

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

OPEN TENDER NOTIFICATION

FOR

Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable for various Transmission Projects

Tender Enquiry No: CC25MSJ027

(Please note this reference number must be quoted in all submission pertaining to this tender)

**The Tata Power Company Limited (Tata Power)
Corporate Contracts,**

**Smart Center of Procurement Excellence,
2nd Floor, Sahar Receiving Station, Near Hotel Leela,
Sahar Airport Road, Andheri (E), Mumbai 400 059**

Procedure for Participating in Tender

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

Tender Enquiry No.	Work Description	EMD (Rs.)	Tender Participation Fee	Last date and time for Payment of Tender Participation Fee*	Last date and time for bid submission
CC25MSJ027	Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable	5,00,000/-	Rs. 2000/-	Till 08th August 2024	By 22nd August 2024

*** Interested bidders are strongly advised not to wait by above time and purchase the tender immediately to get the link for bid submission. This will enable them to communicate/raise queries against the subject tender in time.**

Procedure for Participating in Tender. Following steps to be done before last date for purchase of tender,

- Interested Vendors to refer to the Section C of the tender (Prequalification criteria).
- Eligible and Interested Bidders to submit duly signed and stamped letter on Bidder's letterhead indicating
 - Tender Enquiry number
 - Name of authorized person
 - Contact number
 - e-mail id
 - Details of submission of Tender Participation Fee
- Non-Refundable Tender Participation Fee, as indicated in table above, to be submitted in the form of Direct deposit in the following bank account and submit the receipt along with a covering letter clearly indicating the Tender Reference number –

Beneficiary Name – The Tata Power Co. Ltd.

Bank Name – HDFC Bank Ltd.

Branch Name – Fort Branch, Mumbai

Address – Maneckji Wadia Building, Nanik Motwani Marg, Fort, Mumbai 400023.

Branch Code – 60

Bank & Branch Code – 400240015

Account No – 00600110000763

Account type – CC

IFSC Code – HDFC0000060

E-mail with necessary attachment of 1 and 2 above to be send to munjalsingh.jhala@tatapower.com with copy to vivek.mittal@tatapower.com before “Last date and time for Payment of Tender Participation Fee”

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

Interested bidders to submit Tender Participation Fee and Authorization Letter before Last date and time as indicated above after which link from Tata Power E-Tender system (Ariba) will be shared for further communication and bid submission.

Please note all future correspondence regarding the tender, bid submission, bid submission date extension, Pre-bid query etc will happen only through Tata Power E-Tender system (Ariba). User manual to guide the bidders to submit the bid through e-Tender system (Ariba) is also enclosed in the Section I of the Tender Document.

No e-mail or verbal correspondence will be responded. All communication will be done strictly with the bidder who have done the above steps (Payment of tender fee and submission of letter with requisite details) to participate in the Tender.

Also it may be strictly noted that once date of “Last date and time for Payment of Tender Participation Fee” is lapsed no Bidder will be sent link from Tata Power E-Tender System (Ariba). Without this link vendor will not be able to participate in the tender. Any last moment request to participate in tender will not be acknowledged.

Any payment of Tender Participation Fee / EMD by Bidder who have not done the pre-requisite within stipulated timeline will not be refunded.

Also all future corrigendum's to the said tender, if any, will be informed on Tender section on website <https://www.tatapower.com>

CONTENTS OF THE ENQUIRY

Following Documents Form Part of Tender Enquiry:	No. of Pages
A. Tender Notice Including Instruction to Bidders (this document)	1-16
B. Pre-Bid Queries Submission Format*	
B.1 Format for Technical Pre-Bid Queries	1-1
B.2 Format for Commercial Pre-Bid Queries	1-1
C. Pre-qualification Requirement and Submission Format*	
C.1. Techno-Commercial PQR (Pre-Qualification Requirement)*	1-1
D. Commercial Set of Documents / Format	
D.1. General Terms and Conditions - Supply	1-18
D.2. STC additional for Open Tender	1-3
D.3. Special Conditions of Contract	1-4
D.4. Price Bid Format	1-1
D.5. Annexure to GCC and Safety T&Cs	1-84
E. Technical Set of Documents / Format	
E.1. Technical Specification	1-91
E.2. Schedule C	1-1
F. Other formats / templates	
F.1. Affidavit format	1-1
F.2. Format of Letter of Undertaking	1-1
F.3. E-auction Undertaking format	1-1
F.4. EMD Bank Guarantee Format	1-2
F.5. Contract Performance / Performance Bank Guarantee Format	1-2
F.6. Vendor Registration Form	1-6
G. Policies	
G.1. Health and Safety	1-1
G.2. Environment Policy	1-1
G.3. Sustainability Policy	1-1
H. Tata code of Conduct	1-40
I. ARIBA User manual	1-14

*** To be submitted in editable excel format**

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

Section A: Tender Notice including Instruction to Bidders

1. Tender Details

1.1 Key Tender Specific Details

Reference Number	CC25MSJ027
Description	Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable at the following Locations - 1) Tata Power Vikhroli Receiving Station 2) Tata Power Kalyan Receiving Station 3) Tata Power Trombay Receiving Station
Type of Tender	Firm Order
Period	Till the completion of work.
Tender Fee	Rs 2,000/-
Earnest Money Deposit (EMD)	Rs 5,00,000/- Rs Five Lakh Only PLEASE NOTE THAT IT IS MANDATORY TO SUBMIT EMD IN BANK GUARANTEE FORMAT ONLY
Price Basis	Firm Price
Executive Handling this Tender*	Name: Mr. Munjal Singh Jhala Contact No.: 9549067763 E-Mail ID: munjalsingh.jhala@tatapower.com

*You may contact the above personnel from Monday to Friday during office hours only.

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

1.2 Calendar of Events

(a)	Access to Tender Documents through Tata Power website	01 st August 2024
(b)	Date & Time of Pre-Bid Meeting (if applicable).	Shall be intimated in advance.
(c)	Last date and time for Payment of Tender Participation Fee to get e-tender link for bid submission*	08 th August 2024
(d)	Last Date of receipt of pre-bid queries, if any.	By 13 th August 2024
(e)	Last Date of Posting Consolidated replies to all the pre-bid queries as received	By 16 th August 2024
(f)	Last date and time of receipt of Bids	By 22 nd August 2024

Note: - * Interested bidders are strongly advised not to wait by above time and purchase the tender immediately to get the link for bid submission. This will enable them to communicate/raise queries against the subject tender in time.

These date and time in above calendar of events are as planned and tentative. In case of change the same shall be intimated to Authorized Person of Interested Bidder through E-Tender System.

Please note post submission of Bids relevant communication will be done with Authorized Person of Interested Bidder through E-Tender System.

1.3 Mandatory documents required along with the Bid

- 1.3.1 Bid Guarantee Fee (EMD) of requisite value and validity. PLEASE NOTE THAT BID GUARANTEE ONLY IN FORM OF BANK GUARANTEE WILL BE ACCEPTED.
- 1.3.2 Requisite Documents to ascertain fulfilling of Technical and Commercial Pre-Qualification Requirement as detailed in Tender Enquiry.
- 1.3.3 Technical Submission including Drawings, Type Test details etc. as detailed in Technical Specification.
- 1.3.4 Required Commercial Submission as detailed in Tender Document
- 1.3.5 Technical and Commercial Clarification and Deviations as per the format attached in the Tender Enquiry
- 1.3.6 Proper authorization letter to sign the tender and participate in Tata Power E-Tender system on the behalf of bidder.
- 1.3.7 **For vendor not registered with Tata Power, Duly filled Vendor Registration form with all supporting documents is mandatory to participate in the Tender.**

Please note that in absence of any of the above documents, the bid submitted by a bidder shall be liable for rejection.

Also please note that whenever editable format are shared it is requested that data be filled in relevant cells. No formatting or addition / deletion of rows / columns to be done. Wherever editable Excel submission are requested the file should be free from references, macros etc.

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

Checklist of Document Submission

Stage of Tendering	Document	Type of Format	Mode of submission
Before last date of Pre-Bid Query	Query / Clarification / Deviation (QCD) Format. (F1) Separate Excel sheet to be used for Technical and Commercial Pre-Bid Query	Editable Excel Format	Through message in E-tender system
Bid Submission Envelope 1 (First Part)	Earnest Money Deposit	Original Bank Guarantee	In Sealed Envelope
Bid Submission Envelope 2 (Second Part)	Documents to be uploaded in Ariba only. In case of multiple files, a zipped folder can be attached for the same (size limit of 100 MB per zipped file)		
To be submitted Under Tab 2 in Ariba	Duly filled PQR and supporting documents		
	Duly filled PQR format	Editable Excel Format	E-Tender System
	Backup documents for Technical PQR	Signed and Scanned documents	E-Tender System
To be submitted in Ariba	Duly Filled Vendor Registration Form (for unregistered vendor) and supporting documents. Registered vendor to submit letter indicating Vendor Code in Tata Power and factory/supply address to be used.		
	Duly filled Vendor Registration Form (if vendor is not registered with Tata Power)	Signed and Scanned documents	E-Tender System
	Backup document for Vendor Registration Form (if vendor is not registered with Tata Power)	Signed and Scanned documents	E-Tender System

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

To be submitted in Ariba	Technical Submission and Supporting Documents		
	Duly filled Technical Submission Format	Editable Excel Format	E-Tender System
	Technical Submission as required for Technical Specifications	Signed and Scanned documents	E-Tender System
	Duly filled Technical Submission- Type test verification sheet Format	Editable Excel Format	E-Tender System
	Backup documents for Type Test verification	Signed and Scanned documents/ reports	E-Tender System
	Query / Clarification / Deviation (QCD) Format for Deviation if any	Editable Excel Format	E-Tender System
	Duly filled Unpriced Bid Format	Signed and scanned copy of document	E-Tender System
To be submitted in Ariba	Commercial Submission and supporting document		
	Letter of Undertaking (FOR VENDORS NOT REGISTERED WITH TATA POWER)	Scanned Copy of letter of undertaking duly filled, stamped and signed	E-Tender System
	E-auction Undertaking form	Scanned Copy of letter of undertaking duly filled, stamped and signed	E-Tender System
Bid Submission Envelope 3 (Third Part)	Duly filled Priced Bid Format	Duly signed and stamped scanned copy of document. To be entered in E-Tender System	E-Tender System

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

1.4 Deviation from Tender

Normally, the deviations to tender terms are not admissible and the bids with deviation are liable for rejection. Hence, the bidders are advised to refrain from taking any deviations on this Tender. Still in case of any deviations, all such deviations shall be set out by the Bidders, clause by clause in the Query / Clarification / Deviation (QCD) Format. Deviations have to be mandatorily submitted in editable Excel sheet Technical and Commercial deviation have to be submitted separately.

Technical or Commercial Deviation should be mentioned in Deviation Format only. Deviation in any other document or Format will not be considered.

1.5 Right of Acceptance/Rejection

1.5.1 Bids are liable for rejection in absence of following: -

1.5.2 Mandatory Documents as listed in 1.3 above

1.5.3 Price Bid as per the Price Schedule mentioned in Tender Document

1.5.4 Receipt of Bid and Response to queries within the due date and time

Tata Power reserves the right to accept/reject any or all the bids without assigning any reason thereof.

1.6 Qualification Criteria

Qualification Requirement expectation and document are detailed in documents in Section C

1.7 Pre-Bid Queries

Pre-Bid Queries if any has to be sent through message in E-Tender System. Pre-Bid Query has to be sent only in the Query / Clarification / Deviation (QCD) Format. Technical Pre-Bid Query and Commercial Pre-Bid Query have to be submitted in Separate Editable Excel File in Prescribed Format. Pre-Bid Queries sent in any other format or send through any other communication channel will not be accepted and answered. Pre-Bid Query have to be sent in the stipulated timeline as defined in the Tender Document. No Pre-Bid Query will be accepted after the due time and date as specified as "Last Date of receipt of pre-bid queries, if any"

1.8 Marketing Integrity

We have a fair and competitive marketplace. The rules for bidders are outlined in the General Condition of Contracts and other parts of Tender Documents. Bidders must agree to these rules prior to participating. In addition to other remedies available, Tata Power reserves the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the General Condition of Contracts or other part of the Tender Documents. A bidder who violates the marketplace rules or engages in behavior that disrupts the fair execution of the marketplace, may result in restriction of a bidder from further participation in the marketplace for a length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

- Failure to honor prices submitted to the marketplace
- Breach of terms as published in TENDER
- Submit irrelevant documents or frequently cases of missing documents as part of compliance to Qualifying, Technical or Commercial Requirements causing unnecessary delay in Tender Evaluation

The Tata Power Company Ltd		OPEN TENDER NOTIFICATION
Tender Reference: CC25MSJ027		Document Date: 31 st July 2024

1.9 Supplier Confidentiality

All information contained in this tender is confidential and shall not be disclosed, published or advertised in any manner without written authorization from Tata Power. This includes all bidding information submitted to Tata Power. All tender documents remain the property of Tata Power and all suppliers are required to return these documents to Tata Power upon request. Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

2. Evaluation Criteria

- The bids will be evaluated technically on the compliance to tender terms and conditions.
- The bids will be evaluated commercially on the overall all-inclusive lowest cost for the complete tender BOQ / each line item as calculated in Schedule of Items. Tata Power, however, reserves right to split the order line item wise and/or quantity wise among more than one Bidder. Hence all bidders are advised to quote their most competitive rates against each line item.
- Bidder must mandatorily quote against each item of Schedule of Items. Failing to do so, Tata Power may reject the bids.

NOTE: In case of a new bidder not registered with Tata Power, factory inspection and evaluation shall be carried out to ascertain bidder's manufacturing capability and quality procedures. However, Tata Power reserves the right to carry out factory inspection and evaluation for any bidder prior to technical qualification. In case a bidder is found as Disqualified in the factory evaluation, their bid shall not be evaluated any further and shall be summarily rejected. The decision of Tata Power shall be final and binding on the bidder in this regard.

2.1 Price Variation Clause and Cap:

The prices shall remain firm during the entire contract period and no price variation is applicable.

3. Submission of Bid Documents

3.1 Bid Submission

Bidders are requested to submit their offer in line with this Tender document. Bids shall be submitted in 3 (three) parts:

FIRST PART: "EMD – BANK GUARANTEE" of Value detailed in 1.1 valid for 180 days from the due date of bid submission in the form of Bank Guarantee favoring 'The Tata Power Company Limited'. The EMD must be strictly in the format as mentioned in Tender Document, failing which it shall not be accepted by Tata Power and the bid as submitted shall be liable for rejection.

Note: BG of 180 days validity and further claim period of 180 days is needed. In case the same cannot be issued by your bank then BG valid for 365 days can be provided.

Note: At times bidders have sought Tata Power bank details which is needed by them to make BG. Hence the same is reproduced below. These details are only provided to facilitate making of BG if needed

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

Tata Power's Bank Details for submitting EMD BG:
Bank Name & Address – ICICI Bank, 163 HT Marg,
Backbay Reclamation, Churchgate, Mumbai 400 020.
A/c no. - 000451000293
IFSC Code – ICIC0000393

The hard copy of EMD in a sealed envelope should be sent on address mentioned in Tender document.

First Part must be submitted in Sealed Envelope.

SECOND PART: "TECHNICAL / UN-PRICED COMMERCIAL BID" shall contain the following documents:

- Documentary evidence in support of Technical, Commercial qualifying criteria
- Technical literature/GTP/Type test report/Details of Qualified Manpower Available/ Testing Facility available etc. *(complete in all respect as desired and detailed in Technical Specification and Technical Requirement Section)*
- Duly filled Technical and Commercial Deviation Sheets
- Duly filled formats like Authorization affidavit form
- Unpriced Commercial Bid*

The technical / un-priced commercial bid shall be properly indexed and is to be submitted in Soft Copy through E-Tender system of Tata Power. Hard Copy of Technical Bids need not be submitted.

Second Part must be submitted through E-Tender System Only.

THIRD PART: "PRICE BID" shall contain only the price details and strictly in Price Bid format along with explicit break up of basic prices and applicable GST. Basic price should include packaging forwarding, freight, transit insurance and any other cost envisaged by the bidder.

Third part must be submitted through E-Tender System Only.

FOR BIDS INVITED THROUGH E-TENDER SYSTEM (TECHNICAL AND UN-PRICED COMMERCIAL BID):

In response to advertisement Bidder has to provide details of person authorized to Bid on behalf of the Bidder. An e-mail will be generated by E-Tender System and the authorized person can download the Tender Documents from the system.

Bidders have to mandatorily submit SECOND and THIRD PART (Technical and Price Bid) only through E-Tender system of Tata Power. Bids submitted through any other form (hard copy) / route shall not be admissible.

FOR BIDS INVITED IN SEALED ENVELOPE PROCESS (FIRST PART):

First Part of the bid shall be sealed in envelope which shall be clearly marked as below:

**EMD BID –
"Please mention Tender Reference No"**

Please mention our Tender Reference No on the Tender and drop the same in our Tender Box located at The Tata Power Company Limited (Tata Power), Corporate Contracts, Smart Center of Procurement Excellence, 2nd Floor, Sahar Receiving Station, Near Hotel Leela, Sahar Airport Road, Andheri (E), Mumbai 400 059.

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

The bid shall be addressed to:

Head - Procurement
The Tata Power Company Limited (Tata Power),
Smart Center of Procurement Excellence, 2nd Floor, Sahar Receiving Station,
Near Hotel Leela, Sahar Airport Road, Andheri (E), Mumbai 400 059.

The envelope shall also bear the Name and Address of the Bidder along with our Tender No. and subject.

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and Tata Power, shall be written in the English Language. Any printed literature furnished by the Bidder may be written in another Language, provided that this literature is accompanied by an English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

Bids submitted by Email/Telex/Telegram /Fax will be rejected. No request from any Bidder to Tata Power to collect the proposals from Courier/Airlines/Cargo Agents etc. shall be entertained.

SIGNING OF BID DOCUMENTS:

The bid must contain the name, residence and place of business of the person or persons making the bid and must be signed and sealed by the Bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.

The Bid being submitted must be signed by a person holding a Power of Attorney authorizing him to do so, certified copies of which shall be enclosed.

The Bid submitted on behalf of companies registered with the Indian Companies Act, for the time being in force, shall be signed by persons duly authorized to submit the Bid on behalf of the Company and shall be accompanied by certified true copies of the resolutions, extracts of Articles of Association, special or general Power of Attorney etc. to show clearly the title, authority and designation of persons signing the Bid on behalf of the Company. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the bid.

A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his principal will be rejected.

The Bidder's name stated on the Proposal shall be the exact legal name of the firm.

3.2 Contact Information

Communication Details: Detailed in 1.1

3.3 Bid Prices

Bidders shall quote for the entire Scope of Supply/ work with a breakup of prices for individual items and Taxes & duties. The bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & total price with taxes, duties & freight up to destination at various sites of Tata Power. The all-inclusive prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during the execution of the supply work, breakup of price constituents.

The quantity breakup shown else-where other than Price Schedule is tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any items not indicated in the price schedule, but which are required to complete the job as per the Technical

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

Specifications/ Scope of Work/ SLA mentioned in the tender, shall be deemed to be included in prices quoted.

3.4 Bid Currencies

Prices shall be quoted in Indian Rupees Only. It also may be noted that the denomination of Purchase Order / Outline Agreement / Rate Contract and associated Payment to Successful Bidder shall also be in Indian Rupees Only. In case Bidder intends to import any equipment, part etc and supply to Tata Power then all liability and costs related to import will rest with the Bidder. All statutory compliances, payments, expenditure etc. related to importing of equipment will be responsibility of the bidder.

3.5 Period of Validity of Bids

Bids shall remain valid for **180 days** from the due date of submission of the bid.

Price submitted as part of E-auction / Negotiation shall remain valid for **90 days** from date of E-auction / Negotiation.

Notwithstanding clause above, Tata Power may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and responses thereto shall be made in writing.

3.6 Alternative Bids

Bidders shall submit Bids, which comply with the Bidding documents. Alternative bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the bidding documents.

3.7 Modifications and Withdrawal of Bids

The bidder is not allowed to modify or withdraw its bid after the Bid's submission. The EMD as submitted along with the bid shall be liable for forfeiture in such event.

3.8 Earnest Money Deposit (EMD)

The bidder shall furnish, as part of its bid, an EMD amounting as specified in the tender. The EMD is required to protect the Tata Power against the risk of bidder's conduct which would warrant forfeiture.

The EMD shall be in following form:

- Bank Guarantee valid for 180 days after due date of submission with an additional claim period of 180 days from the date of expiry of BG.

The EMD shall be forfeited in case of:

- a) The bidder withdraws its bid during the period of specified bid validity.

Or

- b) In case of a successful bidder, if the Bidder, within 15 days, does not
 - i) accept the purchase order, or
 - ii) furnish the required Contract Performance Bank Guarantee (CPBG)

Original Bank Guarantee submitted as EMD shall be returned only after completion of award process for unsuccessful bidders and issue of Contract Performance Bank Guarantee (CPBG) for successful bidder.

