet the expectations of our customers, employees, partners, investors, communities and public at large

- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the customers and adhere to our promised standards of service delivery
- We will respect the universal declaration of human rights, International Labour Organization's fundamental conventions on core labour standards and operate as an equal opportunities employer
- We shall encourage and support our partners to adopt responsible business policies, Business Ethics and our Code of Conduct Standards
- We will continue to serve our communities:
  - By implementing sustainable Community Development Programmes including through public/private partnerships in and around our area of operations
  - By constantly protecting ecology, maintaining and renewing bio-diversity and wherever necessary conserving and protecting wild life, particularly endangered species
  - By encouraging our employees to serve communities by volunteering and by sharing their skills and expertise
  - By striving to deploy sustainable technologies and processes in all our operations and use scarce natural resources efficiently in our facilities
  - We will also help communities that are affected by natural calamities or untoward incidence, or that are physically challenged in line with the Tata Group's efforts

The management will commit all the necessary resources required to meet the goals of Corporate Sustainability.



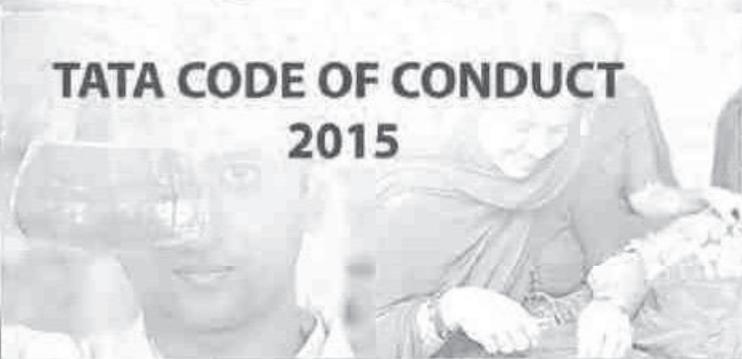
(Praveer Sinha)  
CEO & Managing Director

Date: 15<sup>th</sup> June, 2018





**TATA CODE OF CONDUCT  
2015**



## LEADERSHIP THAT INSPIRES

For over 100 years, the Tata group has been led by visionaries who have stayed true to the vision of the founder, Jamsetji Tata.

A vision that placed the greater good of society at par with business growth.

A vision that put into practice pioneering social initiatives that changed the way responsible business was run.

And a vision that brought into the group a strong social conscience.



We do not claim to be more unselfish, more generous or more philanthropic than other people. But we think we started on sound and straightforward business principles, considering the interests of the shareholders our own, and the health and welfare of the employees, the sure foundation of our success.

**Jamsetji Tata**  
Founder of the Tata group  
Chairman (1868 – 1904)

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## FOREWORD

Tata companies have consistently adhered to the values and ideals articulated by the Founder for over 150 years. The Tata Code of Conduct was first formalized by Mr Ratan Tata. It articulates the Group's values and ideals that guide and govern the conduct of our companies as well as our colleagues in all matters relating to business. Today, the Code is a bedrock on which we base our individual, as well as leadership commitments to core Tata values.

The Tata Code of Conduct outlines our commitment to each of our stakeholders, including the communities in which we operate, and is our guiding light when we are sometimes faced with business dilemmas that leave us at ethical crossroads. The Code is also dynamic in that it has been periodically refreshed in order to remain contemporary and contextual to the changes in law and regulations. However it remains unaltered at its core.

Our stellar reputation and success as a business entity has been defined by the powerful commitment and adherence to the core values and principles expressed in this Code, by all our employees, directors and partners. I trust every Tata colleague and Tata company will continue to not only comply with the laws and regulations that govern our business interests around the world, but will continue to set new standards of ethical conduct that will generate deep respect and inspire emulation by others.

**N. Chandrasekaran**

21<sup>st</sup> February, 2017



## A. OUR VALUES

TATA has always been values-driven. The five core values that underpin the way we conduct our business activities are:



### INTEGRITY

We will be fair, honest, transparent and ethical in our conduct; everything we do must stand the test of public scrutiny.

### UNITY

We will invest in our people and partners, enable continuous learning, and build caring and collaborative relationships based on trust and mutual respect.

### RESPONSIBILITY

We will integrate environmental and social principles in our businesses, ensuring that what comes from the people goes back to the people many times over.

### PIONEERING

We will be bold and agile, courageously taking on challenges, using deep customer insight to develop innovative solutions.

### EXCELLENCE

We will be passionate about achieving the highest standards of quality, always promoting meritocracy.