4. Bid Opening & Evaluation process

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

4.1 Process to be confidential

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence Tata Powers processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

4.2 Technical Bid Opening

Bids will be opened at Corporate Office of Tata Power as per our standard Process. The bids shall be opened internally by Tata Power. Technical bid must not contain any cost information whatsoever.

First the envelope marked "EMD" will be opened. Bids without EMD of required amount/ validity in prescribed format, shall be rejected.

Next, the technical bid of the bidders who have furnished the requisite EMD will be opened in E-Tender system.

4.3 Preliminary Examination of Bids/Responsiveness

Tata Power will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order. Tata Power may ask for submission of original documents in order to verify the documents submitted in support of qualification criteria.

Prior to the detailed evaluation, Tata Power will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.

Bid determined as not substantially responsive will be rejected by the Tata Power and/or the Tata Power and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

4.4 Techno Commercial Clarifications

Bidders need to ensure that the bids submitted by them are complete in all respects. To assist in the examination, evaluation and comparison of Bids, Tata Power may, at its discretion, ask the Bidder for a clarification on its Bid for any deviations with respect to the Tata Power specifications and attempt will be made to bring all bids on a common footing. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted owing to any clarifications sought by Tata Power.

4.5 Price Bid Opening

The EMD of the bidder withdrawing or substantially altering his offer at any stage after the technical bid opening will be forfeited at the sole discretion of Tata Power without any further correspondence in this regard.

Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

4.6 Reverse Auction and Price Matching Option

Tata Power reserves the right to conduct the reverse auction AND / OR Manual Negotiations for the products/ services being asked for in the tender. Only Technical Qualified Bids will be allowed to participate in e-auction. Date and time of e-auction will be intimated through E-Tender system to Authorized Person of Interested Bidder.

For case where more than one bidder has to be awarded (including Rate Contract / Outline Agreement) Price Matching Option will be exercised. Volume of job allocated to original competitive bidder will be more than bidder who is chosen through Price Matching Option. Tata Power decision regarding work sharing shall be final and no explanation OR clarification shall be given regarding the same.

Tata Power reserves the right to go for Reverse Auction (RA) for price negotiation and discover the most competitive price on ARIBA portal, Tata Power's official e-tendering platform. This will be decided after techno-commercial evaluation of the bids. Bidders need to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case Tata Power decides to go for RA.

Only those bidders who are techno-commercially qualified shall be eligible to participate further in RA process. However, the original H1 bidder (whose price bid is the highest post techno-commercial evaluation) shall not be allowed to participate in further RA process provided minimum three techno-commercially qualified bids are available.

5.0 Award Decision

Tata Power will award the contract to the successful bidder whose bid has been determined to be the lowest-evaluated responsive bid as per the Evaluation Criterion mentioned at Clause 2.0. The Cost for the said calculation shall be taken as the all-inclusive cost quoted by bidder in Priced Bid Format subject to any corrections required in line with Clause 4.3 above. The decision to place purchase order/Outline Agreement/ Rate Contract solely depends on Tata Power on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that Tata Power may deem relevant.

Tata Power reserves all the rights to award the contract to one or more bidders so as to meet the delivery requirement or nullify the award decision without assigning any reason thereof.

In case any supplier is found unsatisfactory during the delivery process, the award will be cancelled, and Tata Power reserves the right to award other suppliers who are found fit.

5.1 Rate Contract / Outline Agreement

Rate Contract / Outline Agreement does not guarantee any assured business volume in Rupees or Quantity. Quantities are only indicative and specified for the purpose of readiness as per the request from Purchaser. Supplies shall be only against Firm Purchase Orders placed as per the agreed terms and conditions of Rate Contract / Outline Agreement. Purchaser shall be entitled at its discretion to place firm order for such supplies on "As and When Required Basis" without minimum take-off guarantee.

The Tata Power Company Ltd		<i>OPEN TENDER NOTIFICATION</i>
<i>Tender Reference: CC25MSJ027</i>		<i>Document Date: 31st July 2024</i>

Rate Contract / Outline Agreement will have list of Items with Unit Rate and applicable Taxes and Duties. There will be a cap on value for which order which can be placed against the Rate Contract / Outline Agreement. Actual quantity ordered for each line item may differ significantly from the tentative quantity indicated in the Tender Document. One / few / all items of Rate Contract / Outline Agreement can be ordered till the Cap Value is reached.

6.0 Order of Preference/Contradiction:

In case of contradiction in any part of various documents in tender, following shall prevail in order of preference:

1. Outline Agreement/Purchase Order (with Commercial conditions)
2. Special Terms and conditions (if applicable)
3. General Terms and conditions
4. Technical Specifications

In case there is a discrepancy in the BOQ mentioned in tender (to the extent modified through subsequent Corrigendum, if any) and the bid submitted by any bidder, the description as mentioned in the tender (to the extent modified through subsequent Corrigendum, if any) shall prevail.

7.0 Ethics

Tata Power is an ethical organization and as a policy Tata Power lays emphasis on ethical practices across its entire domain. Bidder should ensure that they should abide by all the ethical norms and in no form either directly or indirectly be involved in unethical practice.

Tata Power work practices are governed by the Tata Code of Conduct. Bidder is requested to refer Tata Code of Conduct Clause in General Terms and Conditions.

8.0 General Condition of Contract and Special Condition of Contracts

Any condition not mentioned above shall be applicable as per General Terms and Conditions and Special Condition of Contracts attached along with this tender.

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FORMAT B.1
Format for Technical Pre-Bid Queries
Tender No **CC25MSJ027**
Package Name **CC25MSJ027 Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable for various Transmission Projects**
Bidder :
Note : The said format to be used only for Technical Pre-Bid Query. Any Commercial Query has to be strictly in Format B2 Format for Commercial Pre-Bid Query and sent seperately
 Format to be used for query regarding Technical Pre-Qualification Requirement, Safety Pre-Qualification Requirement, Technical Set of Documnt
 Pre-Bid Query has to be sent in editable Excel file fomate only
 Pre-Bid Query has to be sent through e-mail in Tata Power E-Tender System

Sr. No.	Detailed Reference to Tata Power Technical Document. Please specify Document No / Clause No / Page No	Page no.	Description as per Bid Document	Remarks - Query / Clarification	Tata Power Response
1	2	-	3	4	5

Format for Commercial Pre-Bid Queries

Package Name	CC25MSJ027 Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable for various Transmission Projects
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Note : The said format to be used only for Commercial Pre-Bid Query. Any Technical Query has to be strictly in Format B1 Format for Technical Pre-Bid Query and sent separately

Format to be used for query regarding Tender Notice, Commercial Pre-Qualification Requirement, Terms and Conditions, Other Formats / templates

Pre-Bid Query has to be sent in editable Excel file format only

Pre-Bid Query has to be sent through e-mail in Tata Power E-Tender System

[illegible]

C.1 Pre-qualification Requirement				
Sr No	Parameter	Tata Power Requirement	Documents to be submitted by vendor to ascertain meeting of Pre-Qualification Requirement	Bidder's Response
1	2	3	4	5
1	Infrastructure	Bidder must be an OEM of 33 kV and above voltage grade single core XLPE Copper cables with manufacturing facility / assembly located 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 & Experience	Bidder shall have supplied 33 kV or of higher voltage EHV single core Copper/Aluminium cable of aggregated length not less than 100 kms in last 10 years. Out of the above quantity, 25 kms of 33 kV or of higher voltage EHV single core cable shall be in satisfactory service for last 5 years as on the date of bid opening. In case the bidder has a previous association with any of Tata Power Group companies for similar products and services, the performance feedback of the bidder by the Tata Power Group companies shall only be considered for evaluation purpose, irrespective of performance certificates issued by any third organization.	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.	
3	Type Test	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. 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 different 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.	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 class and/or different capacity, (if applicable)	
4	Commercial Capability	Average Annual Turnover of the bidder for last three years shall not be less than INR 15 Crores.	Copy of audited Balance Sheet and P&L Account to be submitted in this regard.	

Note -

1) Tata Power reserves the right to review and approve / reject the Bidder based on Document Submission.

2) The Prequalification Criteria published along with the tender "In Section C.1 Pre Qualificaion Criteria" is the total & complete pre-qualification requirement for the tender and shall prevail over any other/additional pre-qualification requirement mentioned elsewhere in the tender.

3) In case the bidder has a previous association with any of the Tata Group companies for similar products and services, the performance feedback for that bidder by Tata Group companies shall only be considered for evaluation, irrespective of performance certificates issued by any third organization.

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 statutes, 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.

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
- 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 statutes: (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
Organization			
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		
Governance			
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?		
Environment/ Planet			
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?		
Green Technology/ Innovation			
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.)?		
Social/ People			
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		
Certifications: Does your company have following certifications (valid till date-please mention validity)			
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

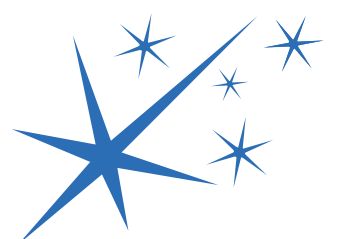
- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the 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: 15th 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. The same can also be raised through our 3rd party ethics helpline facility:

Toll-free Number	1800 267 4065
Email	tatapower@tip-offs.in
Website & Chatbot	www.tatapower.tip-offs.in
Postal address	Attn to: Mr. Puneet Arora, Deloitte Touch Tohmatsu 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.

Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable for various Transmission Projects Ref No CC25MSJ027	THE TATA POWER COMPANY LIMITED	SHEET 1 OF 4
	D.4 SPECIAL CONDITIONS OF CONTRACT	

Sr. No.	TOPIC	PRINCIPLES OF TERMS & CONDITIONS
1	GENERAL	The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract. Wherever there is a conflict, the provisions herein shall prevail over those in the "General Terms and Conditions-Supply" (GTC-Supply).
2	CONTRACT PRICE AND CONTRACT STRUCTURE	The Price Bid shall remain valid for 180 days from the due date of submission of the bid. Price submitted as part of E-auction / Negotiation shall remain valid for 90 days from date of E-auction / Negotiation. - Price quoted by Bidder shall be on Firm basis without any Price Variation / Escalation. Price shall remain same & unchanged till the commissioning of said scope of work payment is disbursed. Unit rate shall be inclusive of Freight and In Transit Insurance. - Price quoted for the complete scope shall be inclusive of Lodging, Boarding, To & Fro Conveyance to site & Food arrangements. - Taxes shall be paid at actuals. - Notwithstanding clause above, Tata Power may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and responses there to shall be made in writing.
3	COMMENCEMENT / EFFECTIVE DATE (Note: It is to be noted that commencement date, effective date and notice to proceed are one and the same.)	The bidder will commence work / manufacturing of equipment on issue of Letter of Award (LOA) / Purchase Order by TATA POWER and notice to proceed by the Order Manager. No equipment shall be delivered without specific dispatch clearance from project Manager TATA POWER.
4	CONTRACT PERFORMANCE BANK GUARANTEE	This is as per General Terms & Conditions - Supply CI no 09. Successful bidder shall submit CPBG cum PBG for 10% of contract value in format specified by Tata Power within 15 days after placement of Purchase Order, valid till warranty period with additional claim period of 6 months.
5	TERMS OF PAYMENT	This is further to General Terms & Conditions - Supply CI no 06. I. No advance payment shall be made. II. Payment Terms shall be as follows: 1) 100% of supply payment shall be released after delivery of material at Site/store on pro-rata basis.

Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable for various Transmission Projects Ref No CC25MSJ027	THE TATA POWER COMPANY LIMITED	SHEET 2 OF 4
	D.4 SPECIAL CONDITIONS OF CONTRACT	

		2) Payment Credit Period - 60 Days. 3) All payments against supply are subject to acceptance of material and submission of error free invoice copy in ARIBA portal. 4) Income tax and any other statutory recoveries as applicable shall be recovered from Contractor monthly running bills and TDS certificate for the deductions shall be furnished. 5) All payments against supply are subject to submission of unconditional CPBG cum PBG and unconditional acceptance/signing of the PO/Contract agreement.
6	FREIGHT & INSURANCE	This is further to the General Terms & Conditions – Supply Clause 5.0, Complete Freight and insurance will be in bidder's scope.
7	LIQUIDATED DAMAGES FOR DELAYS, NON – PERFORMANCE & OVERALL CAP	This is further to General Terms and Conditions Supply clause 10.0, Liquidated Damages (LD), specific to this package, for not achieving timely delivery shall be levied at 1% of Contract Value per week of delay or part thereof, limited to a maximum of 10% of Contract Value.
8	WORK COMPLETION PERIOD	1) Error Free Drawing & Datasheet Submission by BA - Within 07 days from the date of award of PO. 2) Buyer to review & provide Manufacturing Clearance to BA - Within 07 days from the date of receipt of Error Free Drawing & Datasheet. 3) Complete delivery of material at Buyer site shall be within 10 weeks from the date of drawing approval & issuance of manufacturing clearance by Buyer.
9	WARRANTY PERIOD	Warranty clause will be further to General Terms & Conditions – Supply, Clause no. 11. Warranty shall be 24 months from the date of supply or 18 months from the date of commissioning whichever period is concludes earlier. The Performance Bank Guarantee shall be submitted accordingly by the bidder. The Performance Bank Guarantee shall be submitted accordingly by the bidder.
10	Total Compliance to TCOC, safety Terms & Conditions and International Safety standards	Tata Power Contractor Safety Terms and Conditions is enclosed as Annexure to the GCC. Supplier shall have to abide fully without any deviation.

Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable for various Transmission Projects Ref No CC25MSJ027	THE TATA POWER COMPANY LIMITED	SHEET 3 OF 4
	D.4 SPECIAL CONDITIONS OF CONTRACT	

11	BID SUBMISSION (In Ariba)	As mentioned in Tender Notice
12	Reverse Auction	Tata Power reserves the right to conduct the reverse auction for the products / services being asked for in the tender. Only Technical Qualified Bids will be allowed to participate in e-auction. Date and time of e-auction will be intimated through E-Tender system to Authorized Person of Interested Bidder. Tata Power reserves the right to go for Reverse Auction (RA) for price negotiation and discover the most competitive price on ARIBA portal, Tata Power's official e-tendering platform. This will be decided after techno-commercial evaluation of the bids. Bidders need to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case Tata Power decides to go for RA. Only those bidders who are techno-commercially qualified shall be eligible to participate further in RA process. However, the original H1 bidder (whose price bid is the highest post techno-commercial evaluation) shall not be allowed to participate in further RA process provided minimum three techno-commercially qualified bids are available.
13	TPSDI Training	To improve work safety and to ensure that all work force deployed at owner premises have the right orientation / induction and skills training before they undertake any work, the bidder shall accordingly plan and enrol his and sub-contractors work force to the respective skills / crafts training (Levels L1/L2/L3) offered by TPSDI. This is further to General Conditions of Contract Clause 3.54.23. In order to improve work safety and to ensure that all work force deployed at owner premises have the right orientation / induction and skills training before they undertake any work, the bidder shall accordingly plan and enrol his and sub-contractors work force to the respective skills / crafts training (Levels L1/L2/L3) offered by TPSDI. In addition to all prevailing safety practices bidder to take special note of following:

Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable for various Transmission Projects Ref No CC25MSJ027	THE TATA POWER COMPANY LIMITED	SHEET 4 OF 4
	D.4 SPECIAL CONDITIONS OF CONTRACT	

		1. TPSDI training is mandatory. Each employee must undergo L1 training for 3 days. Depending on competency certain workmen will need L2 training which is for 2 days and L3 training which is for 3 days. 2. As per safety standards at Tata Power, Hydra is banned and Farhana or regular crane is accepted along with all statutory approvals i.e., Form 11 for tools and tackles, Driver Licence, PUC, Insurance etc. 3. Electric chippers are not allowed in wet / waterlogged areas 4. Electric Submersible Pump Operation is not allowed when people are in the pit.
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Price Bid Format

Tender No - CC25MSJ027

Package Name - Supply, Inspection and Testing of 33 kV 1 C X 630 sq.mm Cu XLPE and 33 kV 3 C X 400 sq.mm Al XLPE cable for various Transmission Projects

Sr. no.	Short Text (as per SAP)	Qty	UoM	Unit Rate	Total
	Location - Tata Power Vikhroli Receiving Station				
1	CABLE 33 kV 1 C X 630 sq.mm Cu XLPE	8280	Mtrs.		-
2	CABLE 33 kV 3 C X 400 sq.mm Al ARM XLPE	3750	Mtrs.		-
	Location - Tata Power Kalyan Receiving Station				
1	CABLE 33 kV 3 C X 400 sq.mm Al ARM XLPE	6500	Mtrs.		-
	Location - Tata Power Trombay Receiving Station				
1	CABLE 33 kV 3 C X 400 sq.mm Al ARM XLPE	500	Mtrs.		-
	Total Basic				-
	GST @18%				-
	Total with taxes				-

The Tata Power Company Ltd	TPC ^{ODL} TPS ^{ODL}	 TATA TATA POWER	TPN ^{ODL} TPW ^{ODL}	Appendix 3 to CSCC Safety Terms and Conditions
Document No. TPSMS/GSR/STC/009 REV 05				Date of Issue: 01/08/2023

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 (Chief safety and Environment)

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

Clause	Sub-clause	Description	Page No
1.0		Objectives	3
2.0		Scope	3
3.0		Safety Organization & Responsibilities	3
	3.1	Contractor Site Management and Supervision	3
	3.2	Contractor Supervisors and General Staff	4
	3.3	Contractor Workforce	4
	3.4	Vendor/Contractor/sub-contractor	5
4.0		<u>Tools and Tackles(R5)</u>	6
5.0		Site Safety Rules and Procedures	6
6.0		Critical safety Rules and Procedures	6
7.0		<u>General Safety Rules and Procedure(R5)</u>	8
8.0		Training and Capability Building	10
9.0		Pre-Employment and Periodic Medical check-up	12
10.0		Safety performance retention(R5) and Safety Performance Evaluation	12
11.0		<u>Recognition to the Prior Learning in Safety-R5</u>	12
12.0		Other Conditions	13
<u>General Safety Conditions for various contracts Specific to Discom(R5)</u>			
13.0		<u>Safety Conditions for maintenance of STS (Sub Transmission System) Network for Discom(R5)</u>	14
14.0		<u>Safety Conditions for maintenance of 11 KV and LT Network for Discom(R5).</u>	15
15.0		<u>Safety Conditions for the major contract work in Civil Projects for Odisha Discom(R5)</u>	16
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
18.0		<u>Schedule of Safety Audits by BA Safety Staff(R5)</u>	19

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

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.

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

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.

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

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

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**.

The Tata Power Company Ltd Document No. TPSMS/GSR/STC/009 REV 05	 TPC0DL TPS0DL TPN0DL TPW0DL	Appendix 3 to CSCC Safety Terms and Conditions Date of Issue: 01/08/2023
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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.

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

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)

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

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):

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

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) 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

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

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

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

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

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

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 4th March, National Fire Service Day on 14th 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.

The Tata Power Company Ltd Document No. TPSMS/GSR/STC/009 REV 05	TPC0DL TPS0DL  TPN0DL TPW0DL	Appendix 3 to CSCC Safety Terms and Conditions Date of Issue: 01/08/2023
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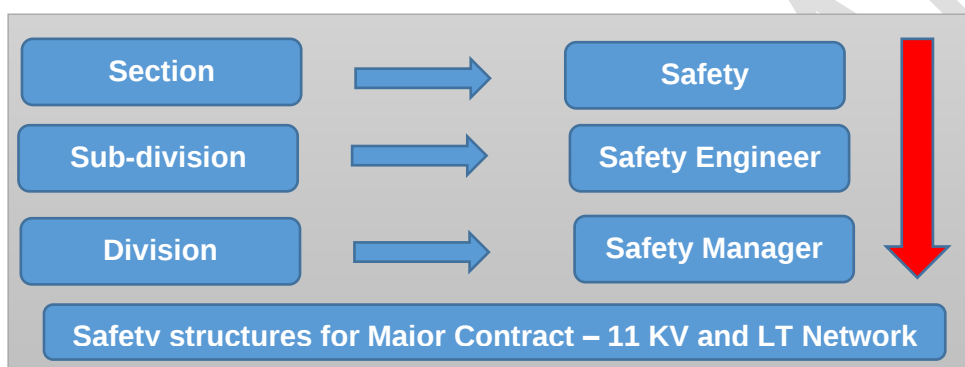
14.0 Safety Conditions for maintenance of 11 KV and LT Network.

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 4th March, National Fire Service Day on 14th 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.

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

- 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.

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

- 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 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 4th March, National Fire Service Day on 14th 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.