These universal values serve as the foundation for the Tata Code of Conduct. They find expression within the value system of every Tata company.

## B. SCOPE AND PURPOSE OF THIS CODE

1. This Code sets out how we behave with:
  - our employees, or those who work with us;
  - our customers;
  - the communities and the environment in which we operate;
  - our value-chain partners, including suppliers and service providers, distributors, sales representatives, contractors, channel partners, consultants, intermediaries and agents;
  - our joint-venture partners or other business associates;
  - our financial stakeholders;
  - the governments of the countries in which we operate; and
  - our group companies.
2. In this Code, “we or us” means our company, our executive directors, officers, employees and those who work with us, as the context may require.
3. The term “our group companies” in this Code typically means companies Tata Sons intends for this Code to apply to, and / or to whom Tata Sons has issued this Code.
4. This Code sets out our expectations of all those who work with us. We also expect those who deal with us to be aware that this Code underpins everything we do, and in order to work with us they need to act in a manner consistent with it.

### REMEMBER...

It is our commitment to protect our reputation and our brand equity by adhering to the values and principles set out in this Code. By doing so, we strengthen our unique culture and identity.

# OUR CORE PRINCIPLES



The Tata philosophy of management has always been, and is today more than ever, that corporate enterprises must be managed not merely in the interests of their owners, but equally in those of their employees, of the consumers of their products, of the local community and finally of the country as a whole.

**J.R.D. Tata**

Chairman, Tata Sons (1938 – 1991)

## C. OUR CORE PRINCIPLES

1. We are committed to operating our businesses conforming to the highest moral and ethical standards. We do not tolerate bribery or corruption in any form. This commitment underpins everything that we do.
2. We are committed to good corporate citizenship. We treat social development activities which benefit the communities in which we operate as an integral part of our business plan.
3. We seek to contribute to the economic development of the communities of the countries and regions we operate in, while respecting their culture, norms and heritage. We seek to avoid any project or activity that is detrimental to the wider interests of the communities in which we operate.
4. We shall not compromise safety in the pursuit of commercial advantage. We shall strive to provide a safe, healthy and clean working environment for our employees and all those who work with us.
5. When representing our company, we shall act with professionalism, honesty and integrity, and conform to the highest moral and ethical standards. In the countries we operate in, we shall exhibit culturally appropriate behaviour. Our conduct shall be fair and transparent and be perceived as fair and transparent by third parties.
6. We shall respect the human rights and dignity of all our stakeholders.
7. We shall strive to balance the interests of our stakeholders, treating each of them fairly and avoiding unfair discrimination of any kind.
8. The statements that we make to our stakeholders shall be truthful and made in good faith.
9. We shall not engage in any restrictive or unfair trade practices.
10. We shall provide avenues for our stakeholders to raise concerns or queries in good faith, or report instances of actual or perceived violations of our Code.
11. We shall strive to create an environment free from fear of retribution to deal with concerns that are raised or cases reported in good faith. No one shall be punished or made to suffer for raising concerns or making disclosures in good faith or in the public interest.
12. We expect the leaders of our businesses to demonstrate their commitment to the ethical standards set out in this Code through their own behaviour and by establishing appropriate processes within their companies.
13. We shall comply with the laws of the countries in which we operate and any other laws which apply to us. With regard to those provisions of the Code that are explicitly dealt with under an applicable law or employment terms, the law and those terms shall take precedence. In the event that the standards prescribed under any applicable law are lower than that of the Code, we shall conduct ourselves as per the provisions of the Code.

### REMEMBER...

"Good faith" means having a reasonable belief that the information you have provided is truthful. It does not mean having 'all the evidence' about the potential violation or case reported.

# OUR EMPLOYEES



Once you got the best people, the people who shared our values and ideals, we left them free to act on their own. We do not fetter them. We encourage them and give them opportunities for leadership.

**J.R.D. Tata**  
Chairman, Tata Sons (1938 – 1991)

## D. OUR EMPLOYEES

### Equal opportunity employer

1. We provide equal opportunities to all our employees and to all eligible applicants for employment in our company. We do not unfairly discriminate on any ground, including race, caste, religion, colour, ancestry, marital status, gender, sexual orientation, age, nationality, ethnic origin, disability or any other category protected by applicable law.
2. When recruiting, developing and promoting our employees, our decisions will be based solely on performance, merit, competence and potential.
3. We shall have fair, transparent and clear employee policies which promote diversity and equality, in accordance with applicable law and other provisions of this Code. These policies shall provide for clear terms of employment, training, development and performance management.