The Tata Power Company Ltd	TPC0DL TPS0DL 	TPN0DL TPW0DL	Appendix 3 to CSCC Safety Terms and Conditions
Document No. TPSMS/GSR/STC/009 REV 05			Date of Issue: 01/08/2023

- 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 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:

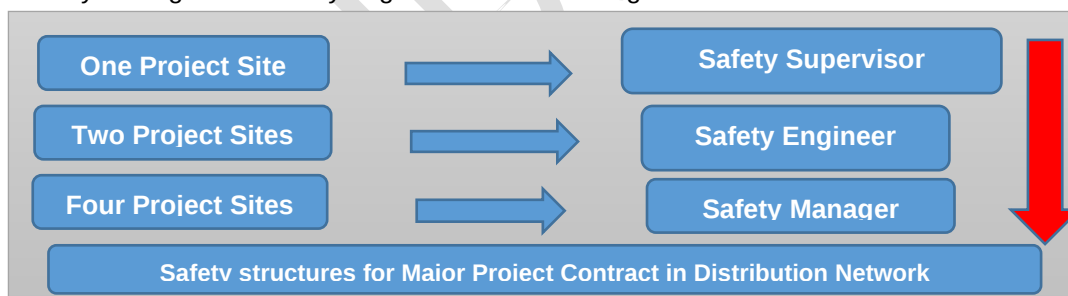
- Availability of Discharge Rods - Minimum 6 Nos. for each project site, fit for purpose and in good conditions and defective rods are removed from service.
- Availability of Neon tester - Minimum one Neon Tester in each project site, in good and working condition and defective or non-standard neon testers 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 4th March, National Fire Service Day on 14th 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.

The Tata Power Company Ltd	TPC0DL TPS0DL TATA TATA POWER	TPN0DL TPW0DL	Appendix 3 to CSCC Safety Terms and Conditions
Document No. TPSMS/GSR/STC/009 REV 05			Date of Issue: 01/08/2023

- 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

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

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	 TPC0DL TPS0DL TPN0DL TPW0DL	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.

VERIFICATION

DEPONENT

Verified aton this _Day of _____ 20__ that the contents of the above affidavit are true and correct and nothing material has been concealed therefrom

ANNEXURE TO
Appendix 3: Safety Terms and Conditions
(Document No - TPSMS/GSR/STC/009 REV 05)

***(Excerpts of Tata Power Safety Code of Conduct as relevant for
Safety Terms & Conditions)***

(A) Definitions

- **Order Manager/Engineer in charge:** Order Manager/Engineer in charge is the Tata Power-Division /DISCOM representative, who has the ownership of the given job.
- **Site Safety Management Plan:** It is the safety plan agreed between Contractor and Tata Power-Division/DISCOM. It will contain the entire job specific safety requirement and will be signed by the contractor.
- **Contractor/Business Associate/Vendor (BA):** An individual or a company that provides services to Tata Power-Division/DISCOM under a signed contract.
- **Emergency:** It is a serious, unexpected, or dangerous situation requiring immediate action, which may result in *loss of life*, loss of revenue/property, business discontinuity. In case of Emergency, services may be procured by selecting the qualified vendor based on the vendor category without the safety bid evaluation and approved by adequate authority of MB level or above.
- **Expert Service jobs:** Jobs which needs expert services of contractor which does not involve direct exposure to the potential risk or work which involves only supervisory work such as expert for AI-ML, expert for transmission and distribution network, expert for civil works, expert on transformers, expert for PSCC, expert for equipment overhaul etc.
- **CEO/Chief/Head of division/Unit/Utility:** Business in charge who is overall custodian of the Tata Power-Division/DISCOM.
- **High Risk Jobs:** A Job or its activities are considered as Very High or High Risk when Order manager apply the “Tata Power Hazard Identification and Risk Analysis” procedure and found safety risk associated with are under Very High or High category. Indicative lists of jobs are given in appendix 14 of this document.
- **Medium Risk Jobs:** Jobs or its activities are considered as medium risk when Order manager apply “Tata Power Hazard Identification and Risk Analysis” procedure and found the same as Medium Risk.
- **Low Risk Jobs:** Any job or its activities are considered as Low or Very low risk while Order manager calculated it by applying “Tata Power Hazard Identification and Risk Analysis” procedure and found it under Low or Very Low category.

(B) Safety performance retention(R7):

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. The retention amount will be calculated based on contract value as below. (R7)

Risk Category-(R7)	Contract Value	Retention Amount (%)
<i>Very high/High risk job/ Medium Risk jobs</i>	Up to 10 Lakhs	2.5
<i>Very high/High risk job/ Medium Risk jobs</i>	10 – 50 Lakhs	2
<i>Low/Very Low Risk jobs</i>	10 – 50 Lakhs	1
<i>Very high/High risk job</i>	0.5 to 10 Cr	2
<i>Medium Risk jobs</i>	0.5 to 10 Cr	1.5
<i>Low/Very Low Risk jobs</i>	0.5 to 10 Cr	1
<i>Very high/High risk job</i>	>10 Cr	1.5
<i>Medium Risk jobs</i>	>10 Cr	1

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.

(C) Safety Performance Evaluation & Responsibility of Business Associate / Contractor:

During the time of job execution, regular site inspection will be carried out by the Tata Power-Division / DISCOM officials to evaluate monthly safety performance of the contractor and monthly score will be maintained by the Order Manager. Violations will be dealt as per **CSM F12 Safety Violation Penalty Criteria**.

1. During the progress of the work, concerned site Supervisor/Engineer/Safety representative will visit and inspect the work site regularly and evaluate the safety performance of the contractor based on matrix **Appendix 13** and apply the Consequence management policy/Penalty criteria as applicable.
2. The evaluation criteria include Lead Indicators such as percentage of workers trained in TPSDI, inspection of critical equipment. Lag indicators such as Fatalities, LWDC and man-days lost.
3. In case of job stoppage due to safety violations / unsafe observations at the site, no time extension from PO completion date shall be given to the contractor, if such delays are attributable to contractor.
4. In case of fatality, limb loss or loss of property, vendor must pay for liability, legal, statutory, and additional mutually agreed settlement charges imposed by the appointed committee by Division Chief/CEO. This charge is over and above the retention amount. The committee will finalize penalty amount based on factors such as advice by statutory authorities, contract value and impact of accident etc.

5. Order Manager, Head of Business and functional Chief have the authority to terminate the contract as per **CSM F12 Safety Violation Penalty Criteria** Through contract department.

(D) Other Appendices are attached,

Appendix 6: CSM F6 - Safety Competency Assessment Form (Template).

(This is to be filled by Bidder and submit to Tata Power as part of bid submission).

Appendix 8: CSM F8 - PPE requirements-(R7)

Appendix 9: CSM F9 - Site Safety Management Plan / Method Statement (Template)

Appendix 12: CSM F12 - Safety Violation Penalty Criteria

Appendix 13: Checklist To Be Used During Site Visit

Appendix 14: Indicative List of High-Risk Jobs

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The Tata Power Company Ltd	TPC0DL TPS0DL TATA TATA POWER	TPN0DL TPW0DL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07			Date of Issue: 01/08/2023

Appendix 6: CSM F6 - Safety Competency Assessment Form (Template)

Name of the Vendor/Bidder:

Name of the Sub Vendor (If job is given to Sub Vendor):

Description of the Job:

Request for Quotation (RFQ) No.:

Vendor/Bidder to mandatorily provide the below safety competency related information:

1. Proposed Manpower Deployment Schedule : -

Type of manpower	Qualification	Experience	Month 1	Month 2	Month 3	
<u>Project /AMC Manager(R7)</u>						
Site In Charge						
Safety Manager						
Safety Officer						
Supervisors						
Technicians						
High Skilled workmen						
Skilled workmen						
Semiskilled workmen						
Lineman						
Helpers						
Drivers						
Unskilled						
<u>Others(R7)</u>						

Instruction to Bidders:

- Indicate the overall site manpower deployment schedule as above
- Indicate direct or subcontracted employees by using color code given below:

Direct Bidder Employee – Green

Partly Direct / partly Subcontracted – Yellow

- 4.3.5 **Subcontracted – Red** *If subcontractor detail is not available at stage of Bid evaluation, then this can be agreed with Order manager or Engineer in charge before deployment Ensure that all sub-contractors follow the Tata Power Safety Procedure and agreed CSM F9 Site Safety Management Plan.R7*

- Against each category, indicate minimum educational qualification and work experience

The Tata Power Company Ltd	TPCDDL TPSDDL TATA TATA POWER	TPNDDL TPWDDL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07			Date of Issue: 01/08/2023

- iv. Add rows to include other specialized manpower, if any.
- v. Extend columns to cover the entire duration of the proposed contract.
- vi. If the operation is in shifts, then indicate shift in charge and / or safety officers required for each shift operation.

2. List of Tools, Tackles, Machines and Equipment: -

Bidder/ Vendor to provide the list of tools, tackles, equipment **to be used during the job / project execution**. Bidder/Vendor to ensure that all the lifting tools and tackles, pressure vessels are duly certified by the competent person authorised by the Chief Inspector of Factories of the respective state prior to start of the job

Sr. No	Description of Tools / Tackles	Capacity / Rating	Quantity	Make	Year of manufacture	Remarks
1						
2						
3						
4						
5						
.....						

3. Safety Records:

Bidder to provide the details of fatalities and lost workday cases (LWDC), occurred in last three years (data to be provided for the last completed FY and preceding 2 years).

Description	Safety Data for current and Last 3 Years			
	Current Year	Year 1 (Last FY)	Year 2	Year 3
		20__ - __	20__ - __	20__ - __
Fatalities (Nos.)				
Lost Workday Cases (Nos.)				

In case of no fatalities, LWDC during any year, the form may be filled stating NIL against the respective year. Bidders are encouraged to also submit the RCA / incident investigation reports and the learning's implemented out of the above reported incidents

4. Job Safety Plan/ Method Statement:

Bidder to provide / enclose a detailed Site/Job Safety Plan along with a Method statement detailing the execution philosophy (how the bidder intends to execute the Job/Project), identifying all key activities which are required to be performed by the contractor at Site.

The Tata Power Company Ltd	TPCODL TPSODL TATA TATA POWER	TPNODL TPWODL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07			Date of Issue: 01/08/2023

Bidder to also list down all high-risk activities and provide the Hazard Identification and Risk Assessment (HIRA) for all such high-risk activities involved in the site work.

(Use Method Statement template attached as Appendix 9)

5. PPE Requirement -R7

Division/DISCOM Requirement	Bidders Response
The Bidder/Vendor shall ensure that all PPE of Approved standards as per CSM F8 – PPE Requirements shall be always available and shall be used by his employees with no exception whatsoever. Bidders to also ensure Standard PPE matrix of Tata Power to be followed for all activities.	
10% Buffer stock of PPEs to be provided by bidders at each circle to meet any contingency	
Bidder will ensure that sample PPEs to be submitted/approved by Safety Department along with EIC at the time of submission of Safety bids for evaluation In case bidder manpower found using substandard or any PPEs which are not approved by the Tata Power-Division /DISCOM representative, then Tata Power-Division /DISCOM will provide the same to manpower deployed at the cost of bidders.	

6. Vehicle Deployment: Bidders to provide details of all vehicles deployed during execution of work-(R7)

S. No.	Vehicle No.	Vehicle Type	Location	EV/CNG/Diesel/Petrol	Year	Whether CNG endorsed on RC

The Tata Power Company Ltd	  	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07	  	Date of Issue: 01/08/2023

- 7. Crane Deployment-(R7):** Bidders to provide details of crane to be deployed during the execution of work as and when required. Bidders to provide approved new gen crane ACE Model SX150, ACE FX150 and Escorts Model TRX 1550.

SI No	Crane No	Location	Year

- 8. Training Records-(R7):** Bidders to provide training records of employees deployed for the execution of work during last one year. These training includes OHS (Occupational Health and Safety) Training, Training on SOP/Work Procedures and Medical Emergency trainings imparted at their own facility, cost, and expenses. Bidders to provide the following details:

Tata Power-Division /DISCOM Requirement	Bidders Response
Training records of employees at their own facility, cost, and expenses for last one year	
Training facility available with Bidders	
Future road map for enhancing the competency of workforce	

- 9. Rewards and Recognition-(R7):** Bidders to provide the details of process deployed in their organization for sharing and resolution of safety concerns raised by their employees. Also, bidders to provide the details of Rewards and Recognition process in their organization for safety to encourage the morale of their workforce.

10. Management System Certification: -

Sr.No	Certification	Yes / No	If Yes, Year of Certification	If No, Target date for Certification
1	ISO 9001			
2	ISO 14001			
3	ISO 45001			
4	Any other (Specify....)			

Note: Please attach certificates to support above. In case not accredited for above but applied for, application letters may be attached.

The Tata Power Company Ltd	TPCODL TPSODL TATA TATA POWER TPNODL TPWODL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07		Date of Issue: 01/08/2023

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.	

The Tata Power Company Ltd	TPC0DL TPS0DL	 TATA TATA POWER	TPN0DL TPW0DL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07				Date of Issue: 01/08/2023

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.	

The Tata Power Company Ltd	TPC ODL TPS ODL	 TATA TATA POWER	TPN ODL TPW ODL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07				Date of Issue: 01/08/2023

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	

The Tata Power Company Ltd	TPC0DL TPS0DL 	TPN0DL TPW0DL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07			Date of Issue: 01/08/2023

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

The Tata Power Company Ltd	 TPCODL TPSODL TPNODL TPWODL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/CSM/015/REV 07		Date of Issue: 01/08/2023

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.)*

The Tata Power Company Ltd	TPCDDL TPSDDL TATA TATA POWER	TPNDDL TPWDDL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07			Date of Issue: 01/08/2023

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).*

The Tata Power Company Ltd	TPCODL TPSODL TATA TATA POWER	TPNODL TPWODL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07			Date of Issue: 01/08/2023

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)*.

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

The Tata Power Company Ltd	     	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07		Date of Issue: 01/08/2023

Hazardous Substances to be used in job:
(Attach MSDS if required)

						
Acute Toxic	Health Hazard	Corrosive	Dangerous For the environment	Oxidizing	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*

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

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.

The Tata Power Company Ltd	     	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07		Date of Issue: 01/08/2023

Appendix 12: CSM F12 - Safety Violation Penalty Criteria

Major Violations and Escalation matrix--(R7)

Consequence of safety violation observed not related to incidents or accidents		Violations				
Sl. No.	Safety Violation	1st	2nd	3rd	4th	Subsequent violation
1	Working without required PPE such as Helmet/gloves/safety shoes/Safety harness etc.	A	B	C	D	Will Attract the same penalty as 4th violation
2	Working without proper tools and tackles	A	B	C	D	
3	Poor or bad condition of Crane/Hydra/Vehicle and/or Incompetent driver and/or helper).	B	C	D	E	Termination of Contract and blacklisting after repetition of violations (3 to 4 times as the case may be)
4	Improper Working at Height	B	C	D	E	
5	Untrained /unauthorized workman engaged in high-risk jobs	B	C	D	E	
6	Violation of SOP or WI or LOTO	C	D	E		
7	Working without PTW or LC / Without authorization / Without creating Safe Zone	C	D	E		

Legend	Action to be Taken	Responsibility	Penalty (INR)	Repeat Violations
A	Levy of Penalty	Order manager / EIC	5000	The no. of repeat violations shall be calculated cumulative during the contract period, not on a monthly basis
B	Memo to BA and Levy of Penalty	Order manager / EIC	10000	
C	Memo to BA and Levy of Penalty	Order manager / EIC	25000	
D	Memo to BA and Levy of Penalty	Order Manager / EIC	50000	
E	Memo to BA, Levy of Penalty, Termination of Contract, Blacklist	Order Manager / EIC	100000	

The Tata Power Company Ltd	TPCODL TPSODL	 TATA TATA POWER	TPNODL TPWODL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07				Date of Issue: 01/08/2023

Other Violations and Penalty

Penalty shall be imposed on the contractors under the following circumstances for breaching the contractual agreements. The list is not exhaustive, but indicative.

Sl. No	Description of Violation	Severity	Penalty (INR)
1.	Unhygienic/Bad condition of PPE	2	500
2.	Unsafe Act/Condition of Severity 4	4	4000
3.	Unsafe Act/Condition of Severity 5	5	5000
4.	No Earthing of Electrical equipment	5	5000
5.	Working without efficient supervision	4	4000
6.	Non-reporting of incidents	3	3000
7.	Starting the job without Toolbox Talk	4	4000
8.	Electric cable tied with metal wire / Use of damaged electrical cable / Use of two core cable	3	3000
9.	Rubber mat not available in front of electrical panels.	3	3000
10.	Inserting naked wire into the socket instead of a plug	5	5000
11.	Inflammable materials stored inside PSS/FCC/Distribution Room	5	5000
12.	Water accumulation found near electrical panels / equipment	5	5000
13.	Grinding wheel/ Coupling/ Piling winch/other rotating parts without guard	4	4000
14.	Inadequate illumination of working area	3	3000
15.	Bringing inside PSS/FCC or any other work area any chemicals without approval.	5	5000
16.	Loose materials in work area which can fall down or fly during a storm	5	5000
17.	Misusing emergency facilities like fire hydrant line/ hose box/ spray system/ eye wash etc.	3	3000
18.	Entering restricted areas like switch yard, hazardous material storage room etc. without authorization	3	3000
19.	Not using 24 V lamp inside confined spaces	3	3000
20.	Bypassing/overriding safety interlocks	5	5000
21.	Working besides road without proper barricading and monitoring of traffic	5	5000

The Tata Power Company Ltd	     	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07		Date of Issue: 01/08/2023

22	Smoking in prohibited area (Closed Go-downs, Storage of flammable material, Storage of Gas cylinders, PSS , Offices etc.)	3	3000
23	Improper stacking of materials in Storage Yard	4	4000
24	Sleeping at workplace	3	3000
25	First aid box not available / in locked condition	2	2000
26	Appointment of subcontractor without his Safety Bid Evaluation and/or without the permission of engineer in charge or Order manager.	5	5% of order value
27	Bad Housekeeping with respect to TPSMS/GSP/GHK/022 • 1st Instant • 2nd instant • 3rd instant • 4th instant • Subsequent instants	2	• 1000 • 2000 • 5000 • 10000 • 10000
28	Violations related to vehicles with respect to TPSMS/CSP/RSP/015. • Parking without wheel choke • Parking in undesignated area • Heavy vehicle without helper or co-driver • Seat belt not available / not used • Driver without license • Heavy vehicles without reverse horn • Using mobile phone while driving • Lights/mirrors not working /broken	3	1000 per each violation
28	Violation in Gas cutting and Gas cylinder handling • Cylinder valve without guard • No flashback arrester • Leaky DA/Oxygen hose • Cylinders not kept in secured manner • Cylinder trolley not available • Cylinders are transported by manual rolling	5	2000 per each violation
29	Violations in Lifting Operations w.r.t. to TPSMS/CSP/HEMS/005 • Hook latch missing • Load raised or swung over people or occupied areas of building • Persons standing within the swing area of the crane • No barricading of crane working area • Use of damaged lifting tools and tackles	5	2000 per each violation

The Tata Power Company Ltd	     	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07		Date of Issue: 01/08/2023

	- Lifting tools and tackles not tested / Test certificate expired - Crane operator without proper license - Angular loading - Lifting / shifting heavy material without guide rope - Using mobile phone during loading and unloading jobs		
30	Violation in Scaffolding work w.r.t. to TPSMS/CSP/SCAF/007 - Unstable scaffolding/nonstandard Scaffolding in use - Handrails/mid rails/toe guards missing - Safety harness not anchored on fixed structure - Opening found in working platform	5	2000 per violation
31	Violation in Excavation Work w.r.t. to TPSMS/CSP/EXS/002 - Loose material falling into excavated pit - Water logging in excavated pits / trenches - Inadequate or no barricading - Undercut / cave in found on sides of excavated pits	4	2000 per violation
32	Caution boards, danger signs (luminescent /red) along with emergency contact number are not found displayed.	3	3000
34	Spillage of hazardous material/chemicals during transportation	4	4000

Penalty for Incidents / Accidents-(R7)

Consequence of incident / Accident		Incident / Accident				Action Required
Sr.No.	Type of Injury	1st	2nd	3rd	4th	
1	Major Injury (Bone injury or burn or hospitalization >48 hrs.) Non-fatal	F	F	G	G	Intolerable
2	Major Injury (Bone injury or burn or hospitalization >48 hrs.) Non-Fatal (Two or more non-Fatal in one event)	G	G	H		
3	Single fatality	G	H			
4	Multiple fatalities (Two or more fatalities in one event). Anywhere in Tata power.	H				

The Tata Power Company Ltd	TPCODL TPSODL	 TATA TATA POWER	TPNODL TPWODL	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07				Date of Issue: 01/08/2023

Legend	Action to be taken	Responsibility	Penalty (INR)	The no. of violations shall be calculated cumulative during the contract period for all contracts in SBU, not on a monthly basis
F	Memo to BA and Levy of Penalty	Order Manager/Engineer in charge	200000	
G	Memo to BA and Levy of Penalty	Order Manager/Engineer in charge	500000	
H	Memo to BA, Levy of Penalty, Termination of Contract and Blacklisting the BA	Order Manager/Engineer in charge	1000000	

Appendix -13: CHECKLIST TO BE USED DURING SITE VISIT

Checklist to be used: During site visit to check the adequacy Safety systems.			
		Observation	Score* (1-5)
1	Check the adequacy of safety policy and Safety Management system of the contractor.		
2	Does the contractor have written down safety procedures?		
3	Check the records of Near miss, unsafe act, unsafe conditions, and incidents.		
4	Check the organization setup to implement the safety systems at site (safety officer, safety supervisor)		
5	Check whether safety meeting and toolbox talk carried out regularly and records maintained or not.		
6	Is the process of incident investigation adequate or not?		
7	Verify incident reporting and recording system		
8	Check the usage of equipment/tools and tackles.		
9	Check for housekeeping at site		
10	Check the use of PPEs and general behavior of workforce towards safety		
	Total Score		
	Site Visit Score		

Score*- rating on the scale of 1-5 to be given based on the observations on site. Score of 1 is the lowest and core of 5 is the highest.

The Tata Power Company Ltd	     	Contractor's Safety Code of Conduct
Document no TPSMS/GSP/ CSM/015/REV 07		Date of Issue: 01/08/2023

Appendix 14: Indicative List of High-Risk Jobs

Indicative high-risk jobs are given below. This is not an exhaustive list. This is only indicative.

Sl. No.	Jobs
1	Transmission Line Tower Erection on columns, near live lines, In congested areas, In creeks, In the Sea.
2	Conductor Stringing on Tower Using Tensioner & Puller in the area such as Line Crossing, Near Live lines, Congested Areas, Road Crossing, Bridge Crossing, Railway line Crossing, In creeks, In the Sea
3	Cable Pulling by Using winch Machine in City and Rural Areas
4	Hot Washing of HT and Extra HT lines, Towers and switchyards equipment
5	Maintenance / Testing and Replacement of High Voltage (33 KV etc.) Switchyard equipment
6	Installation of Lifts
7	Installation of EOT Cranes
8	Tower Dismantling
9	Working on H Frame /Pole mounted Transformers
10	Excavation in operational Area having power cables in receiving station
11	Identification and spiking of cable / disconnection of cables from poles
12	Working on Electrical Panels
13	Working on live electrical switch yard, Material handling and equipment repair/installation.
14	All activities that require climbing on a pole/structures/Towers/Transformers
15	Cable laying and termination jobs
16	Excavation beyond 5 feet near existing building and structures
17	Working in confined Spaces
18	Stringing of new conductors over poles

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



(Praveer Sinha)
CEO & Managing Director

Date: 15th 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: 15th 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)

CONTENTS

Foreword	3
A Our values	4
B Scope and purpose of this Code	5
C Our core principles	7
D Our employees	9
E Our customers	18
F Our communities and the environment	21
G Our value-chain partners	23
H Our financial stakeholders	25
I Governments	27
J Our group companies	29
Raising concerns	30
Accountability	31
Acknowledgement sheet	33

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

21st 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:



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.

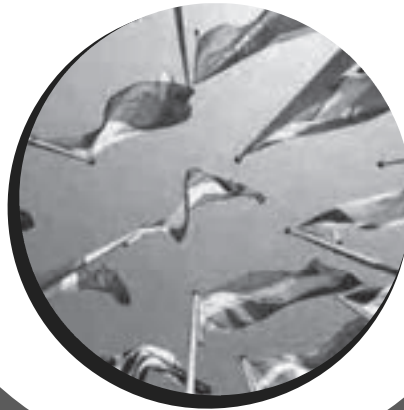
Ratan Tata

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-authorised, 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 29th 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.

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: _____

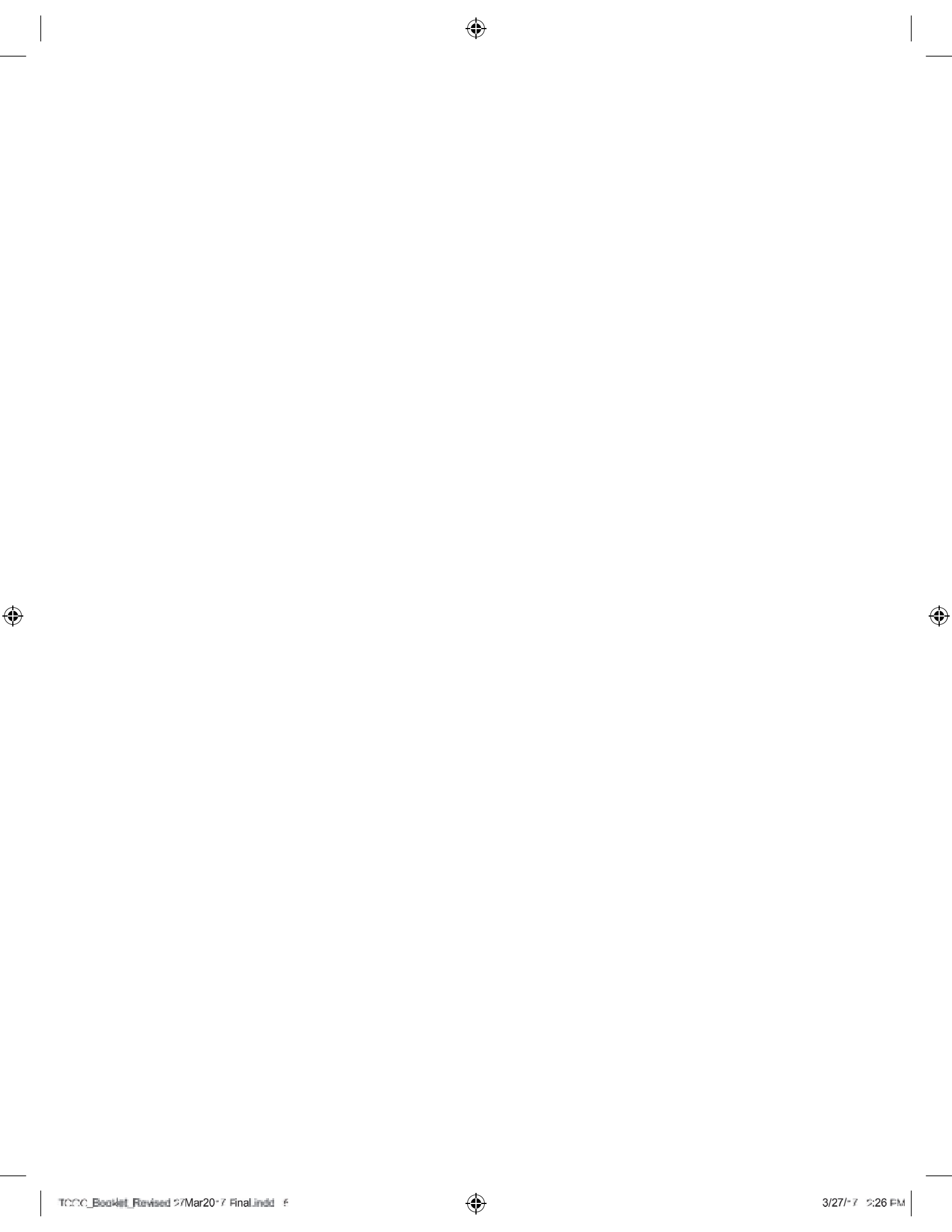
(Please submit this declaration to your Ethics Counsellor or the Human Resource department of your company.)



[illegible]

NOTES

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

Technical Specification

PROCUREMENT OF 33kV CLASS CABLES FOR UPGRADATION OF 22 kV AIS WITH GIS AT VIKROLI & KALYAN RECEIVING STATION

TE00535

Specification Title: SPECIFICATIONS FOR 33kV 1C 630 SQMM COPPER

CONDUCTOR XLPE CABLE

Specification No: TE00535/SP/011/FY25



The Tata Power Company Limited

Engineering T&D, Antop Hill Station, Samadhan Road,
Antop Hill, Mumbai 400 037.

Registered Office: Bombay House 24 Homi Mody Street Mumbai 400 001

Revision	Date	Description	Approvals		
			Prepared By	Checked By	Approved By
A	15.07.2024	Final	HSK <i>H.S. Kulkarni</i>	MVD <i>M.V. Joshi</i>	SKV <i>SKV</i> 170724

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PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKHROLI & KALYAN REC STATION	SECTION- A
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

TABLE OF CONTENTS

SECTION	DESCRIPTION
COMMON	COVERPAGE AND TABLE OF CONTENTS
	CHECKLIST FOR DOCUMENTS
SECTION-A	
A	SPECIFICATION
A1	INTENT OF SPECIFICATION
A2	PROJECT INFORMATION
A3	SCOPE OF WORK
A4	TERMINAL POINTS
A5	EXCLUSIONS
A6	CODES AND STANDARDS
A7	BIDDER'S QUALIFICATION REQUIREMENT
A8	PROJECT SCHEDULE / MILE STONES
A9	SUBMISSIONS BY BIDDERS
A10	DETAILED TECHNICAL SPECIFICATION
A10.1	MECHANICAL
A10.2	CIVIL AND ARCHITECTURAL
A10.3	CONTROL INSTRUMENTATION AND AUTOMATION
A10.4	ELECTRICAL
A11	LAYOUT REQUIREMENT
A12	QUALITY REQUIREMENT (should include the requirement of Factory Inspection, Testing & SAT)
A13	PERFORMANCE REQUIREMENTS
A13.1	TEST PROCEDURE
A13.2	PERFORMANCE GUARANTEE PARAMETERS AND LD CLAUSES FOR NON PERFORMANCE
A14	MAINTAINANCE REQUIREMENTS
A15	TOOLS TACKLES FOR ERECTION AND COMMISSIONING
A16	SPARES
SECTION-B	
B1	DATA SHEETS (To be prepared by package engineer and to be filled up by bidders)
B2	STANDARD SPECIFICATIONS (if available)
SECTION-C	
C	SCHEDULES
C1	SCHEDULE OF QUANTITIES AND PRICES
C2	TIME SCHEDULE FOR THE PROJECT
C3	SCHEDULE OF DEVIATIONS FROM TECHNICAL SPECIFICATIONS
C4	SCHEDULE OF DEVIATIONS FROM GENERAL & SPECIAL CONDITIONS OF CONTRACT

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKHROLI & KALYAN REC STATION	SECTION- A
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

C5	SCHEDULE OF DRAWINGS/ DOCUMENT SUBMISSION
C6	SCHEDULE OF MANDATORY SPARES
C7	SCHEDULE OF SPECIAL ERECTION, MAINTENANCE TOOLS & TACKLES
C8	SCHEDULE OF PLACES OF TESTS & INSPECTION
C9	SCHEDULE OF RECOMMENDED SPARES
SECTION-D	
D	DRAWINGS AND DOCUMENTS
D1	TENDER PURPOSE
D2	AFTER AWARD OF CONTRACT
SECTION-E	
E	ANNEXURES
E1	Annexure 1 – PQR
E2	Annexure 2 – Technical Requirement
E3	Annexure 3 – Standard Specification for 33 kV 1C 630 Sqmm Copper Conductor XLPE Cable
E4	Annexure 4 - Standard Quality plan
E5	Annexure 5 – BOQ
E6	Annexure 6 – General QAI requirements

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKHROLI & KALYAN REC STATION	SECTION- A
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

CHECK LIST FOR DOCUMENTS TO BE SUBMITTED ALONG WITH THE BID

<u>SN</u>	<u>Document Name</u>	<u>Submitted by Bidder</u> (Please ☒ in the Box)			
		YES		NO	
1.	Signed copy of bid document as a token of acceptance	YES		NO	
2.	Duly filled in schedules, listed in section 'C'. i.e. Schedule C1 to C9	YES		NO	
3.	Qualifying Requirement in Format E1	YES		NO	
4.	Quality Assurance Plan (QAP), Manufacturing Quality Plan (MQP), Field Quality Plan (FQP) as applicable	YES		NO	
5.	General Arrangement Drawings for equipment offered	YES		NO	
6.	Filled up Data Sheets in Format B1	YES		NO	
7.	Type Test Reports as applicable.	YES		NO	

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 kV AIS WITH GIS AT VIKHROLI & KALYAN REC STATION	SECTION- A
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

A1 INTENT OF SPECIFICATION

The specification is issued for procurement of 33 kV 1C 630 Sqmm Copper Conductor XLPE cables for upgradation of 22 kV AIS with GIS at Vikhroli receiving station.

A2 PROJECT INFORMATION

1.0	Owner	The Tata Power Company Limited Transmission Division Mumbai Maharashtra, India Project Manager Mr. Milind Rane 9821357925
2.0	Location of the plant	Vikhroli inside Mumbai & Kalyan
3.0	Climatic conditions	
3.1	Temperatures:	
(a)	Maximum dry bulb temperature	36.7° C
(b)	Minimum dry bulb temperature	18.3° C
(c)	Design temperature for electrical equipment / devices	50°C
(d)	Design humidity	95%
3.2	Relative humidity	
	(a) Maximum during monsoon	100%
	(b) Minimum during December to January	22%
4.0	Rainfall	Annual average rainfall is about 2500 to 3100 mm (most of which occurs during the monsoon season from June to September)

A3 SCOPE OF WORK

The scope includes design, manufacture, inspection at factory works and supply of 33 kV 1C 630 Sqmm Copper Conductor XLPE cables. Design shall be complying with the Standard specification of THE TATA POWER CO LTD attached in annexures.

The quantity of Cable is estimated in the Schedule C1 and detailed Breakup is given in Annexure 5- BOQ.

The specification also covers the following:

- Design, Manufacture, Inspection and Testing at the VENDOR's and/or his SUB- VENDOR's Works.
- Packing, shipment, delivery FOR Mumbai, of equipment to various site location as mentioned in BOQ. The insurance cover (in case of CIF delivery) to be provided shall specifically include fire, theft, malicious damages, transit, civil riots, damage during installation etc. The insurance cover shall be for replacement costs.

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKHROLI & KALYAN REC STATION SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	SECTION- A
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A4 TERMINAL POINTS - NA**A5 EXCLUSIONS - NIL****A6 CODES AND STANDARDS**

The cables supplied shall conform to the latest edition of the following national and international standards, but not limited to:

- a) IEC publication 60502 -2 - Power cables with extruded insulation and their accessories for rated voltages from 1 kV to 36 kV
- b) IS 7098 -2 - Specifications for cross linked polyethylene insulated PVC sheathed cables for working voltages from 3.3 kV up to and including 33 kV.
- c) IS 3975 - Specification for mild steel wires, strips and tapes for armoring cables.
- d) IS 10810 - Specifications for method of Tests of cables.
- e) IS 5831- Specification for PVC insulation and sheath of electrical cables.
- f) IS 8130 - Specification for conductors for insulated electric cables and flexible cords.
- g) IS 2629 - Recommended practice for hot dipped galvanized of iron and steel.
- h) IS 4759 - Specifications for hot dipped galvanized coatings on round steel wire.
- i) IS 10418 - Specifications for drums for electrical cables

A7 BIDDER'S QUALIFICATION REQUIREMENTS

Refer attached Annexure 1 – PQR

A8 PROJECT SCHEDULE / MILESTONES

Bidder shall submit with the bid, a detailed Project Schedule covering the following based on the milestones tabulated below:

- a. Start of 'Engineering'
- b. Completion of 'Engineering'
- c. Commencement of 'Manufacturing'/Manufacturing process
- d. Commencement of Supply

Milestone	Target
Prebid meeting	As given in bid document
Bid Submission	As given in bid document
Drawing submission	Within two weeks from receipt of PO
Inspection of equipment	Within 12 weeks from placement of PO
Delivery of equipment	Within 16 weeks from placement of PO

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKHROLI & KALYAN REC STATION	SECTION- A
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

A9 SUBMISSIONS BY BIDDERS

Bidder shall submit the following information along with the Technical Bid.

- Dully filled in schedules, listed in section 'C'.
- Quality Assurance Plan (QAP), Manufacturing Quality Plan (MQP), Field Quality Plan (FQP)
- General Arrangement Drawings for equipment offered
- Filled up Data Sheets

A10 DETAILED TECHNICAL SPECIFICATIONS*

Refer attached Annexure 3 - Standard specification for 33 kV 1C 630 Sqmm Copper Conductor XLPE Cable

A11 LAYOUT REQUIREMENTS - NA**A12 QUALITY REQUIREMENTS**

Refer attached Annexure 4 - Standard Quality Plan for MV Cable Ref No. TPQAIT-QAXX-00-EX-SQP-138-Rev0 dated 01.09.2015 is attached.

A13 PERFORMANCE REQUIREMENTS

Refer Attached Annexure 3 - Standard Specification for 33 kV 1C 630 Sqmm Copper Conductor Cable

A14 MAINTAINANCE REQUIREMENTS -NIL**A15 TOOLS AND TACKLES FOR ERECTION AND COMMISSIONING - NIL**

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKHROLI & KALYAN REC STATION	SECTION- A
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

A16 SPARES

Bidder needs to include competitive price for Mandatory Spare parts against the below specified list and schedules.

Bidder shall include list of spares with quantities as recommended by him required for three years trouble free operation of equipment's.

< Clearance of Engineering Disciplines (as under) shall be taken on office copy for records. The concurrence signatures shall not be printed on document being sent outside of Project Engineering>

Rev No	Date	Originator	Reviewed By	Cleared By		Approved By (HOD)
				HOD	Signature	
				Mechanical		
				Civil		
				Piping & Layout		
				C & I		
				Automation		
				Electrical		

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-B
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

B1 – DATA SHEETS

Refer Attached Annexure 2 – Technical Particulars for 33 kV 1C 630 Sqmm Copper Conductor XLPE cable

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-B
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

B2 –STANDARD SPECIFICATIONS

Refer attached Annexure 3 - standard specifications for 33 kV 1C 630 Sqmm Copper
Conductor XLPE Cable

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-C
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

C1 - SCHEDULE OF QUANTITIES AND PRICES**SUPPLY:**

Sr. No	Description	Qty/Unit	Unit Price (Rs.)	Item Price (Rs.)
1	33 kV 1C 630 Sqmm Copper Conductor XLPE cable (as per specifications)	9780 mtr		
	Refer Annexure 5 for Detailed BOQ			

SERVICES:	NIL
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Seal of the Company

Signature

Designation

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-C
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

C2- PROJECT TIME SCHEDULE

Seal of the Company

Signature

Designation

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-C
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

C3- SCHEDULE OF DEVIATIONS FROM TECHNICAL SPECIFICATIONS

All deviations from this specification, shall be set out by the Bidders, indicating clause no and page in this schedule. Unless ***specifically*** mentioned in this schedule, the tender shall be deemed to conform to the purchaser's specifications:

Sr. No.	Clause No.	Details of deviation With justifications
-----	-----	-----

We confirm that there are no deviations apart from those detailed above.

Seal of the Company

Signature

Designation

PROJECT ID : TE00535
SPEC NO :
TE00535/SPEC/0011/FY25
REV : A
DATE :15.07.2024

**PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF
22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION**

SECTION-C

**SPECIFICATION FOR 33kV 1C 630 SQMM COPPER
CONDUCTOR XLPE CABLE**

C4- SCHEDULE OF DEVIATIONS FROM GENERAL & SPECIAL CONDITIONS OF CONTRACT

All deviations from this specification, shall be set out by the Bidders, indicating clause no and page in this schedule. Unless ***specifically*** mentioned in this schedule, the tender shall be deemed to conform to the purchaser's specifications:

Sr. No.

Clause No.

**Details of deviation
With justifications**

We confirm that there are no deviations apart from those detailed above.

Seal of the Company

Signature

Designation

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-C
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

C5- SCHEDULE OF DRAWINGS & DOCUMENT SUBMISSION

As part of the proposal, the BIDDER shall furnish the schedule of drawing/document Submission

Sr. No.	Title of Drawing/Document	Target Date of submission	For Information/Review/Approval	Remarks
1.0				
1.1				
1.2				
2.0				
2.1				
2.2				
3.0				
3.1				
3.2				
4.0				
4.1				
4.2				
5.0				
5.1				
5.2				

Seal of the Company

Signature

Designation

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-C
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

C6- SCHEDULE OF MANDATORY SPARES

As part of the proposal, the BIDDER shall indicate below the list of recommended spares for three years of trouble free operation of the equipment/system offered by him.

Sr. No	Equipment tag no.	Description of spare	Material of construction	Part no	Quantity recommended per unit of equipment	Unit price	Total price	Delivery period from date of LOI	Remarks

Seal of the Company

Signature

Designation

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-C
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

C7 - SCHEDULE OF SPECIAL ERECTION/MAINTENANCE TOOLS & TACKLES

As part of the proposal, the BIDDER shall indicate below, the list of erection/maintenance tools & tackles offered by him.

Sr. No.	Description of spare	Quantity recommended per unit of equipment	Unit price	Total price	Delivery period from date of LOI	Remarks

Seal of the Company

Signature

Designation

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-C
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

C8 - SCHEDULE OF PLACES OF MANUFACTURE, TESTS AND INSPECTION

For major equipment / systems, the Bidder shall indicate the name of the Manufacturer / SUB CONTRACTOR and place of test and inspection.