### Q & A

**A job requirement entails extensive travel. One of the candidates has excellent relevant experience and qualifications. However, this candidate is a single parent. As a result, I feel such a situation would significantly hinder this candidate's ability to cope with the job requirement. What should I do?**

In accordance with the Code, the decision to recruit an employee should be based upon merit. We cannot make a presumption that the candidate would not be able to meet the travel requirements of the job. All eligible candidates should be provided with equal opportunity to demonstrate or justify that they can cope with the travel requirements of the job. Being a single parent cannot be a ground to be discriminated against at any stage of recruitment or ongoing employment in our company.

### REMEMBER...

We do not tolerate harassment in any form and therefore we expect every employee to discourage such misdemeanours in the workplace.

### Dignity and respect

4. Our leaders shall be responsible for creating a conducive work environment built on tolerance, understanding, mutual cooperation and respect for individual privacy.
5. Everyone in our work environment must be treated with dignity and respect. We do not tolerate any form of harassment, whether sexual, physical, verbal or psychological.
6. We have clear and fair disciplinary procedures, which necessarily include an employee's right to be heard.
7. We respect our employees' right to privacy. We have no concern with their conduct outside our work environment, unless such conduct impairs their work performance, creates conflicts of interest or adversely affects our reputation or business interests.

### Human rights

8. We do not employ children at our workplaces.
9. We do not use forced labour in any form. We do not confiscate personal documents of our employees, or force them to make any payment to us or to anyone else in order to secure employment with us, or to work with us.

### Bribery and corruption

10. Our employees and those representing us, including agents and intermediaries, shall not, directly or indirectly, offer or receive any illegal or improper payments or comparable benefits that are intended or perceived to obtain undue favours for the conduct of our business.

#### REMEMBER...

Violation by even a single employee of any law relating to anti-bribery, anti-corruption, anti-competition, data privacy, etc. could result in severe financial penalties and cause irreparable reputational damage to the company.

## Gifts and hospitality

11. Business gifts and hospitality are sometimes used in the normal course of business activity. However, if offers of gifts or hospitality (including entertainment or travel) are frequent or of substantial value, they may create the perception of, or an actual conflict of interest or an 'illicit payment'. Therefore, gifts and hospitality given or received should be modest in value and appropriate, and in compliance with our company's gifts and hospitality policy.

## Freedom of association

12. We recognise that employees may be interested in joining associations or involving themselves in civic or public affairs in their personal capacities, provided such activities do not create an actual or potential conflict with the interests of our company. Our employees must notify and seek prior approval for any such activity as per the 'Conflicts of Interest' clause of this Code and in accordance with applicable company policies and law.

### REMEMBER...

As a general rule, we may accept gifts or hospitality from a business associate, only if such a gift:

- has modest value and does not create a perception (or an implied obligation) that the giver is entitled to preferential treatment of any kind;
- would not influence, or appear to influence, our ability to act in the best interest of our company;
- would not embarrass our company or the giver if disclosed publicly.

The following gifts are never appropriate and should never be given or accepted:

- gifts of cash or gold or other precious metals, gems or stones;
- gifts that are prohibited under applicable law;
- gifts in the nature of a bribe, payoff, kickback or facilitation payment\*;
- gifts that are prohibited by the gift giver's or recipient's organisation; and
- gifts in the form of services or other non-cash benefits (e.g. a promise of employment).

(\*'Facilitation' payment is a payment made to secure or speed up routine legal government actions, such as issuing permits or releasing goods held in customs.)

### Working outside employment with us

13. Taking employment, accepting a position of responsibility or running a business outside employment with our company, in your own time, with or without remuneration, could interfere with your ability to work effectively at our company or create conflicts of interest. Any such activity must not be with any customer, supplier, distributor or competitor of our company. Our employees must notify and seek prior approval for any such activity as per the 'Conflicts of Interest' clause of this Code and in accordance with applicable company policies and law.

### Integrity of information and assets

14. Our employees shall not make any wilful omissions or material misrepresentation that would compromise the integrity of our records, internal or external communications and reports, including the financial statements.
15. Our employees and directors shall seek proper authorisation prior to disclosing company or business-related information, and such disclosures shall be made in

accordance with our company's media and communication policy. This includes disclosures through any forum or media, including through social media.