ITEM OF EQUIPMENT	Manufacturer / SUBCONTRACTOR	PLACE OF TESTING & INSPECTION

Seal of the Company

Signature

Designation

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION-C
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

C9- SCHEDULE OF RECOMMENDED SPARES

As part of the proposal, the BIDDER shall indicate below the list of recommended spares for three years of trouble free operation of the equipment/system offered by him.

Sr. No	Equipment tag no.	Description of spare	Material of construction	Part no	Quantity recommended per unit of equipment	Unit price	Total price	Delivery period from date of LOI	Remarks

Seal of the Company

Signature

Designation

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION- D
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

D- DRAWINGS AND DOCUMENTS**D1 TENDER PURPOSE****D2 AFTER AWARD OF CONTRACT**

All the drawings and documents shall be through wrench system only

PROJECT ID : TE00535 SPEC NO : TE00535/SPEC/0011/FY25 REV : A DATE :15.07.2024	PROCUREMENT OF 33kV CABLES FOR UPGRADATION OF 22 KV AIS WITH GIS AT VIKROLI & KALYAN REC STATION	SECTION- E
	SPECIFICATION FOR 33kV 1C 630 SQMM COPPER CONDUCTOR XLPE CABLE	

E.- ANNEXURES

Annexure 1 – PQR

Annexure 2 – Technical Requirement

Annexure 3 – Standard Specification for 33 kV 1C 630 Sqmm Copper
Conductor XLPE Cable

Annexure 4 - Standard Quality plan

Annexure 5 – BOQ

Annexure 6 – General QAI Requirements

THE TATA POWER COMPANY LIMITED

STANDARD

TECHNICAL SPECIFICATION

FOR

33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE

(DOCUMENT NO – ENGG/STD-SPEC/93/20)



Tata Power

Engineering (T&D)

Rev. No	Date	Revision History	Prepared By	Checked By	Approved By (HOD)
A	20.07.2020	Issued for comments	PSA	SVD/RKS	AM
B	29.06.2023	Cable Drum details added	PSA	MVD	SKV
C	21-05-2024	Conductor details added	HSK	MVD	SKV

Contents

1. [Introduction](#)
2. [Pre-Qualifying Requirements including TTR](#)
3. [System Description and Scope](#)
4. [Codes & Standards.](#)
5. [Design Requirements](#)
6. [Layout Requirements for the equipment](#)
7. [Safety Requirements](#)
8. [Operational Requirements](#)
9. [Technical Parameters of Equipment including data sheet and make list for bought out items.](#)
10. [Quality Requirements \(including SQP and FQP\)](#)
11. [Inspection, Testing and Performance Requirements along with Warranty](#)
12. [Mandatory Spares](#)
13. [Data Submission by Bidder](#)
 - 13.1 With the Bid (including list of key drawings with dates/period which are part of commercial compliance)
 - 13.2 After award of contract

ENGG/ELECT/STD-SPEC/ 93/20 Rev: C Date: 21.05.2024	Standard Specification	Page 3 of 11
	33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE	

1. Introduction

The document covers the specific requirements for complete design, detailed engineering, manufacture, supply, inspection & testing at Bidder's work, and supply of 33 kV, 1C, 630 Sq.mm Copper conductor XLPE Cable and accessories.

All equipment, system and services covered under this specification shall comply with all current applicable statutory regulations and safety codes in the locality where the equipment is proposed to be installed. The equipment and systems shall also conform to the latest version of applicable codes and standards on the date of offer made by the Bidder unless otherwise indicated. Nothing in this specification shall be construed to relieve the Bidder of this responsibility

2. Pre-Qualifying Requirements including TTR

PI refer Annexure 1 – PQR for 33 kV Cable

3. System Description and Scope

Scope includes design, manufacture, testing at manufacturer's works and supply of 33 kV 1C 630 Sq.mm Copper conductor XLPE cables along with necessary number of termination kit, joints etc as specified in Section A.

4. Codes & Standards.

Given below are the acceptable code and standards. The Bidder shall take Owners approval for use of other codes & standards

The cables supplied shall conform to the latest edition of the following national and international standards, but not limited to:

- a) IEC publication 60502 -2 - Power cables with extruded insulation and their accessories for rated voltages from 1 kV to 36 kV
- b) IS 7098 -2 - Specifications for cross linked polyethylene insulated PVC sheathed cables for working voltages from 3.3 kV up to and including 33 kV.
- c) IS 3975 - Specification for mild steel wires, strips and tapes for armouring cables.
- d) IS 10810 - Specifications for method of Tests of cables.
- e) IS 5831- Specification for PVC insulation and sheath of electrical cables.

ENGG/ELECT/STD-SPEC/ 93/20 Rev: C Date: 21.05.2024	Standard Specification	Page 4 of 11
	33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE	

- f) IS 8130 - Specification for conductors for insulated electric cables and flexible cords.
- g) IS 2629 - Recommended practice for hot dipped galvanized of iron and steel.
- h) IS 4759 - Specifications for hot dipped galvanized coatings on round steel wire.
- i) IS 10418 - Specifications for drums for electrical cables.

5. Design Requirements

5.1 Specific Requirements

5.1.1 The cables shall be 33 kV, single core, 630 sq.mm with stranded annealed compacted circular copper conductors, cross link Polyethylene XLPE (insulation compound Borealis/DOW make) insulated, core shielded, with water barrier protection (longitudinal), inner PVC sheathed, aluminium round wire armour with non-magnetic material and shall be provided with an overall PVC over sheath coated with graphite. The cables shall be (Fire Retardant Low Smoke) FRLS compliant.

5.1.2 The conductor shield, insulation and insulation shield shall be extruded in a single process (triple extrusion) or any other equivalent process using dry curing technology to ensure homogeneity and absence of micro voids.

5.1.3 These cables shall be manufactured by 'Dry curing' process.

5.1.4 The BIDDER shall indicate any specific construction features, which will be provided to ensure specific water tightness of cable longitudinally.

5.1.5 The MANUFACTURER shall confirm the final permissible conductor temperature after overload and consequently ensure that there is no loss of life of the cable insulation.

5.1.6.0 The cables shall be suitable for voltage grade (Uo/U) 19/33 kV, 3 phase, AC, 50 hZ frequency, effectively grounded system and capable of continuous operation at their rated currents.

5.1.6.1 The power cables shall withstand power frequency voltage, impulse voltage and partial discharge extinction level as per IS:7098 part -2

5.1.6.2 The cables shall be suitable for use where combination of ambient temperature and temperature rise due to load, results in conductor temperature not exceeding 90 deg C under normal operation. The vendor shall submit cable current carrying calculations when laid in ground 1800 mm below ground level and in air with the ground temperature being 30 deg C and a maximum operating temperature of 90 deg C.

5.1.6.3 The cables and accessories shall be capable of withstanding dynamic and thermal stresses due to a symmetrical short circuit current of 40 kilo Amperes (RMS) for a period of 1 sec. and dynamic withstand of 100 kA (peak).

ENGG/ELECT/STD-SPEC/ 93/20 Rev: C Date: 21.05.2024	Standard Specification	Page 5 of 11
	33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE	

5.1.6.4 The nominal thickness of insulation of the cable shall not be less than 8.8 mm.

5.1.7 Temperature Rise

5.1.7.1 The maximum conductor temperature shall not exceed 90 deg.C during continuous operation at full rated current at 33 kV followed by 10% overload for two hours. The temperature after a short circuit for one second, shall not exceed 250 deg.C, with initial conductor temperature of 90 deg.C.

5.1.7.2 Emergency Loading

The BIDDER shall indicate the maximum percentage overload current that the cable can carry and its duration when operating initially at a conductor temperature of 90 deg.C and the permissible final conductor temperature after overload. The total period during the life time of the cable when it shall be subjected to emergency loading without any deterioration to its insulation shall also be indicated.

5.2 Design Features

5.2.1 Cable Construction

5.2.1.1 Conductor

Plain, annealed, high conductivity copper wires, stranded compacted circular Conductor of 630 sq. mm size as specified in General Technical Particulars.

5.2.1.2 Conductor Shield

Extruded layers of semi-conducting compound. Minimum thickness of extruded conductor screen shall not be less than 1.0 mm. A semi-conducting tape may be applied over the conductor before extrusion of the conductor screen.

5.2.1.3 Insulation

Cross linked polyethylene (XLPE) manufactured by chemical cross linking process with suitable amounts of antioxidants, harmless to operating personnel, added to further improve ageing properties at elevated temperatures. The nominal thickness for 33 kV Cable shall be 8.8 mm in accordance with IS standard.

5.2.1.4 Insulation Shield

- Non metallic part - Extruded layers of semi-conducting compound. Minimum thickness of insulation screen shall not be less than 1 mm.
- Water Swellable tape –Water swellable semi-conducting tape with minimum 25% overlap

ENGG/ELECT/STD-SPEC/ 93/20 Rev: C Date: 21.05.2024	Standard Specification	Page 6 of 11
	33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE	

- c. Metallic part - Copper Tape (minimum thickness 0.045mm) with 20 % overlap. Metallic insulation screening fault current capacity shall be 25 kA for 1 sec which is combination of copper tape and Aluminium armour.

5.2.1.5 Moisture barrier

Moisture impervious layer of suitable material (or Non conducting swell able tape) shall be provided.

5.2.1.6 Armour

Aluminium Round wire armour followed by suitable binder tape to be designed to provide adequate mechanical protection during installation and in-service conditions.

Bedding

A suitable binder tape or bedding shall be applied over armour tapes and under the over sheath.

5.2.1.7 Over sheath

Extruded FRLS PVC ST2 sheath over the armour. Colour of Outer sheath shall be black.

5.2.1.8 Coating

A hard baked one layer of graphite shall be applied over the over sheath as outer electrode for testing the sheath.

- 5.2.1.9 Embossing/Printing – Standard embossing/Printing having manufacturer Name, Cable size, Voltage grade, FR-LSH, year of manufacturing, PO number and Property of TATA Power Company Limited. Also, sequential length marking shall be provided at every one meter by hot foil indenting / Printing on outer sheath of cable.

5.3 Cable Drums

The cable drums shall conform to IS 10418 - Specifications for drums for electrical cables. The cables shall be supplied in returnable drums. Cable drum shall provide Fire Resistant Polyethylene sheet (Packaging material) along with GI sheet cover above that for external protection of cables. The Cable drums will be returned after one year from supply of cable. All ferrous and other metal parts of drum shall be treated with a suitable rust preventive finish or coating to avoid rusting during transit or storage. The direction for rolling of drums and for laying of Cable should be indicated.

ENGG/ELECT/STD-SPEC/ 93/20 Rev: C Date: 21.05.2024	Standard Specification	Page 7 of 11
	33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE	

The length of cable on each drum shall be determined by the manufacturer considering the transport limitations from manufacturer's works to the site and the route survey indicating the location of joints, cross bonding considerations, etc. as per the final survey carried out by the successful Bidder and the PURCHASER. BIDDER shall indicate in the offer, the maximum length for each size of cable, which can be furnished on one drum. However, before manufacture of the cables, the successful BIDDER shall obtain PURCHASER'S approval for the drum length. The cable ends on the drum must be sealed during transport, storage and installation to prevent ingress of water in the cable.

The sizes and weights of drums shall also be restricted to reasonable amounts to facilitate transport from Stores to site as also installation.

Any adjustment required in individual drum lengths(+/- 5%) to suit the cable route lengths of the 33 kV cables shall be made without extra cost to match overall order length.

5.4 Electrolysis & Corrosion

The cable serving shall be designed such that the cable sheath and armouring are protected from electrolysis caused by stray currents, from galvanic action and from corrosion and microbiological attack. The design of accessories shall be such that the outer metallic coverings of cable joints, sealing ends and control points can be insulated from earth along the entire route so that cathode protection, if needed can be applied and also periodic testing of the insulation resistance of the serving can be done. A set of links shall be provided at each end of the cables to connect the cable sheath and armour to the respective station grounds. The sealing ends shall be suitably insulated from their supporting structures, to permit insulation tests on the cable over sheath.

5.5 Grounding System

The BIDDER shall indicate his recommendations regarding the type of grounding systems for the armour. The scope of supply shall include any ground rod or ground conductor/earthing cable as recommended. The grounding material shall be copper. Special provision including supply of required material viz. shorting bars, varistors etc. for GIS envelope carrying cable sealing ends shall be made, to avoid Transient Ground Potential Rise (TGPR) Phenomenon

6. Layout Requirements for the equipment

- 6.1 Cable shall be buried as per cable layout drawings to be prepared by the bidder and approved by Owner during detailed engineering.
- 6.2 Bidder shall maintain necessary clearances as per statutory and safety requirements as applicable.

ENGG/ELECT/STD-SPEC/ 93/20 Rev: c Date: 21.05.2024	Standard Specification	Page 8 of 11
	33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE	

7. Safety Requirements

NIL

8. Operational Requirements

Equipment shall give continuous service under specified site conditions.

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

CABLE DATA

1. APPROXIMATE LENGTH OF CABLE	: As per schedule
2. TYPE OF INSULATION	:XLPE
3. NOMINAL SYSTEM VOLTAGE, PHASES AND FREQUENCY	: 33kV, 3Ph,50 Hz
4. MAXIMUM SYSTEM VOLTAGE (FOR CONTINUOUS OPERATION)	:36 kV
5. SYSTEM NEUTRAL EARTHING AT EACH END OF CABLE	: Effectively earthed
6. a) FAULT LEVEL OF SYSTEM (SYMMETRICAL) (kA RMS FOR 1 SEC.)	40
b) DYNAMIC WITHSTAND CAPABILITY (kA)	125
7. NO. OF CORES	1
8. CONDUCTOR	
8.1 MATERIAL	: Annealed Copper
8.2 SIZE (MINIMUM)	: 630 Sqmm
8.3 SHAPE	:Stranded Compacted circular
9. CONDUCTOR SCREEN	
9.1 MATERIAL	: Extruded layers of Semiconducting Compound
9.2 THICKNESS (MINIMUM)	: 1 mm

ENGG/ELECT/STD-SPEC/ 93/20 Rev: C Date: 21.05.2024	Standard Specification	Page 9 of 11
	33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE	

10 INSULATION	: Borealis/DOW
10.1 MATERIAL	: Cross linked Polyethylene(XLPE)
10.2 NOMINAL THICKNESS	: 8.8 mm
11 INSULATION SCREEN	
11.1 NON METALLIC PART	: Non Metallic Extruded layers of
11.1.1 THICKNESS (MINIMUM)	: 1 mm Semiconducting Compound with
11.2 WATER SWELLABLE TAPE	: Semiconducting water swellable
tape helically applied with 25% overlap	
11.3 Metallic part	: non magnetic metallic copper tape
(minimum thickness 0.045 mm with minimum 20% overlap)	
12 MOISTURE BARRIER	
12.1 MATERIAL	: Non conducting water swellable tape
13 INNER SHEATH	
13.1 MATERIAL	: Extruded PVC Type ST - 2
13.2 THICKNESS (MINIMUM)	: 0.6 mm
14. ARMOUR	: Single layer of hard drawn aluminium round wire of Nom. 2.5 mm dia. Suitable binder tape shall be provided over armour
15. OUTER SHEATH	: FRLS PVC Type ST -2 of minimum thickness 2.36 mm

D. INSTALLATION

1. TYPE OF LAYING *	: Direct Burial
2. AVERAGE DEPTH OF BURIAL	: 1.1 M
3. CONTINUOUS CURRENT RATING OF LAID CABLES AND ACCESSORIES AS PER SITE CONDITIONS	: 550 Amp

Notes:

*All details mentioned above as 'By Bidder' shall be subject to Purchaser's approval.

Data Sheet:

Refer attached Annexure 2 – Technical Requirement for 33 kV 1c 630 Sqmm Cable

ENGG/ELECT/STD-SPEC/ 93/20 Rev: C Date: 21.05.2024	Standard Specification	Page 10 of 11
	33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE	

10. Quality Requirements (including SQP and FQP)

10.1 The Quality Control Plan shall list and define in sequential order all process control activities, inspection and tests proposed to be performed on the equipment/material starting from component procurement and from testing stages to product dispatch. The Quality Control Plan shall indicate and identify the applicable standards, detailed description with diagram the procedure, acceptance criteria, extent of check and record to be generated. This QAP shall be submitted by bidder and approved by Owner.

10.2 All erection and installation activities shall be performed in line of approved FQP by Owner.

Refer Annexure 3 - Standard SQP for Medium Voltage Cables

11. Inspection, Testing and Performance Requirements along with Warranty

11.1. All test routine test, performance test, special tests and acceptance test as per the relevant standards specified in this specification and approved MQP shall be carried out on each cable. Minimum shop testing requirements are specified in the attached Standard Quality Plans. All applicable Type test report shall be submitted with the bid and shall not be older than 5 years.

11.2. All the type tests shall be carried out as mentioned in the clause no.3.4 of Standard Quality Plan attached as Annexure 3 along with this document.

11.3 Cost of cable consumed for testing shall be on bidders account & the actual delivery quantity of the cable shall be exclusive of the ordered quantity.

11.4 The Cable Drum length should be as per drum schedule given by Tata Power User department.

12. Mandatory Spares - NIL

13. Data Submission by Bidder

13.1 With the Bid

Following drawings and documents shall be prepared based on Owner specifications and statutory requirements and shall be submitted with the bid:

- a. Completely filled in Technical Particulars
- b. General description of the equipment and all components including brochures.
- c. General arrangement
- d. Bill of material
- e. Experience List
- f. Type test certificates

ENGG/ELECT/STD-SPEC/ 93/20 Rev: C Date: 21.05.2024	Standard Specification	Page 11 of 11
	33 kV, 1C, 630 SQMM COPPER CONDUCTOR XLPE CABLE	

13.2 After award of contract

Sr. No	Descriptions		For Approval	For Review Information	Final submission
1.	Technical parameters		√		√
2.	Cross section Drawing			√	√
3.	QA & QC Plan		√	√	√
4.	Test Certificates		√	√	√

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

TECHNICAL SPECIFICATION

HT CABLES 11kV, 22kV, 33 kV

The Tata Power Company Ltd.
Engineering Services (ENSE),
Distribution Division,
Senapati Bapat Marg,
Lower Parel,
Mumbai – 400013
Maharashtra

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
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TECHNICAL SPECIFICATION COVER SHEET

Document No: ENSE-DS-2006-R00

Document Title: Technical Specification of HT Cables

00	ENSE-DS-2006-R00	1/12/2023	YMM		AVP		RMB	
01	D-NPCE-SPEC-04	18/09/2022	NVD	-sd-	VK	-sd-	SBM	-sd-
00	D-NPCE-SPEC-04	08/02/2019	BN	-sd-	SBK	-sd-	NCP	-sd-
Rev No.	Remarks	Date	Initials	Sign	Initials	Sign	Initials	Sign
			Prepared By		Reviewed By		Approved & Issued By	

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

CONTENTS

- 1.0 SCOPE
- 2.0 APPLICABLE STANDARDS
- 3.0 CLIMATIC CONDITIONS OF THE INSTALLATION
- 4.0 GENERAL TECHNICAL REQUIREMENTS
- 5.0 GENERAL CONSTRUCTIONS
- 6.0 MARKINGS
- 7.0 TESTS
- 8.0 TYPE TEST CERIFICATES
- 9.0 PRE-DISPATCH INSPECTION
- 10.0 INSPECTION AFTER RECEIPT AT STORE
- 11.0 GUARANTEE
- 12.0 PACKING
- 13.0 TENDER SAMPLE
- 14.0 QUALITY CONTROL
- 15.0 MINIMUM TESTING FACILITIES
- 16.0 MANUFACTURING ACTIVITIES
- 17.0 SPARES, ACCESSORIES AND TOOLS
- 18.0 DRAWING AND DOCUMENTS
- 19.0 SCHEDULE "A" GUARANTEED TECHNICAL PARTICULARS
- 20.0 SCHEDULE "B" DEVIATIONS

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The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
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1.0	SCOPE	This specification covers technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and delivery at stores/site, performance of 11/22/33kV cable complete with all accessories for trouble free and efficient operations and conform to practices consistent with sound environmental management and local statutes.																								
2.0	APPLICABLE STANDARDS	The equipment covered under this specification shall unless otherwise stated, be designed, manufactured and tested in accordance with the latest editions of the following Indian, International standards / IEC & shall conform to the regulations of the local authorities. The applicable standards are: <table><tr><th>INDIAN STANDARDS (IS)</th><th>Title</th></tr><tr><td>IS 7098 (Part-2)</td><td>Specification for Cross-linked polyethylene insulated PVC sheathed Cables Part: 2 - For working voltages from 3.3 kV up to and including 33 kV</td></tr><tr><td>IS 8130</td><td>Specification for Conductor for insulated electric cables & flexible cords</td></tr><tr><td>IS 10418</td><td>Specification for Drums for Electric cables</td></tr><tr><td>IS 5831</td><td>Specification for PVC insulation and sheath of electric cables</td></tr><tr><td>IS 3975</td><td>Mild steel wires, formed wires and tapes for armouring of cables.</td></tr><tr><td>IS 4826</td><td>Specification for hot dipped galvanized coatings on round steel wires</td></tr><tr><td>IS 2530</td><td>Methods of tests for polyethylene moulding materials and polyethylene compounds</td></tr><tr><td>IS 4984</td><td>High density polyethylene pipes for water supply</td></tr><tr><td>IS 4905</td><td>Method for random sampling</td></tr><tr><td>IS 10810</td><td>Methods of tests for cables</td></tr><tr><td>IS 5</td><td>Colours for ready mixed paints and enamels</td></tr></table>	INDIAN STANDARDS (IS)	Title	IS 7098 (Part-2)	Specification for Cross-linked polyethylene insulated PVC sheathed Cables Part: 2 - For working voltages from 3.3 kV up to and including 33 kV	IS 8130	Specification for Conductor for insulated electric cables & flexible cords	IS 10418	Specification for Drums for Electric cables	IS 5831	Specification for PVC insulation and sheath of electric cables	IS 3975	Mild steel wires, formed wires and tapes for armouring of cables.	IS 4826	Specification for hot dipped galvanized coatings on round steel wires	IS 2530	Methods of tests for polyethylene moulding materials and polyethylene compounds	IS 4984	High density polyethylene pipes for water supply	IS 4905	Method for random sampling	IS 10810	Methods of tests for cables	IS 5	Colours for ready mixed paints and enamels
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ENSE-DS-2006-R00		Date of Issue: 1/12/2023

		International Standards	Title	
		IEC-60228	Conductor for insulated cables.	
		IEC-60502 (Part-2)	Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1.2 kV) up to 30 kV (Um = 36 kV) - Part 2: 22 kV Cables for rated voltages from 6 kV (Um = 7.2 kV) up to 30 kV (Um= 36 kV).	
		IEC-60811	Test methods for insulations and sheaths of electric cables and cords.	
		IEC 332	Test on electric cables on the fire conditions.	
		IEC 60754	Apparatus & procedure for the measurement of amount of halogens evolved during the combustion of materials taken from electric or optical fibre cable constructions.	
		ICEA T 31-610	Test method for conducting longitudinal water penetration resistance tests on blocked conductors	
		ASTM D 6097	Standard test method for relative resistance to vented tree growth in Solid dielectric insulating materials.	
		ASTM D 2863	Standard test method for measuring the minimum oxygen concentration to support candle-like combustion of plastics (Oxygen index)	
		ASTM D 2843	Standard test method for Density of smoke from burning or decomposition of plastic.	
In case of any conflict on any technical particular in the specification, the stricter requirement mentioned in the relevant standard shall be valid				
3.0	CLIMATIC CONDITIONS OF THE INSTALLATION	<u>Cable site installation ambient conditions:</u>		
		1	Maximum ambient temperature	43 deg.C
		2	Max. Daily average ambient temp	35 deg.C
		3	Min Ambient Temperature	07 deg.C
		4	Maximum Relative Humidity	100%
		5	Minimum Relative Humidity	40%

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ENSE-DS-2006-R00				Date of Issue: 1/12/2023																																															
		6	Average No. of thunderstorm per annum	50																																															
		7	Average Annual Rainfall	2380mm																																															
		8	Average No. of rainy days per annum	115																																															
		9	Rainy months	June to Oct.																																															
		10	Altitude above MSL not exceeding	300 meters																																															
		11	Average Air Pressure	29.6-inch Hg																																															
		Atmosphere is generally laden with mild acid and dust suspended during summer months and subjected to fog in winter months. The design of the equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.1g.																																																	
4.0	GENERAL TECHNICAL REQUIREMENTS	<table><tr><th rowspan="2">S.No.</th><th rowspan="2">Description</th><th colspan="2">Requirement</th></tr><tr><th>3 Core Cable</th><th>1 Core Cable</th></tr><tr><td>1</td><td>Rated Voltage</td><td colspan="2">12 kV(E) /24 kV (E)/36 kV (E) Effectively grounded system</td></tr><tr><td>1.1</td><td>Operating Voltage</td><td colspan="2">11 kV(E) /22 kV (E)/33 kV(E)</td></tr><tr><td>2</td><td>Variation in supply voltage</td><td colspan="2">+/- 10%</td></tr><tr><td>3</td><td>Frequency</td><td colspan="2">50 Hz</td></tr><tr><td>3.1</td><td>Variation in Supply Frequency</td><td colspan="2">+/- 5%</td></tr><tr><td>4</td><td>Type of Cable</td><td colspan="2">Watertight Aluminium conductor, XLPE Insulated, Extruded PVC Inner sheath, round GI wire armoured and PVC outer sheathed cable</td></tr><tr><td>5</td><td>Material of conductor</td><td colspan="2">Stranded compacted circular Aluminium conductor</td></tr><tr><td>6</td><td>Conductor Screen</td><td colspan="2">Semi-conducting tape & compound</td></tr><tr><td>7</td><td>Insulation</td><td colspan="2">XLPE insulation as per IS:7098 (Part-II)-1985</td></tr><tr><td>8</td><td>Insulation Screen</td><td colspan="2">a) Non-metallic: Extruded semiconducting compound</td></tr></table>				S.No.	Description	Requirement		3 Core Cable	1 Core Cable	1	Rated Voltage	12 kV(E) /24 kV (E)/36 kV (E) Effectively grounded system		1.1	Operating Voltage	11 kV(E) /22 kV (E)/33 kV(E)		2	Variation in supply voltage	+/- 10%		3	Frequency	50 Hz		3.1	Variation in Supply Frequency	+/- 5%		4	Type of Cable	Watertight Aluminium conductor, XLPE Insulated, Extruded PVC Inner sheath, round GI wire armoured and PVC outer sheathed cable		5	Material of conductor	Stranded compacted circular Aluminium conductor		6	Conductor Screen	Semi-conducting tape & compound		7	Insulation	XLPE insulation as per IS:7098 (Part-II)-1985		8	Insulation Screen	a) Non-metallic: Extruded semiconducting compound	
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ENSE-DS-2006-R00				Date of Issue: 1/12/2023		
				b) Semiconducting compound water swellable tape		
				c) Metallic: Copper tape		
		9	Inner Sheath	Extruded PVC Compound Type ST2 with PP fillers	Extruded PVC Compound Type ST2	
		10	Armour	a) Galvanized steel wire as per IS: 3975 – 1999 for multi core cable		
				b) Round Al wire for single core cables		
				c) RC tape as a binder over the armour		
		11	Outer Sheath	Extruded PVC Compound Type ST2 FRLSH as per IS: 5831-1984		
		12	Fault level	Cables shall be suitable for withstanding without damage, the thermal and mechanical stresses due to a 3-phase symmetrical short circuit of:		
				33 kV Cable		
				3CX400 sq.mm.	37.7 kA/sec	
				1CX630 sq.mm.	59.4 kA/sec	
				22 kV Cable		
				3CX240 sq.mm.	22.6 kA/sec	
				1CX185 sq.mm.	17.5kA/sec	
				11 kV Cable		
				3CX400 sq.mm.	37.7 kA/sec	
				3CX300 sq.mm.	28.3 kA/sec	
				1CX1000 sq.mm.	94.3 kA/sec	
1CX185 sq.mm.	17.5 kA/sec					
5.0	GENERAL					
Rev No.	Prepared By & Date	Checked By & Date		Approved for Issue By & Date		
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ENSE-DS-2006-R00			Date of Issue: 1/12/2023																																																																												
	CONSTRUCTION	The cross-linked polyethylene insulated (XLPE) cable (Dry cured & water cooled) shall be manufactured and tested strictly as per IS 7098: Part-II with its latest amendments. All material used in the manufacturing of cables shall be new and shall be selected as the best available for the intended use. The rating factors for variation in ground and air temperature, depth of laying, Thermal resistivity of soil and different laying configuration of cables shall be provided by the Bidder.																																																																													
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ENSE-DS-2006-R00			Date of Issue: 1/12/2023																									
		6	Longitudinal water sealing of conductor	a) Non-conductive water swellable yarn/ tape/ combination of both shall be provided in between interstices of the conductor. b) Also, this water swellable tape and yarn shall be compatible to withstand conductor continuous temperature of 90 deg C and short circuit temperature of 250 deg C without any decay. c)It shall not affect the electrical conductivity of the conductor.																								
		7	Cleanliness and uniformity	a) Before stranding, the cross-section of the Aluminum conductor shall be circular, and shall have uniform smooth surface, free from sharp edges and free from any defects. b) Stranded Conductor shall be free from oil traces & aluminum dust. c) Traces of aluminum dust on conductor or conductor screen shall not be acceptable.																								
		8	Conductor jointing	Not acceptable in any strand or in any conductor after it is stranded.																								
		9	Raw material supplier	Conductor raw material shall be procured from reputed suppliers viz., BALCO/ HINDALCO/ NALCO/ Vedanta only.																								
		10	Diameter of conductor	To be specified by bidder																								
		11	Min. weight of conductor (kg/km/core)	<table><tr><th>Voltage Grade</th><th>Nominal size of conductor Sq. mm.</th><th>Min. weight of conductor (kg/km/core)</th></tr><tr><td>11 kV</td><td>3C x 300 Sq. mm</td><td></td></tr><tr><td>11 kV</td><td>1C x 1000 Sq. mm</td><td></td></tr><tr><td>11 kV</td><td>1C x 185 Sq. mm</td><td></td></tr><tr><td>22 kV</td><td>3C x 240 Sq. mm</td><td></td></tr><tr><td>22 kV</td><td>1C x 185 Sq. mm</td><td></td></tr><tr><td>33 kV</td><td>3C x 400 Sq. mm</td><td></td></tr><tr><td>33 kV</td><td>1C x 630 Sq. mm</td><td></td></tr></table>	Voltage Grade	Nominal size of conductor Sq. mm.	Min. weight of conductor (kg/km/core)	11 kV	3C x 300 Sq. mm		11 kV	1C x 1000 Sq. mm		11 kV	1C x 185 Sq. mm		22 kV	3C x 240 Sq. mm		22 kV	1C x 185 Sq. mm		33 kV	3C x 400 Sq. mm		33 kV	1C x 630 Sq. mm	
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The Tata Power Company Ltd				TECHNICAL SPECIFICATION OF HT CABLES	
ENSE-DS-2006-R00				Date of Issue: 1/12/2023	

5.2	CONDUCTOR SCREENING	<table border="1"> <tr> <th>Sr. No.</th> <th>Parameter</th> <th>Requirement</th> </tr> <tr> <td>1</td> <td>Material</td> <td>1st layer: Semi-conducting tape 2nd layer: Semi-conducting compound</td> </tr> <tr> <td>2</td> <td>Configuration</td> <td>1st layer: Semi-conducting tape shall be applied over conductor with nominal thickness of 0.2 mm. 2nd layer: Semi-conducting compound screen shall be applied through triple extrusion process.</td> </tr> <tr> <td>3</td> <td>Min. thickness</td> <td>Minimum thickness of semi-conducting compound screen shall be 0.3 mm (for three core cables) & 0.5 mm (for single core cables) at any point of measurement.</td> </tr> <tr> <td>4</td> <td>Resistivity</td> <td>Resistivity of semiconducting conductor screen shall not exceed 1000 Ω-m</td> </tr> <tr> <td>5</td> <td>Uniformity on interfacial region</td> <td>Interfacial region between conductor screen and insulation shall be uniform. Protrusion/ convolution/ other defects are not acceptable in the region.</td> </tr> <tr> <td>6</td> <td>Raw material supplier</td> <td>Semiconducting compound shall be procured from reputed raw material suppliers viz.,Dow/Borealis/Hanwa only.</td> </tr> </table>	Sr. No.	Parameter	Requirement	1	Material	1st layer: Semi-conducting tape 2nd layer: Semi-conducting compound	2	Configuration	1st layer: Semi-conducting tape shall be applied over conductor with nominal thickness of 0.2 mm. 2nd layer: Semi-conducting compound screen shall be applied through triple extrusion process.	3	Min. thickness	Minimum thickness of semi-conducting compound screen shall be 0.3 mm (for three core cables) & 0.5 mm (for single core cables) at any point of measurement.	4	Resistivity	Resistivity of semiconducting conductor screen shall not exceed 1000 Ω -m	5	Uniformity on interfacial region	Interfacial region between conductor screen and insulation shall be uniform. Protrusion/ convolution/ other defects are not acceptable in the region.	6	Raw material supplier	Semiconducting compound shall be procured from reputed raw material suppliers viz.,Dow/Borealis/Hanwa only.
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5.3	INSULATION	<table border="1"> <tr> <th>Sr. No.</th> <th>Parameter</th> <th>Requirement</th> </tr> <tr> <td>1</td> <td>Material and extrusion process</td> <td>XLPE insulation shall be applied through CCV/VCV line by triple extrusion process with 'Dry Curing' and 'Water Cooling'.</td> </tr> <tr> <td>2</td> <td>Raw material supplier</td> <td>a) XLPE compound shall be super cleaned and procured from reputed raw material suppliers viz., Dow/Borealis/Hanwa only. b) Both XLPE and semi conductive compounds shall be used from same raw material supplier.</td> </tr> <tr> <td>3</td> <td>Thickness and Eccentricity</td> <td> <table border="1"> <tr> <th colspan="4">a) Eccentricity of insulation shall not exceed 10%.</th> </tr> <tr> <th>Voltage Grade</th> <th>Cable Type</th> <th>Nominal Thickness mm</th> <th>Minimum Thickness at any point of measurement</th> </tr> <tr> <td>11 kV</td> <td>3C x 300 Sq. mm</td> <td>3.6 mm</td> <td>3.14 mm</td> </tr> </table> </td> </tr> </table>	Sr. No.	Parameter	Requirement	1	Material and extrusion process	XLPE insulation shall be applied through CCV/VCV line by triple extrusion process with 'Dry Curing' and 'Water Cooling'.	2	Raw material supplier	a) XLPE compound shall be super cleaned and procured from reputed raw material suppliers viz., Dow/Borealis/Hanwa only. b) Both XLPE and semi conductive compounds shall be used from same raw material supplier.	3	Thickness and Eccentricity	<table border="1"> <tr> <th colspan="4">a) Eccentricity of insulation shall not exceed 10%.</th> </tr> <tr> <th>Voltage Grade</th> <th>Cable Type</th> <th>Nominal Thickness mm</th> <th>Minimum Thickness at any point of measurement</th> </tr> <tr> <td>11 kV</td> <td>3C x 300 Sq. mm</td> <td>3.6 mm</td> <td>3.14 mm</td> </tr> </table>	a) Eccentricity of insulation shall not exceed 10%.				Voltage Grade	Cable Type	Nominal Thickness mm	Minimum Thickness at any point of measurement	11 kV	3C x 300 Sq. mm	3.6 mm	3.14 mm
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The Tata Power Company Ltd				TECHNICAL SPECIFICATION OF HT CABLES												
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				33 kV	1C x 630 Sq. mm	8.8 mm	7.82 mm									
		4	Thermal stability	The insulation properties shall be stable under thermal conditions arising out of continuous operation at conductor temperature of 90 deg. C rising momentarily to 250 deg. C under short circuit conditions.												
		5	Cleanliness and uniformity	Interfacial region between insulation and insulation screen shall be uniform. Protrusion/convolution/ other defects are not acceptable. Core shall be free from void and contamination.												
		The insulation shall be so applied that it shall be possible to remove it without damaging the conductor.														
		5.4	INSULATION SCREENING	<table><tr><th>Sr. No.</th><th>Parameter</th><th>Requirement</th></tr><tr><td>1</td><td>Material</td><td>1st layer : Semi-conducting compound 2nd layer: Semi-conducting water swellable tape 3rd layer: Annealed copper tape</td></tr><tr><td>2</td><td>Configuration</td><td>1st layer: Non-Metallic Part: This shall be applied directly over the insulation of each core and shall consist of an extruded semi-conducting compound of bonded type. Resistivity shall not exceed 500 Ω-meter. Surface of insulation screen shall be smooth, free from cavity/ nicks/scratches/ other visible defects. Insulation screen shall be strippable type with Min. thickness of 0.7 mm at any point of measurement. The semi-conducting compound shall be suitable for the operating temperature of the cable and compatible with the insulating material.</td></tr></table>						Sr. No.	Parameter	Requirement	1	Material	1st layer : Semi-conducting compound 2nd layer: Semi-conducting water swellable tape 3rd layer: Annealed copper tape	2
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ENSE-DS-2006-R00				Date of Issue: 1/12/2023	
				2nd layer: Water Swellable tape: Semi-conducting water swellable tapes shall be applied over non- metallic screen of individual core. Minimum thickness of water swellable shall be 0.3 mm and minimum overlapping shall be 25% before the copper screening. This tape shall be of semiconducting compound acting as a moisture barrier for the core. 3rd layer: Metallic Part: Annealed copper tape, helically wound over the water swellable tape with minimum 20% overlap. Minimum thickness shall be 0.045 mm at any point of measurement.	
		3	Raw material supplier	Semiconducting compound shall be procured from reputed raw material suppliers viz., Dow/Borealis/Hanwa only	
		4	Diameter of cores	To be specified by bidder	
		5	Weight of water swellable tape(approx.)	To be specified by bidder	
		6	Weight of copper tape/km (approx.)	To be specified by bidder	
5.5	CORE IDENTIFICATION	3 CORE CABLE		1 CORE CABLE	
		Each of the three core identification strips shall be applied longitudinally beneath copper screen. Width of the coloured strip shall be 7-10 mm.		NA	
5.6	LAYING UP OF CORES	In three core cables, the cores shall be laid together with a suitable right hand lay. Where necessary, the interstices shall be filled with non-hygroscopic material.			
5.7	FILLERS				

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	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
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1	Material	Virgin Polypropylene fibers of natural colour	NA																															
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5.8	INNER SHEATH	<table><tr><th>Sr. No.</th><th>Parameter</th><th>3 Core Cable</th><th>1 Core Cable</th></tr><tr><td>1</td><td>Material</td><td>Black coloured Polyvinyl chloride (PVC) type ST-2 compound</td><td></td></tr><tr><td>2</td><td>Configuration</td><td colspan="2">The laid-up cores shall be provided with normal extruded inner sheath. It shall be ensured that the shape is as circular as possible. The inner sheath shall be of polyvinyl chloride (PVC) Compound conforming to the requirements of type ST-2 of IS: 5831-1984 with latest amendments. The inner sheath shall be black in colour. It shall be applied to fit closely on to the laid-up cores and shall be possible to remove easily without causing any damage to the underlying insulated cores and screens.</td></tr><tr><td>3</td><td>Raw material supplier</td><td colspan="2">PVC compound shall be procured from reputed raw material suppliers viz., Shakun, Kalpana, KLJ, DCM ShriRam. PVC compound from cable manufacturer shall be considered only after factory evaluation for the same.</td></tr><tr><td>4</td><td>Min. thickness At any point of measurement</td><td><table><tr><th>Volta ge Grad e</th><th>Type of Cabl e</th><th>Min imu m Thi ckn ess</th></tr><tr><td></td><td></td><td></td></tr></table></td><td><table><tr><th>Volta ge Grad e</th><th>Type of Cable</th><th>Mini mum Thic knes s</th></tr><tr><td></td><td></td><td></td></tr></table></td></tr></table>	Sr. No.	Parameter	3 Core Cable	1 Core Cable	1	Material	Black coloured Polyvinyl chloride (PVC) type ST-2 compound		2	Configuration	The laid-up cores shall be provided with normal extruded inner sheath. It shall be ensured that the shape is as circular as possible. The inner sheath shall be of polyvinyl chloride (PVC) Compound conforming to the requirements of type ST-2 of IS: 5831-1984 with latest amendments. The inner sheath shall be black in colour. It shall be applied to fit closely on to the laid-up cores and shall be possible to remove easily without causing any damage to the underlying insulated cores and screens.		3	Raw material supplier	PVC compound shall be procured from reputed raw material suppliers viz., Shakun, Kalpana, KLJ, DCM ShriRam. PVC compound from cable manufacturer shall be considered only after factory evaluation for the same.		4	Min. thickness At any point of measurement	<table><tr><th>Volta ge Grad e</th><th>Type of Cabl e</th><th>Min imu m Thi ckn ess</th></tr><tr><td></td><td></td><td></td></tr></table>	Volta ge Grad e	Type of Cabl e	Min imu m Thi ckn ess				<table><tr><th>Volta ge Grad e</th><th>Type of Cable</th><th>Mini mum Thic knes s</th></tr><tr><td></td><td></td><td></td></tr></table>	Volta ge Grad e	Type of Cable	Mini mum Thic knes s			
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	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd						TECHNICAL SPECIFICATION OF HT CABLES					
ENSE-DS-2006-R00						Date of Issue: 1/12/2023					
				11 kV	3C x 300 Sq. mm.	0.7	11 kV	1C x 185 Sq. mm.	0.4		
				22 kV	3C x 240 Sq. mm.	0.7	11 kV	1C x 1000 Sq. mm.	0.6		
				33 kV	3C x 400 Sq. mm.	0.7	22 kV	1C x 185 Sq. mm.	0.4		
							33 kV	1C x 630 Sq. mm.	0.6		
5.9	ARMOURING	The armouring shall be applied over the inner sheath in cables. The direction of lay of the armour shall be left hand.									
		Sr. No.	Parameter	Requirement							
						3 Core Cable		1 Core Cable			
		1	Material	Low carbon annealed hot dipped galvanized round steel wires		H4 Grade Aluminium wires					
		2	Compliance to Standard	It shall comply with the requirements of IS 3975 along with latest amendments. Hot dipped galvanizing layer shall be uniform on low carbon annealed steel wires. Zinc coating shall be 290 g/m ² as per IS 4826:1979.		It shall comply with the requirements of IS 8130 along with latest amendments.					