16. Our employees shall ensure the integrity of personal data or information provided by them to our company. We shall safeguard the privacy of all such data or information given to us in accordance with applicable company policies or law.
17. Our employees shall respect and protect all confidential information and intellectual property of our company.
18. Our employees shall safeguard the confidentiality of all third party intellectual property and data. Our employees shall not misuse such intellectual property and data that comes into their possession and shall not share it with anyone, except in accordance with applicable company policies or law.
19. Our employees shall promptly report the loss, theft or destruction of any confidential information or intellectual property and data of our company or that of any third party.

## Q&A

**I am an accountant in the finance department of my company. Due to my artistic skills, I received an offer to pen cartoons for a children's publication for which I would receive compensation. I plan to undertake this activity during week-ends. What should I do before accepting this offer?**

Before accepting the offer, you should ascertain whether the company policies and rules require you to make a disclosure to your supervisor so that the company may determine whether your undertaking this activity adversely affects our company's interests. On confirmation from the company that it does not do so, you would be free to take up the activity. It is also your duty to bring to the attention of the company whenever there is any change in the situation you have disclosed.

20. Our employees shall use all company assets, tangible and intangible, including computer and communication equipment, for the purpose for which they are provided and in order to conduct our business. Such assets shall not be misused. We shall establish processes to minimise the risk of fraud, and misappropriation or misuse of our assets.
21. We shall comply with all applicable anti-money laundering, anti-fraud and anti-corruption laws and we shall establish processes to check for and prevent any breaches of such laws.

### Insider trading

22. Our employees must not indulge in any form of insider trading nor assist others, including immediate family, friends or business associates, to derive any benefit from access to and possession of price sensitive information that is not in the public domain. Such information would include information about our company, our group companies, our clients and our suppliers.

### Q & A

**Our company has recently announced the launch of a new business initiative. In connection with this, your friend who is a journalist with a leading business newspaper has asked you to provide some information that he could cover in his forthcoming article. He has promised not to quote you, or reveal your identity. Should you be giving him this information?**

No. You should not be sharing information of this nature with the media, even if it is assured that the source would remain anonymous. Only authorised personnel in the company are permitted to speak to the media and provide information of this nature.

**Our company has a “Use of Social Media” policy that lays down the “dos and don’ts” for use of social media even if you may access such media on your own time. Why is there such a policy?**

External communication is a serious matter. It must be carefully managed because information put out with reference to our company or its businesses needs to be clear, truthful and not violate any undertakings we have given to other parties. In each business there are managers nominated to authorise and make different types of statements to the outside world. These managers should be consulted about any request for information you may receive or information you think we should give out.

In using social media, in particular blogs or social networking sites, you should exercise great caution while talking about our company or the business we do. It may feel like you are chatting with friends or expressing a personal opinion but even while doing so you cannot share any confidential information of our company.

### REMEMBER...

We must respect the property rights of others by never misusing their assets, intellectual property or trade secrets, including the copying or downloading of unauthorised software, trademarks, copyrighted material or logos. We should never make unauthorised copies of computer software programs or use unlicensed personal software on company computers.

### Prohibited drugs and substances

23. Use of prohibited drugs and substances creates genuine safety and other risks at our workplaces. We do not tolerate prohibited drugs and substances from being possessed, consumed or distributed at our workplaces, or in the course of company duties.

### Conflicts of interest

24. Our employees and executive directors shall always act in the interest of our company and ensure that any business or personal association *including close personal relationships* which they may have, does not create a conflict of interest with their roles and duties in our company or the operations of our company. Further, our employees and executive directors shall not engage in any business, relationship or activity, which might conflict with the interest of our company or our group companies.

25. Should any actual or potential conflicts of interest arise, the concerned person must immediately report such conflicts and seek approvals as required by applicable law and company policy. The competent authority shall revert to the employee within a reasonable time as defined in our company's policy, so as to enable the concerned employee to take necessary action as advised to resolve or avoid the conflict in an expeditious manner.
26. In the case of all employees other than executive directors, the Chief Executive Officer / Managing Director shall be the competent authority, who in turn shall report such cases to the Board of Directors on a quarterly basis. In case of the Chief Executive Officer / Managing Director and executive directors, the Board of Directors of our company shall be the competent authority.

### Q&A

**You are responsible for maintaining our company's customer database. One of your friends is starting a business venture and requests you to share a few particulars from this database for marketing purposes of his business. He assures you that he would keep the data as well as his source confidential. Should you do so?**

No. You should respect the confidentiality of customer information and not share any part of the database with any person without due authorisation.

**You have access to revenue numbers of different business units of our company. While having a conversation with you over evening drinks, your friend enquires about the financial performance of our company. You do not share detailed information with your friend, but share approximate revenue figures. Is this conduct of yours correct?**

No, it is not. You are not permitted to share financial information of our company with others who do not need to know this information. Financial information should always be safeguarded and disclosed only on a need-to-know basis after obtaining requisite approvals. Sharing of any price sensitive information that is not generally available with the public could also lead to violation of applicable insider trading laws.



27. Notwithstanding such or any other instance of conflict of interest that exists due to historical reasons, adequate and full disclosure by interested employees shall be made to our company's management. At the time of appointment in our company, our employees and executive directors shall make full disclosure to the competent authority, of any interest leading to an

actual or potential conflict that such persons or their immediate family (including parents, siblings, spouse, partner, children) or persons with whom they enjoy close personal relationships, may have in a family business or a company or firm that is a competitor, supplier, customer or distributor of, or has other business dealings with, our company.

### REMEMBER...

A conflict of interest could be any known activity, transaction, relationship or service engaged in by an employee, his/her immediate family (including parents, siblings, spouse, partner, and children), relatives or a close personal relationship, which may cause concern (based upon an objective determination) that the employee could not or might not be able to fairly perform his/her duties to our company.

### Examples of Potential Conflicts of Interest

A conflict of interest, actual or potential, arises where, directly or indirectly, an employee or executive director:

- (a) engages in a business, activity or relationship with anyone who is party to a transaction with our company;
- (b) is in a position to derive an improper benefit, personally or for any family member or for any person in a close personal relationship, by making or influencing decisions relating to any transaction;
- (c) conducts business on behalf of our company or is in a position to influence a decision with regard to our company's business with a supplier or customer where a relative of, or a person in close personal relationship with, an employee or executive director is a principal officer or representative, resulting in a personal benefit or a benefit to the relative;
- (d) is in a position to influence decisions with regard to award of benefits such as increase in salary or other remuneration, posting, promotion or recruitment of a relative or a person in close personal relationship employed in our company or any of our group companies;
- (e) undertakes an activity by which the interest of our company or our group companies can be compromised or defeated; or
- (f) does anything by which an independent judgement of our company's or our group companies' best interest cannot be exercised.



28. If there is a failure to make the required disclosure and our management becomes aware of an instance of conflict of interest that ought to have been disclosed by an employee or executive director, our management shall take a serious view of the matter and consider suitable disciplinary action as per the terms of employment. In all such matters, we shall follow clear and fair disciplinary procedures, respecting the employee's right to be heard.

### Examples of activities normally approved (post-disclosure) as per applicable company policy

Acceptance of a position of responsibility (whether for remuneration or otherwise) in the following cases would typically be permitted, provided the time commitments these demand do not disturb or distract from the employee's primary duties and responsibilities in our company, and are promptly disclosed to the relevant competent authority:

- (a) Directorships on the Boards of any of our group companies, joint ventures or associate companies.
- (b) Memberships/positions of responsibility in educational/professional bodies, where such association will promote the interests of our company.
- (c) Memberships or participation in government committees/bodies or organisations.

### Q & A

**You are in a relationship with a colleague who has been recently moved into your team and would now be reporting to you. What should you do?**

Romantic or close personal relationships with another employee where a reporting relationship exists and one is responsible for evaluating the other's performance, is likely to create a conflict of interest. In such a situation, you would need to report the potential conflict to your supervisor.

**Your company is submitting a proposal to a company in which you were previously employed. You have confidential information pertaining to your previous employer, which you believe will help your present employer in winning the contract. Should you share this information?**

No. You should not share this information with your company since it relates to confidential information of a third party. Your company respects its employees' duty to protect confidential information that they may have relating to their previous employers.

**You are the purchasing manager in the procurement department of your company. You receive an invitation from a supplier to attend a premier sporting event as her guest. This particular supplier is one of the vendors who has submitted a proposal for an open tender issued by your company. Should you accept the invitation?**

No. You should not accept the invitation in this instance. Since you are in a key decision-making role for the tender, any unusual benefit that you receive could be perceived as an inducement that could compromise your objectivity.

## OUR CUSTOMERS



We have continued to enjoy prosperity, even with adverse times to fight against. Our relations with all concerned are the most friendly. We have maintained the same character for straight-forward dealing with our constituents and customers. Our productions have continued to be of the same high quality, and therefore command the best reputation and realise the highest prices. ... I mention these facts only to point out that with honest and straight-forward business principles, close and careful attention to details, and the ability to take advantage of favourable opportunities and circumstances, there is a scope for success.