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The Tata Power Company Ltd				TECHNICAL SPECIFICATION OF HT CABLES																														
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		3	Nominal Dimensions	<table><tr><th>Volta ge Grade</th><th>Typ e of Cabl e</th><th>Nomin al Thick ness</th></tr><tr><td>11 kV</td><td>3C x 300 Sq. mm .</td><td>3.15 mm</td></tr><tr><td>22 kV</td><td>3C x 240 Sq. mm .</td><td>4.0 mm</td></tr><tr><td>33 kV</td><td>3C x 400 Sq. mm .</td><td>4.0 mm</td></tr></table>		Volta ge Grade	Typ e of Cabl e	Nomin al Thick ness	11 kV	3C x 300 Sq. mm .	3.15 mm	22 kV	3C x 240 Sq. mm .	4.0 mm	33 kV	3C x 400 Sq. mm .	4.0 mm	<table><tr><th>Volt age Grad e</th><th>Type of Cable</th><th>Nomin al Thick ness</th></tr><tr><td>11 kV</td><td>1C x 185 Sq. mm.</td><td>2.0 mm</td></tr><tr><td>11 kV</td><td>1C x 1000 Sq. mm.</td><td>2.5 mm</td></tr><tr><td>22 kV</td><td>1C x 185 Sq. mm.</td><td>2.0 mm</td></tr><tr><td>33 kV</td><td>1C x 630 Sq. mm.</td><td>2.5 mm</td></tr></table>		Volt age Grad e	Type of Cable	Nomin al Thick ness	11 kV	1C x 185 Sq. mm.	2.0 mm	11 kV	1C x 1000 Sq. mm.	2.5 mm	22 kV	1C x 185 Sq. mm.	2.0 mm	33 kV	1C x 630 Sq. mm.	2.5 mm
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33 kV	1C x 630 Sq. mm.	2.5 mm																																
4	Jointing in the armour wires	Not acceptable in any armour wire.																																
5	Laying of armour	The armour wires shall be applied as closely as practicable. Shall not be less than 90% of total circumference. The gap between any two armour strip/wire shall not be more than the diameter of armour wire																																
6	Binding	The rubberized cotton binding tape shall be applied to bind the armour wires such that it shall not affect the electrical properties of the armour wires and the overall cable.																																
7	Weight of armour	To be furnished by Bidder																																
8	Raw material supplier	Steel armour shall be procured from reputed raw material suppliers viz., TATA Steel, Jindal	Aluminium armour shall be procured from reputed raw material suppliers viz., BALCO/ HINDALCO/																															

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	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd				TECHNICAL SPECIFICATION OF HT CABLES	
ENSE-DS-2006-R00				Date of Issue: 1/12/2023	
				Steel, SAIL only.	NALCO/ Vedanta only.
5.10	OUTER SHEATH				

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	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

5.11	SEALING END CAP	<table><tr><th>Sr. No.</th><th>Parameter</th><th>Requirement</th></tr><tr><td>1</td><td>Material</td><td>Adhesive coated polyolefin heat shrinkable</td></tr><tr><td>2</td><td>Configuration</td><td>Adhesive coated polyolefin heat shrinkable end cap shall be provided at both ends of the cable.</td></tr><tr><td>3</td><td>Additional requirements</td><td>2 nos. additional cable end caps shall be provided with each drum and placed in the drum.</td></tr></table>	Sr. No.	Parameter	Requirement	1	Material	Adhesive coated polyolefin heat shrinkable	2	Configuration	Adhesive coated polyolefin heat shrinkable end cap shall be provided at both ends of the cable.	3	Additional requirements	2 nos. additional cable end caps shall be provided with each drum and placed in the drum.			
		Sr. No.	Parameter	Requirement													
		1	Material	Adhesive coated polyolefin heat shrinkable													
		2	Configuration	Adhesive coated polyolefin heat shrinkable end cap shall be provided at both ends of the cable.													
3	Additional requirements	2 nos. additional cable end caps shall be provided with each drum and placed in the drum.															
5.12	OTHER REQUIREMENTS	Following to be specified by the bidder.															
		Overall diameter of the cable.															
		Weight of overall cable.															
		<table><tr><td></td><td>Continuous current rating of cable when laid</td><td></td></tr><tr><td>a)</td><td>Direct in ground at 35 Deg.C.</td><td>Amps.</td></tr><tr><td>b)</td><td>In Air at 45 Deg.C.</td><td>Amps.</td></tr><tr><td>c)</td><td>In Ducts</td><td>Amps.</td></tr><tr><td></td><td>Max. DC Resistance of Conductor at 20 Deg.C.</td><td>ohm/km</td></tr></table>		Continuous current rating of cable when laid		a)	Direct in ground at 35 Deg.C.	Amps.	b)	In Air at 45 Deg.C.	Amps.	c)	In Ducts	Amps.		Max. DC Resistance of Conductor at 20 Deg.C.	ohm/km
			Continuous current rating of cable when laid														
		a)	Direct in ground at 35 Deg.C.	Amps.													
b)	In Air at 45 Deg.C.	Amps.															
c)	In Ducts	Amps.															
	Max. DC Resistance of Conductor at 20 Deg.C.	ohm/km															
6.0	MARKING	The drum shall carry the following information stenciled on both sides of the drum:															
		a) Reference to the standards b) Manufacturer's name c) Type of Cable d) Voltage Grade e) Number of cores f) Nominal Cross sectional Area of the conductor/Cable size g) Cable Code h) Length of the cable on the drum i) Number of lengths on the drum (If more than one) j) Direction of the rotation of the drum k) Gross mass l) Country of manufacture m) Year and month of manufacture															

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The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

		n) Purchase Order no. o) Drum No. The following details shall be embossed on the outer PVC Jacket of the cable: a) Running meter marking b) "Property of "Tata Power" at every meter. c) "Name of Supplier" at every meter d) "Year of Manufacture" at every meter e) "Voltage grade" at every meter f) "Size of the cable" shall be embossed on the cable in bold letters. g) Font size of 12 (Computer size) shall be used for all markings on single core cables and the embossing shall be done on one side throughout the length of cable for single core cables. h) Font size shall be as per below table for all markings on three core cables and the embossing shall be done on one side throughout the length of cable for three core cables. <table><tr><th>Cable size, rating and code</th><th>Font size</th></tr><tr><td>3C x 300 sq.mm 11 KV(E) A2XCEWY</td><td>10</td></tr><tr><td>3C x 240 sq.mm 22 KV(E) A2XCEWY</td><td>10</td></tr><tr><td>3C x 400 sq.mm 33 KV(E) A2XCEWY</td><td>12</td></tr></table> Voltage levels for all the cables shall be embossed legibly on the outer sheath of the cables.	Cable size, rating and code	Font size	3C x 300 sq.mm 11 KV(E) A2XCEWY	10	3C x 240 sq.mm 22 KV(E) A2XCEWY	10	3C x 400 sq.mm 33 KV(E) A2XCEWY	12
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3C x 240 sq.mm 22 KV(E) A2XCEWY	10									
3C x 400 sq.mm 33 KV(E) A2XCEWY	12									
7.0	TESTS	All routine, acceptance & type tests shall be carried out in accordance with the relevant IS/IEC/International standard. All routine/acceptance tests shall be witnessed by TATA Power's authorized representative. All the components should also be type tested as per the relevant standards. Following tests shall be necessarily conducted on the 11/22/33kV cables in additions to others specified in IS/IEC/International standards. *In case of any conflict on any technical particular in the specification, the stricter requirement mentioned in the relevant standard shall be valid.								

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	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

7.1	TYPE TEST	<table><tr><th rowspan="2">Sr. No.</th><th rowspan="2">Test</th><th colspan="2">Specific Value</th><th colspan="2">Test Method</th></tr><tr><th>Clause No.</th><th>Reference Standard</th><th>Clause No.</th><th>Reference Standard</th></tr><tr><td colspan="6">Tests on Conductor</td></tr><tr><td>1</td><td>Conductor resistance test</td><td>Table 2</td><td>IS 8130</td><td>10</td><td>IS 10810 part 5</td></tr><tr><td>2</td><td>Conductor water penetration test</td><td>IEC 60502/ ICEA T-31-610</td><td>IEC 60502/ ICEA T-31-610</td><td>Annexure F</td><td>IEC 60502/ ICEA T-31-610</td></tr><tr><td colspan="6">Tests on Insulation</td></tr><tr><td>3</td><td>Tensile Strength & Elongation at break (before ageing)</td><td>Table 1 of Clause No.5</td><td>IS 7098 part 2</td><td>8</td><td>IS 10810 part 7</td></tr><tr><td>4</td><td>Ageing in air oven</td><td>Table 1 of Clause No.5</td><td>IS 7098 part 2</td><td>8</td><td>IS 10810 part 11</td></tr><tr><td>5</td><td>Tensile strength & Elongation at break</td><td>Table 1 of Clause No.5</td><td>IS 7098 part 2</td><td>8</td><td>IS 10810 part 7</td></tr><tr><td>6</td><td>Tests for thickness of insulation</td><td>Table 4</td><td>IS 7098 part 2</td><td>8</td><td>IS 10810 part 6</td></tr><tr><td>7</td><td>Eccentricity and Ovality of insulation</td><td>12.4</td><td>IS 7098 part 2</td><td>Annexure A</td><td>IS 7098 part 2</td></tr><tr><td>8</td><td>Hot set test</td><td>Table 1 of Clause No.5</td><td>IS 7098 part 2</td><td>8</td><td>IS 10810 part 30</td></tr><tr><td>9</td><td>Shrinkage test</td><td>Table 1 of Clause No.5</td><td>IS 7098 part 2</td><td>8</td><td>IS 10810 part 12</td></tr><tr><td>10</td><td>Gravimetric test (Water absorption)</td><td>Table 1 of Clause No.5</td><td>IS 7098 part 2</td><td>8</td><td>IS 10810 part 33</td></tr><tr><td>11</td><td>Volume resistivity / Insulation Resistance</td><td>Table 1 of Clause No.5</td><td>IS 7098 part 2</td><td>8</td><td>IS 10810 part 43</td></tr><tr><td colspan="6">Tests on inner Sheath</td></tr><tr><td>12</td><td>PVC thickness</td><td>Table 5</td><td>IS 7098 part 2</td><td>8</td><td>IS 10810 part 6</td></tr></table>	Sr. No.	Test	Specific Value		Test Method		Clause No.	Reference Standard	Clause No.	Reference Standard	Tests on Conductor						1	Conductor resistance test	Table 2	IS 8130	10	IS 10810 part 5	2	Conductor water penetration test	IEC 60502/ ICEA T-31-610	IEC 60502/ ICEA T-31-610	Annexure F	IEC 60502/ ICEA T-31-610	Tests on Insulation						3	Tensile Strength & Elongation at break (before ageing)	Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 7	4	Ageing in air oven	Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 11	5	Tensile strength & Elongation at break	Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 7	6	Tests for thickness of insulation	Table 4	IS 7098 part 2	8	IS 10810 part 6	7	Eccentricity and Ovality of insulation	12.4	IS 7098 part 2	Annexure A	IS 7098 part 2	8	Hot set test	Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 30	9	Shrinkage test	Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 12	10	Gravimetric test (Water absorption)	Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 33	11	Volume resistivity / Insulation Resistance	Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 43	Tests on inner Sheath						12	PVC thickness	Table 5	IS 7098 part 2	8	IS 10810 part 6
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The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

		13	Volume resistivity test of conductor screen	Table 2	IS 7098 part 2	Annexure E	IS 7098 part 2
		14	Volume resistivity test of core screen	Table 2	IS 7098 part 2	Annexure E	IS 7098 part 2
		15	Flammability test for outer sheath	Clause no. 20.8	IS 7098 part 2	8	IS 10810 part 53
		16	Thickness	Table 7	IS 7098 part 2		
		17	Tensile strength and Elongation at break (before ageing)	Table 2	IS 5831	8	IS 10810 part 7
		18	Tensile strength and Elongation at break (after ageing)	Table 2	IS 5831	8	IS 10810 part 7
		19	Variation due to ageing	Table 2	IS 5831	8	IS 10810 part 7
		20	Loss of mass test	Table 2	IS 5831	8	IS 10810 part 10
		21	Shrinkage test	Table 2	IS 5831	8	IS 10810 part 12
		22	Hot deformation test	Table 2	IS 5831	8	IS 10810 part 15
		23	Heat shock test	Table 2	IS 5831	8	IS 10810 part 14
		24	Thermal stability test	Table 2	IS 5831	Appendix B	IS 5831:1984
		25	Flammability test	As per IEC 332 part 1			
		26	Oxygen index	As per ASTM 2863			
		27	Temperature index	ASTM 2863			
		28	Acid gas generation	IEC 60754			
		29	Smoke density	ASTM 2843			

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ENSE-DS-2006-R00		Date of Issue: 1/12/2023

Tests on Armour for 3 Core Cable					
30	Tensile test	8	IS 3975	6	IS 1608
31	Torsion test	8	IS 3975	7	IS 1717
32	Wrapping test	8	IS 3975	5	IS 1755
33	Resistance test	8	IS 3975	8	IS 10810 Part 42
34	Mass of zinc coating	9	IS 3975	6	IS 6745
35	Uniformity of zinc coating	9	IS 3975	4	IS 2633
36	Adhesion test	9	IS 3975	9.3	IS 3975
Tests on Armour for 1 Core Cable					
37	Tensile test	8	IS 8130	6	IS 1608
38	Torsion test	8	IS 8130	7	IS 1717
39	Wrapping test	8	IS 8130	5	IS 1755
40	Resistance test	8	IS 8130	8	IS 10810 Part 42
Tests on Complete Cable					
41	Partial discharge test	20.2	IS 7098 part 2	8	IS 10810 Part 46
42	Thermal ageing test	20.9	IS 7098 part 2	20.9	IS 7098 part 2
43	Bending test	20.3	IS 7098 part 2	20.3	IS 7098 part 2
44	Dielectric power factor test	20.4	IS 7098 part 2	20.4	IS 7098 part 2
45	High voltage test	63 kV for 5 minutes As per Clause no. 20.7.2	IS 7098 part 2	20.7	IS 7098 part 2
46	Heat cycle test	20.5	IS 7098 part 2	20.5	IS 7098 part 2
47	Impulse withstand test	20.6	IS 7098 part 2	20.6	IS 7098 part 2

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ENSE-DS-2006-R00		Date of Issue: 1/12/2023

7.2

ACCEPTANCE TEST

Sr. No.	Test Name	Specific Value		Test Method	
		Clause No.	Reference Standard	Clause No.	Reference Standard
(I) Test on Conductor					
1	Conductor resistance test	Clause No. 5(A.5)	ENG-EHV-1012	10	IS 10810 part 5
2	Test for non-conductivity of water swellable tape/yarn of conductor	Clause No. 5(A.6)	ENG-EHV-1012	Through multimeter	
3	Visual inspection for conductor cleanliness	Clause No. 5(A.7)	ENG-EHV-1012	Check for presence of any Aluminium dust	
4	Conductor water penetration test	ICEA T-31-610			

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd				TECHNICAL SPECIFICATION OF HT CABLES	
ENSE-DS-2006-R00				Date of Issue: 1/12/2023	

7.3	ROUTINE TEST	Routine Tests				
			Clause No.	Reference Standard		
		Conductor resistance test	19.3	IS 7098 part 2		
		Partial discharge	19.3	IS 7098 part 2		
		High voltage test with power frequency	19.3	IS 7098 part 2		
		Resistance test for Aluminium armour	19.3	IS 7098 part 2		

7.4	ADDITIONAL TESTS	Additional tests for Concentricity, Voids, Contamination tests on insulation parameters as performed according to IS 7098 Part 3 to be performed to ensure that the cable should meet the following characteristics:					
		i. Core consistency with hot set/creep less than 100%					
		ii. No voids larger than 75 microns per 16.4 cubic cm					
		iii. No ambers larger than 250 microns per 16.4 cubic cm					
		iv. No contaminants larger than 125 microns and less than 5 between 50-125 microns per cubic 16.4 cubic cm tested.					
		v. Cable insulation concentricity greater than 90% tested					
		vi. No protrusions greater than 75 microns at the conductor shield and 125 microns at the insulation shield					
		vii. Raw material consumption					
		viii. Color coding identification over copper screen (for 3C cable)					
		ix. Sequential marking check					
		x. Cable drum length verification					
		xi. Packaging of cable on cable drum					
		xii. Diameter over outermost sheath of co-extruded cable					
			47	Colour coding identification over copper screen (for 3C cable)	Clause no. 5(D.2)	ENG-EHV-1012	To be checked by inspector
			48	Sequential marking check	Clause no. 6.ii	ENG-EHV-1012	To be checked by inspector

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd				TECHNICAL SPECIFICATION OF HT CABLES			
ENSE-DS-2006-R00				Date of Issue: 1/12/2023			
		49	Cable drum length verification	Clause no. 6	ENG-EHV-1012	To be checked by inspector	
		50	Packaging of cable on cable drum	By recyclable PVC sheet- As per Clause no.12	ENG-EHV-1012	To be checked by inspector	
		51	Weight of conductor/km	Clause No. 5(A.11)	ENG-EHV-1012	Value to be noted by inspector	
		52	Diameter of conductor	Clause No. 5(A.10)	ENG-EHV-1012	Value to be noted by inspector	
		53	Weight of XLPE insulation plus semiconducting screen (of conductor & insulation)/ km	Value to be noted by inspector			
		54	Diameter over core	Clause no. 5(D.4)	ENG-EHV-1012	Value to be noted by inspector	
		55	Weight of core	Clause no. 5(D.5)	ENG-EHV-1012	Value to be noted by inspector	
		56	Weight of copper tape/km	Clause No. 5(D.6)	ENG-EHV-1012	Value to be noted by inspector	
		57	Diameter over inner sheath	Value to be noted by inspector			
		58	Weight of armour/ km	Clause No. 5(G.6)	ENG-EHV-1012	Value to be noted by inspector	
59	Cable sealing end caps	Clause No. I	ENG-EHV-1012	Provision to be checked by inspector			
Rev No.	Prepared By & Date		Checked By & Date		Approved for Issue By & Date		
R00	Yash M. Mane 		Ajay V. Potdar 		Ravindra M. Bhanage		
	1/12/2023		1/12/2023		1/12/2023		

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

		60	Weight of outer sheath/ km	Clause 5(H.7)	No.	ENG-EHV-1012	Value to be noted by inspector
		61	Diameter of complete cable	Clause 5(J.1)	No.	ENG-EHV-1012	Value to be noted by inspector
8.0	TYPE TEST CERTIFICATES	Requirement: The Bidder shall furnish the type test certificates of the 11/22/33 kV cable for the tests as mentioned in Clause no.7 of this specification and as per the corresponding standards. All the type tests shall be conducted at certified test laboratories like CPRI / ERDA / KEMA Accredited Lab as per the relevant standards. Type test report shall be submitted for the type, size and rating of the cable mentioned in the bid/ OR for any size higher (than required) of similar type and similar voltage grade. Type test should have been conducted in certified Test Laboratories during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports i.e., any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to Tata Power-Mumbai. Additional certification should be provided stating that: The cable produced is expected to meet long duration performance criteria based on quality and consistency of manufacturing. In the event of any discrepancy in the test reports i.e. any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TATA POWER. In case the type test certificates are dated beyond 5 years and up to 10 years maintaining basic component design same then deviation should be submitted on vendor letter head.					