**Jamsetji Tata**  
Founder of the Tata group  
Chairman, Tata Sons (1868 – 1904)

## E. OUR CUSTOMERS

### Products and services

1. We are committed to supplying products and services of world-class quality that meet all applicable standards.
2. The products and services we offer shall comply with applicable laws, including product packaging, labelling and after-sales service obligations.
3. We shall market our products and services on their own merits and not make unfair or misleading statements about the products and services of our competitors.

### Export controls and trade sanctions

4. We shall comply with all relevant export controls or trade sanctions in the course of our business.

### Fair competition

5. We support the development and operation of competitive open markets and the liberalisation of trade and investment in each country and market in which we operate.
6. We shall not enter into any activity constituting anti-competitive behaviour such as abuse of market dominance, collusion, participation in cartels or inappropriate exchange of information with competitors.
7. We collect competitive information only in the normal course of business and obtain the same through legally permitted sources and means.

### Dealings with customers

8. Our dealings with our customers shall be professional, fair and transparent.
9. We respect our customers' right to privacy in relation to their personal data. We shall safeguard our customers' personal data, in accordance with applicable law.

## Q&A

**You are the Regional Sales Manager of our company. You have become a member of an “informal group”, on an instant messaging service, whose members are the regional sales heads of our company’s competitors. The administrator of the group has requested an in-person meeting to informally discuss market conditions and brainstorm on “pricing strategy” from an industry perspective. What should you do?**

Any meeting with competitors, especially to discuss “pricing strategy”, could be an attempt to promote an anti-competitive practice or manipulate prices. You should respond by declining this invitation and exiting the “informal group”. You should also report this incident to your supervisor and your Legal department.

**You are attending a customer meeting with a colleague, and your colleague makes an untruthful statement about the company’s services. What should you do?**

You should assist your colleague in correcting the inaccuracy during the meeting if possible. If this is not possible, raise the issue with your colleague after the meeting to enable him/her or the company to correct any misrepresentation made to the customer.

**While working on a customer project, you receive a call from your colleague. He used to manage that customer account before you took over his role. He recalls that he had worked with the customer on developing a new ordering system which he thinks would be beneficial for another customer and requests you to send him the project details. What should you do?**

You must not share this information without specific approval of the customer; you are not permitted to use a customer’s assets, including software, for another customer or for any personal use.

## REMEMBER...

Striving for excellence in the standards of our work and in the quality of our goods and services is a core Tata value. It is the unwavering practice of this value that builds and sustains customer trust in our brand.

# OUR COMMUNITIES AND THE ENVIRONMENT



In a free enterprise, the community is not just another shareholder in business but is in fact the very purpose of its existence.

## Jamsetji Tata

Founder of the Tata group  
Chairman, Tata Sons (1868 – 1904)

## F. OUR COMMUNITIES AND THE ENVIRONMENT

### Communities

1. We are committed to good corporate citizenship, and shall actively assist in the improvement of the quality of life of the people in the communities in which we operate.
2. We engage with the community and other stakeholders to minimise any adverse impact that our business operations may have on the local community and the environment.
3. We encourage our workforce to volunteer on projects that benefit the communities in which we operate, provided the principles of this Code, where applicable, and in particular the 'Conflicts of Interest' clause are followed.

### The environment

4. In the production and sale of our products and services, we strive for environmental sustainability and comply with all applicable laws and regulations.
5. We seek to prevent the wasteful use of natural resources and are committed to improving the environment, particularly with regard to the emission of greenhouse gases, consumption of water and energy, and the management of waste and hazardous materials. We shall endeavour to offset the effect of climate change in our activities.

# OUR VALUE-CHAIN PARTNERS



If we had done some of the things that some other groups have done, we would have been twice as big as we are today. But we didn't, and I would not have it any other way.

**J.R.D. Tata**

Chairman, Tata Sons (1938 – 1991)

(on the pace of expansion of the Tata group in the 1960s and 70s)



## G. OUR VALUE-CHAIN PARTNERS

1. We shall select our suppliers and service providers fairly and transparently.
2. We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.
3. Our suppliers and service providers shall represent our company only with duly authorised written permission from our company. They are expected to abide by the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.
4. We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
5. We respect our obligations on the use of third party intellectual property and data.

### Q & A

**You head the procurement function in our company. You have tight budgetary constraints for a project that you are working on. In order to complete the project within the targeted costs, you intend to request your supplier to provide you an exceptional discount on this project order on the understanding that you would "make it up to him" in future orders. Would you be violating the Code?**

Yes, you would. Inducement in any form, including future benefits to the supplier, could compromise your ability to act objectively and in the best interests of the company and therefore must be avoided.

### REMEMBER...

Our value-chain partners would include our suppliers and service providers, distributors, sales representatives, contractors, channel partners, consultants, intermediaries and agents; joint-venture partners and other business associates.



# OUR FINANCIAL STAKEHOLDERS



Ethical behaviour in business – in every sphere and with all constituents – has been the bedrock on which the Tata group has built, and operates, its enterprises. This has been an article of faith for the group ever since its inception, a fundamental element of our cherished heritage and the essence of our way of life.

**Ratan Tata**

Chairman, Tata Sons (1991 – 2012)

## H. OUR FINANCIAL STAKEHOLDERS

1. We are committed to enhancing shareholder value and complying with laws and regulations that govern shareholder rights.
  2. We shall inform our financial stakeholders about relevant aspects of our business in a fair, accurate and timely manner and shall disclose such information in accordance with applicable law and agreements.
  3. We shall keep accurate records of our activities and shall adhere to disclosure standards in accordance with applicable law and industry standards.
-

# GOVERNMENTS



Business, as I have seen it, places one great demand on you; it needs you to impose a framework of ethics, values, fairness and objectivity on yourself at all times. It is not easy to do this; you cannot impose it on yourself forcibly because it has to become an integral part of you.

**Ratan Tata**

Chairman, Tata Sons (1991 – 2012)

## I. GOVERNMENTS

### Political non-alignment

1. We shall act in accordance with the constitution and governance systems of the countries in which we operate. We do not seek to influence the outcome of public elections, nor to undermine or alter any system of government. We do not support any specific political party or candidate for political office. Our conduct must preclude any activity that could be interpreted as mutual dependence/favour with any political body or person, and we do not offer or give any company funds or property or other resources as donations to any specific political party, candidate or campaign.

Any financial contributions considered by our Board of Directors in order to strengthen democratic forces through a clean electoral process shall be extended only through the Progressive Electoral Trust in India, or by a similar transparent, duly-authorized, non-discriminatory and non-discretionary vehicle outside India.

### Government engagement

2. We engage with the government and regulators in a constructive manner in order to promote good governance. We conduct our interactions with them in a manner consistent with our Code.
3. We do not impede, obstruct or improperly influence the conclusions of, or affect the integrity or availability of data or documents for any government review or investigation.

# OUR GROUP COMPANIES



I do not think anyone was on par with Jamsetji as an industrial visionary. But that is not the sole reason why I have been an admirer of Jamsetji.

The major reason was his sense of values, sterling values, which he imparted to this group. If someone were to ask me, what holds the Tata companies together, more than anything else, I would say it is our shared ideals and values which we have inherited from Jamsetji Tata.

**J.R.D. Tata**

Chairman, Tata Sons (1938 – 1991)

## J. OUR GROUP COMPANIES

1. We seek to cooperate with our group companies, including joint ventures, by sharing knowledge, physical resources, human and management resources and adopting leading governance policies and practices in accordance with applicable law including adherence to competition law, where relevant.
2. We shall strive to achieve amicable resolution of any dispute between us and any of our group companies, through an appropriate dispute resolution mechanism so that it does not adversely affect our business interests and stakeholder value.
3. We shall have processes in place to ensure that no third party or joint venture uses the TATA name/brand to further its interests without proper authorisation.
4. Our Board of Directors shall consider for adoption policies and guidelines periodically formulated by Tata Sons and circulated to group companies.

### Q & A

**You are in the process of selecting potential vendors for an IT project in our company. In the final shortlist of two companies, one is a new start-up with limited references and a lower price-quotation, while the other is a Tata company with thirty years of implementation experience and good references, but a marginally higher quote for the same job. With all other parameters of choice being nearly equal, which company should you select for the job?**

While price is undoubtedly an important criterion for decision making, it is clearly not the only one to be evaluated. You may also need to consider good customer references, proven track record and shared value systems in order to decide on your IT partner.

**You are in the process of selecting potential vendors for a project. One of the three finalists is a group company. In reviewing the final proposals, you rank the group company second out of the three proposals based on pricing and total cost of ownership, and select the first-ranked vendor. Is this the right decision?**

Yes. You should select the vendor that, on its own merits, is the vendor that is most appropriate for your company's requirements. You should not select a group company only because of its affiliation.

## RAISING CONCERNS

We encourage our employees, customers, suppliers and other stakeholders to raise concerns or make disclosures when they become aware of any actual or potential violation of our Code, policies or law. We also encourage reporting of any event (actual or potential) of misconduct that is not reflective of our values and principles.

Avenues available for raising concerns or queries or reporting cases could include:

- immediate line manager or the Human Resources department of our company
- designated ethics officials of our company
- the 'confidential reporting' third party ethics helpline (if available)
- any other reporting channel set out in our company's 'Whistleblower' policy.

We do not tolerate any form of retaliation against anyone reporting legitimate concerns. Anyone involved in targeting such a person will be subject to disciplinary action.

If you suspect that you or someone you know has been subjected to retaliation for raising a concern or for reporting a case, we encourage you to promptly contact your line manager, the company's Ethics Counsellor, the Human Resources department, the MD/CEO or the office of the group's Chief Ethics Officer.

### Q & A

**My supervisor has asked me to do something which I believe may be illegal. I am afraid if I do not do what I am told, I could lose my job. Should I do it?**

No. Breaking the law is never an option. Discuss the situation with your supervisor to be certain that you both understand the facts. If your concerns are not resolved, contact a higher level supervisor, the Ethics Counsellor, the Legal department or report them via the company's confidential reporting system, if available.

**I feel that my supervisor is treating me unfairly for reporting a concern to the Ethics Counsellor. What should I do?**

Retaliation against anyone who raises a concern is a violation of the Code. You should therefore promptly report this action of your supervisor to the Ethics Counsellor or the MD/CEO of your company or via the company's confidential reporting system, if available.

## ACCOUNTABILITY

This Code is more than a set of prescriptive guidelines issued solely for the purpose of formal compliance. It represents our collective commitment to our value system and to our core principles.

Every person employed by us, directly or indirectly, should expect to be held accountable for his/her behaviour. Should such behaviour violate this Code,

they may be subject to action according to their employment terms and relevant company policies.

When followed in letter and in spirit, this Code is *'lived'* by our employees as well as those who work with us. It represents our shared responsibility to all our stakeholders, and our mutual commitment to each other.

### SPEAK UP...

If you are unsure whether a particular action you are about to take is consistent with the principles set forth in the Code, ask yourself:

- Could it directly or indirectly endanger someone or cause them injury?
- Is it illegal/unlawful or out of line with our policies and procedures?
- Does my conscience reject it? Does it conflict with my personal values?
- Would I feel uncomfortable if the story appeared in the media? Would it shame my company, spouse, partner, parent or child?
- Does it 'feel' wrong?

If the answer to any of these questions is "Yes", please stop and consult your reporting manager, the Ethics Counsellor, the Human Resource department, the Legal department or any member of the senior management team, to assist you in making the decision.

**When faced with a dilemma:** Stop, Think, Act Responsibly

**NOTE**

The Code does not provide a comprehensive and complete explanation of all expectations from a company standpoint or obligations from a stakeholder standpoint.

Our employees have a continuing obligation to familiarise themselves with all applicable law, group-level advisories and policies, company-level policies, procedures and work rules as relevant. For any guidance on interpretation of the Code, we may seek support from our company's Ethics Counsellor or from the group's Chief Ethics Officer, as appropriate.

All joint ventures are encouraged to adopt the Tata Code of Conduct (TCOC) or a code of conduct that incorporates all elements of the TCOC.

This version of the Tata Code of Conduct supersedes all earlier versions and associated documents and stands effective from 29<sup>th</sup> July, 2015.

For any query or clarification on the Code, please contact the office of the group's Chief Ethics Officer via email at: [ethicsoffice@tata.com](mailto:ethicsoffice@tata.com).



## TATA CODE OF CONDUCT – 2015

I acknowledge that I have received the Tata Code of Conduct.

I have read the Tata Code of Conduct and I acknowledge that as a Tata employee, I am required to comply with the guidelines described therein and failure to do so may subject me to action as per my employment terms and relevant company policies.

If I have a concern about a violation, or a potential violation of the Tata Code of Conduct, I understand that there are channels available to me in my company to report such concerns. By making use of these channels when necessary, I will play my part in maintaining the high ethical standards to which we hold ourselves.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Department: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

*(Please submit this declaration to your Ethics Counsellor or the Human Resource department of your company.)*











For further information on the Code please contact:  
 The Ethics Office,  
 Tata Sons Ltd.,  
 Bombay House,  
 24, Homi Mody Street,  
 Mumbai - 400001, India.  
 Email: [ethicsoffice@tata.com](mailto:ethicsoffice@tata.com)