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd			TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00			Date of Issue: 1/12/2023
		TATA POWER will have the rights to accept/reject the same	
9.0	PRE-DESPATCH INSPECTION	The Material shall be subject to inspection by a duly authorized representative of the Tata Power. Inspection may be made at any stage of manufacture at the discretion of Tata Power-Mumbai and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to rejection. Bidder shall grant free access to the places of manufacture to Tata Power-Mumbai's representatives at all times when the work is in progress. Inspection by Tata Power-Mumbai or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. The inspection of cable during manufacturing will be done especially while copper tape screening and forming of laid up cores for new vendors. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by Tata Power-Mumbai. Following documents shall be sent along with material a) Test reports b) MDCC issued by Tata Power-Mumbai c) Invoice in duplicate d) Packing list e) Drawings & catalogue f) Guarantee / Warrantee card g) Delivery Challan h) Other Documents (as applicable).	
10.	INSPECTION AFTER RECEIPT AT STORES	The material received at Tata Power-Mumbai store shall be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Contracts & Engineering department. The material received at TPC, Mumbai store shall be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection or any other parameters observed after delivery. The material should be delivered at TPC, Mumbai stores within 45 days from the date of manufacturing, same shall be checked during delivery and overdue material shall not be accepted. Bidders to plan the delivery accordingly. Bidders to attend and rectify the same at his own cost. The material shall be accepted in stores only after rectification of any observed flaw.	

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd			TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00			Date of Issue: 1/12/2023
		Billing shall be processed only after acceptance of the material.	
11.0	GUARANTEE	Bidder shall stand guarantee towards design, materials, workmanship & quality of process / manufacturing of items under this contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by TATA Power-Company Limited, up to a period of at least 60 months from the date of commissioning or 72 months from the date of last supplies made under the contract whichever is later, (the time scale of 60/72 months could be enhanced subject to mutual agreements). Bidder shall be liable to undertake to replace/rectify such defects at its own costs, within mutually agreed time frame, and to the entire satisfaction of TATA Power-Company Limited, failing which TATA Power-Company Limited will be at liberty to get it replaced/rectified at Bidder's risks and costs and recover all such expenses plus the TATA Power-Company Limited's own charges (@ 20% of expenses incurred), from the Bidder or from the "Security cum Performance Deposit" as the case may be. Free replacement: Bidder shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by TATA Power-Company Limited.	
12.0	PACKING AND TRANSPORT	a)Standard length of Cable: The cable shall be supplied in continuous standard length of 250 mtrs (3 cores) & 500 mtrs (Single core) running meters with +/- 5% tolerance. b) Filling condition: Drum shall not be overfilled. c) Cable drum: The cable shall be wound on non-returnable steel drums without any extra cost d) Sealing of cable ends: The ends of the cable shall be sealed by means of heat shrinkable polyolefin end caps. Additional 2 nos. end caps shall be provided with each drum. e) Requirements for Cable drums: Cable drums shall be so constructed as to have required mechanical strength so that the drum flanges and other components do not break during transport, in actual use or in storage. The flanges and the outside surface of the barrel shall be free from protruding materials/projections/ unevenness/ sharp edges that can damage the cable or hands of the operator during rotation of drums. f) Bottom end of cable should be clamped on drum by jute or nylon rope. g) All ferrous metal parts used shall be treated with a suitable rust-free finish or coating to avoid rusting during transit or storage. The drums shall withstand normal handling and transport. h) Rail/ Road transportation: The bidder shall ensure that the equipment covered under this specification shall be prepared for rail/road transport in a manner so as to protect the equipment from damage in transit. i) Packaging shall be as per climate change perspective. Cable wound on cable drum shall be covered by recyclable PVC sheet for dust proof.	
13.0	TENDER SAMPLE	Sample of Material not required	

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd			TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00			Date of Issue: 1/12/2023
14.0	QUALITY CONTROL	The bidder shall submit with the offer Quality assurance plan indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. Tata Power-Mumbai reserves the sole rights for the type test of random sample from the lot and in case of any discrepancy or deviation from the Type test certificates submitted along with the bid, the complete Lot shall be rejected. Tata Power-Mumbai's engineer or its nominated representative shall have free access to the bidder's works to carry out inspections.	
15.0	MINIMUM TESTING FACILITIES	Bidder shall have adequate in-house testing facilities for carrying out all routine and acceptance tests as per relevant International / Indian standards.	
16.0	MANUFACTURING ACTIVITIES	The successful bidder will have to submit GTP & Drawing with 15 days from placement of order/OLA for approval. The date of Code -2/ Code-1 approval given by TATA Power will be treated as first day for assessment of LD (if applicable).	
17.0	SPARES, ACCESSORIES AND TOOLS	Not Applicable	
18.0	DRAWINGS AND DOCUMENTS	Following documents shall be prepared based on the specifications and statutory requirements with complete BOM and shall be submitted with the bid: a) Filled-in Technical Parameters b) General description of the equipment and all components including brochures c) Type test Certificates d) Experience List. e) Cross sectional drawing of the cable with each layer-wise dimensions. f) Rating factors for variation in ground and air temperature, depth of laying, thermal resistivity of soil and different laying configuration of cables. g) A detailed list of bought out items which got into the manufacture of cables should be furnished indicating the name of the firms from whom these items are procured. All the Documents and Drawings shall be in English Language.	

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd			TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00			Date of Issue: 1/12/2023

19	SCHEDULE "A" GUARANTEED TECHNICAL PARTICULARS:	Bidder to submit clause wise compliance.						
20.0	SCHEDULE "B" DEVIATIONS	<u>(TO BE ENCLOSED WITH TECHNICAL BID)</u> All deviations from this specification shall be set out by the Bidders, clause by Clause in this schedule. Unless specifically mentioned in this Schedule, the tender shall be deemed to confirm the purchaser's specifications. <table border="1"> <thead> <tr> <th>S.No.</th> <th>Clause No.</th> <th>Details of deviation with justifications</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> We confirm that there are no deviations apart from those detailed above. Seal of the Company Designation Signature	S.No.	Clause No.	Details of deviation with justifications			
S.No.	Clause No.	Details of deviation with justifications						

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

ANNEXURE – 1
INSPECTION TEST PLAN

S.No.	Test name	Specific value		Test method	
		Clause No.	Reference Standard	Clause No.	Reference Standard
(I) Test on Conductor					
1	Conductor resistance test	Clause No. 5.1	ENSE-DS-2006	10	IS 10810 part 5
2	Test for non-conductivity of water swellable tape/yarn of conductor	Clause No. 5.1	ENSE-DS-2006	Through multimeter	
3	Visual inspection for conductor cleanliness	Clause No. 5.1	ENSE-DS-2006	Check for presence of any Aluminium dust	
4	Conductor water penetration test	ICEA T-31-610			
(II) Test on Conductor Screen					
5	Thickness of semi-conducting tape over conductor	Clause No. 5.2	ENSE-DS-2006	Value to be noted by inspector	
6	Test for conductivity of semi-conducting tape over conductor	Clause No. 5.2	ENSE-DS-2006	Through multimeter	
7	Resistivity of extruded semi-conducting conductor screen	Clause No. 5.2	ENSE-DS-2006	Annexure E	IS 7098 part 2
8	Thickness of extruded semi-conducting conductor screen	Clause No. 5.2	ENSE-DS-2006	Value to be noted by inspector	
(III) Test on Insulation					
9	Tensile strength & Elongation at break (before ageing)	Clause No.5.3	IS 7098 part 2	8	IS 10810 part 7
10	Insulation thickness	Clause No. 5.3	ENSE-DS-2006	8	IS 10810 part 6
11	Eccentricity and Ovality of insulation	Clause No. 5.3	ENSE-DS-2006	Annexure A	IS 7098 part 2
12	Hot set test	Clause No.5.3	IS 7098 part 2	8	IS 10810 part 30
13	Volume resistivity	Clause No.5.3	IS 7098 part 2	8	IS 10810 part 43
14	Void & contamination test on core (by silicon dip method)	Clause No. 5.3	ENSE-DS-2006	20.1	IS 7098 part 3
15	Surface smoothness of insulation	Clause No. 5.3	ENSE-DS-2006	To be checked by inspector	
(IV) Test on Insulation Screen					

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

16	Resistivity of insulation screen	Clause No. 5.4	ENSE-DS-2006	Annexure E	IS 7098 part 2
17	Thickness of insulation screen	Clause No. 5.4	ENSE-DS-2006	Value to be noted by inspector	
18	Visual inspection for any convolution/ protrusion between conductor screen and XLPE insulation, XLPE insulation and insulation screen	Clause no. 5.4	ENSE-DS-2006	To be checked by inspector	
19	Thickness & % Overlapping of semi- conducting water swellable tape	Clause no. 5.4	ENSE-DS-2006	Value to be noted by inspector	
20	Thickness & % Overlapping of copper tape	Clause No. 5.4	ENSE-DS-2006	Value to be noted by inspector	

(V) Test on Inner sheath					
21	PVC thickness	Clause No. 5.8	ENSE-DS-2006	8	IS 10810 part 6
22	Colour of inner sheath	Clause No. 5.8	ENSE-DS-2006	To be checked by inspector	
(VI) Test on Armour					
For 3 core cable					
23	Tensile test	8	IS 3975	IS 1608	
24	Mass of zinc coating	Table 1	IS 4826	IS 6745	
25	Uniformity of zinc coating	9	IS 3975	IS 2633	
26	Adhesion test	9	IS 3975	IS 3975	
27	Diameter and no. of wires	Clause No. 5.9	ENSE-DS-2006	Value to be noted by inspector	
28	Coverage %	Clause No. 5.9	ENSE-DS-2006	Value to be noted by inspector	
For 1 core cable					
29	Tensile test	8	IS 8130	6	IS 1608
30	Wrapping test	8	IS 8130	5	IS 1755
31	Resistance test	8	IS 8130	8	IS 10810 Part 42
32	Diameter and no. of wires	Clause No. 5.9	ENSE-DS-2006	Value to be noted by inspector	
33	Coverage %	Clause No. 5.9	ENSE-DS-2006	Value to be noted by inspector	
(VII) Test on Outer Sheath					
PVC Outer Sheath for normal cable					

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

34	Thickness	Clause No. 5.10	ENSE-DS-2006	Value to be noted by inspector	
35	Tensile strength and Elongation at break (before ageing)	Table 2	IS 5831	8	IS 10810 part 7
36	Colour of outer sheath	Clause No. 5.10	ENSE-DS-2006	To be checked by inspector	
37	Surface uniformity of outer sheath (on full drum)/ shall be free from any damage- void, nick, cavity.	Clause No. 5.10	ENSE-DS-2006	Through rewinding of drum (As per TATA POWER-DDL specification)	
38	Presence of lead naphthenate in PVC outer sheath	Chemical test Clause no. 5.10	ENSE-DS-2006	To be checked by inspector	
39	Flammability test	As per IEC 332 part 1			
40	Oxygen index	As per ASTM 2863			
41	Temperature index	ASTM 2863			
42	Acid gas generation	IEC 60754			
43	Smoke density	ASTM 2843			

(VIII) Tests for complete cable					
44	Partial discharge test	5 pC	As per type test	8	IS 10810 part 46
45	High voltage test	21 kV for 5 minutes As per Clause no. 20.7.2	IS 7098 part 2	8	IS 10810 part 45

(IX) Additional tests					
46	Raw material consumption	Document verification as proof to be submitted			
		Invoice to be shown from procurement to consumption			
47	Colour coding identification over copper screen (for 3C cable)	Clause no. 5.12	ENSE-DS-2006	To be checked by inspector	
48	Sequential marking check	Clause no. 6	ENSE-DS-2006	To be checked by inspector	
49	Cable drum length verification	Clause no. 6	ENSE-DS-2006	To be checked by inspector	
50	Packaging of cable on cable drum	By recyclable PVC sheet- As per Clause no.12	ENSE-DS-2006	To be checked by inspector	

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

5 1		Diameter over outermost sheath cable	Clause No. 5.12		ENSE-DS-2006		Value to be noted by inspector	
S.No.		Test name		Specific value		Test method		
			Clau se No.	Referenc e Standar d	Clau se No.	Referenc e Standar d		
(I) Test on Conductor								
1	Conductor resistance test		Clause No. 5.1	ENSE-DS-2006	10	IS 10810 part 5		
2	Test for non-conductivity of water swellable tape/yarn of conductor		Clause No. 5.1	ENSE-DS-2006	Through multimeter			
3	Visual inspection for conductor cleanliness		Clause No. 5.1	ENSE-DS-2006	Check for presence of any Aluminium dust			
4	Conductor water penetration test		ICEA T-31-610					
(II) Test on Conductor Screen								
5	Thickness of semi-conducting tape over conductor		Claus e No. 5.2	ENSE-DS-2006	Value to be noted by inspector			
6	Test for conductivity of semi-conducting tape over conductor		Clau se No. 5.2	ENSE-DS-2006	Through multimeter			
7	Resistivity of extruded semi-conducting conductor screen		Clau se No. 5.2	ENSE-DS-2006	Anne xu re E	IS 7098 part 2		
8	Thickness of extruded semi-conducting conductor screen		Clau se No. 5.2	ENSE-DS-2006	Value to be noted by inspector			
(III) Test on Insulation								
9	Tensile strength & Elongation at break (before ageing)		Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 7		

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

10	Insulation thickness	Clause No. 5.3	ENSE-DS-2006	8	IS 10810 part 6
11	Eccentricity and Ovality of insulation	Clause No. 5.3	ENSE-DS-2006	Annexure A	IS 7098 part 2
12	Hot set test	Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 30
13	Volume resistivity	Table 1 of Clause No.5	IS 7098 part 2	8	IS 10810 part 43
14	Void & contamination test on core (by silicon dip method)	Clause No. 5.3	ENSE-DS-2006	20.1	IS 7098 part 3
15	Surface smoothness of insulation	Clause No. 5.3	ENSE-DS-2006	To be checked by inspector	
(IV) Test on Insulation Screen					
16	Resistivity of insulation screen	Clause No. 5.4	ENSE-DS-2006	Annexure E	IS 7098 part 2
17	Thickness of insulation screen	Clause No. 5.4	ENSE-DS-2006	Value to be noted by inspector	
18	Visual inspection for any convolution/ protrusion between conductor screen and XLPE insulation, XLPE insulation and insulation screen	Clause no. 5.4	ENSE-DS-2006	To be checked by inspector	
19	Thickness & % Overlapping of semi-conducting water swellable tape	Clause no. 5.4	ENSE-DS-2006	Value to be noted by inspector	
20	Thickness & % Overlapping of copper tape	Clause No. 5.4	ENSE-DS-2006	Value to be noted by inspector	
(V) Test on Inner sheath					
21	PVC thickness	Clause No. 5.8	ENSE-DS-2006	8	IS 10810 part 6

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

The Tata Power Company Ltd		TECHNICAL SPECIFICATION OF HT CABLES
ENSE-DS-2006-R00		Date of Issue: 1/12/2023

22	Colour of inner sheath	Clause No. 5.8	ENSE-DS-2006	To be checked by inspector
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(VI) Test on Armour

For 3 core cable

23	Tensile test	8	IS 3975	IS 1608
24	Mass of zinc coating	Table 1	IS 4826	IS 6745
25	Uniformity of zinc coating	9	IS 3975	IS 2633
26	Adhesion test	9	IS 3975	IS 3975
27	Diameter and no. of wires	Clause No. 5.9	ENSE-DS-2006	Value to be noted by inspector
28	Coverage %	Clause No. 5.9	ENSE-DS-2006	Value to be noted by inspector

For 1 core cable

29	Tensile test	8	IS 8130	6	IS 1608
30	Wrapping test	8	IS 8130	5	IS 1755
31	Resistance test	8	IS 8130	8	IS 10810 Part 42
32	Diameter and no. of wires	Clause No. 5.9	ENSE-DS-2006	Value to be noted by inspector	
33	Coverage %	Clause No. 5.9	ENSE-DS-2006	Value to be noted by inspector	

(VII) Test on Outer Sheath

PVC Outer Sheath for normal cable

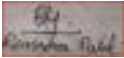
34	Thickness	Clause No. 5.10	ENSE-DS-2006	Value to be noted by inspector	
35	Tensile strength and Elongation at break (before ageing)	Table 2	IS 5831	8	IS 10810 part 7
36	Colour of outer sheath	Clause No. 5.10)	ENSE-DS-2006	To be checked by inspector	
37	Surface uniformity of outer sheath (on full drum)/ shall be free from any damage-void, nick, cavity.	Clause No. 5.10	ENSE-DS-2006	Through rewinding of drum (As per TATA POWER-DDL specification)	

Rev No.	Prepared By & Date	Checked By & Date	Approved for Issue By & Date
R00	Yash M. Mane 	Ajay V. Potdar 	Ravindra M. Bhanage
	1/12/2023	1/12/2023	1/12/2023

		The Tata Power Company Limited Corporate Engineering-Quality Assurance Inspection & Testing			
TPQAIT-QAXX-00-EX-SQP-138 REV.1		STANDARD QUALITY PLAN FOR MEDIUM VOLTAGE CABLES (3.3 kV to 33 kV)		Date of Issue: 29.06.2023	
Sr. No.	COMPONENT / OPERATION	CHARACTERISTICS CHECKED		TYPE / METHOD OF CHECK	Remarks
1	2	3		4	7
1	MATERIAL:	(All material shall be as per approved drawing/ data sheet/ Specifications)			
1.1	XLPE/TR-XLPE Compound		Relevant Standards & Specifications	Review of co-related MTC.	Additional sample testing by cable manufacturer. In case TR-XLPE is used as insulation, quality/ grade certificate to be furnished.
1.2	Copper Conductor / Aluminium Conductor (as applicable)		Diameter, Resistivity, Purity/ Chemical Composition, Tensile strength, Surface finish	Review of co-related MTC.	
1.3	Outer Sheath (PVC/ HDPE), Inner Sheath, Semiconducting Compound, Cu / Al Armour, Water Swellable tapes, Galvanized Steel Wire / tape, Binding tape		Relevant Standards & Specifications	Review of co-related MTC.	
2	INPROCESS INSPECTION: (Generally in line with manufacturer standard)				
3	FINAL INSPECTION - (IS 7098 Part-2)				
3.1	Routine Tests	1	Conductor Resistance	Testing and Measurement	100%
		2	Partial Discharge		
		3	High Voltage Test		
		4	Electrical test on outer sheath		
		5	Capacitance measurement		
3.2	Acceptance tests	1	Thickness of Insulation (eccentricity), Inner and Outer Sheath & colour code, Armour Size, Cable Construction, Conductor Dia, No. of Strands, & Overall dia.	Testing and Measurement as per relevant IS and IS 7098 Part-2 on sample selected by Tata Power.	
		2	Annealing test (for Copper)*		
		3	Tensile Test (for Aluminium) *		
		4	Wrapping Test (for Aluminium) *		
		5	Tensile Strength and Elongation at Break for Insulation, Inner and Outer sheath (Before and after ageing)		
		6	Insulation Resistance (Volume Resistivity) at Room Temperature and Elevated Temperature		
		7	Eccentricity of insulation		
		8	Conductor Resistance		
		9	High Voltage Test for 4 hr at 4Uo		
		10	Partial Discharge at 1.73Uo (Full Drum Length)		
		11	Hot Set Test		

		The Tata Power Company Limited Corporate Engineering-Quality Assurance Inspection & Testing			
TPQAIT-QAXX-00-EX-SQP-138 REV.1		STANDARD QUALITY PLAN FOR MEDIUM VOLTAGE CABLES (3.3 kV to 33 kV)		Date of Issue: 29.06.2023	
Sr. No.	COMPONENT / OPERATION	CHARACTERISTICS CHECKED		TYPE / METHOD OF CHECK	Remarks
1	2	3		4	7
	Acceptance tests	12	Galvanizing Tests on armour		
		13	Rewinding of Drums to check for Length, Surface Defects, Finishing, Undulation, Joints, Embossing, Printing, (Min.Two Drums from offered lot)		
			14		
		15	Ovality of the core		
		16	Additional Tests on insulation:		
		i)	Void & contamination test	One Sample as per relevant standard/ specification	
		ii)	Concentricity of Insulation		
		iii)	Shrinkage test (checking conductor protrusion) & insulation screen.		
3.3	FRLS Tests (One Sample from offered lot for FRLS cables) as applicable	1	Oxygen Index	ASTM-D-2863/ NES-715	CHP
		2	Temperature Index	ASTM-D-2863	
		3	Smoke Density Rating	ASTM D-2843	
		4	Acid Gas Generation	IEC 60754-1	
		5	Flammability Test	IS 10810-53, 61 & 62 (Category-A)	
	Type tests	1	Test on Conductor	IS 7098 part 2	Valid & Approved Type Test Report Review during final inspection. (Not older than 5 years)
		a	Wrapping Test (for Aluminium) *	IS 8130	
		b	Tensile test on AL as applicable	IS 8130	
		c	Annealing test (for Copper)*	IS 8130	
		d	Resistance test	IS 8130	
		e	Test on Armour (Wire/ strip)	Clause 7, Table- 6 (IS 7098-2), IS 3975	
		2	Physical Tests on Insulation	IS 7098 part 2	
		a	Ageing in Air Oven	IS 10810 - 11	
		b	Degree of cross linking	IS 7098 part 2	
		c	Shrinkage Test	IS 10810 - 12	
		d	Water Absorption Test (Gravimetric)	IS 10810 - 33	
		3	Test on extruded semi-conducting screens	IS 7098 part 2	
		a	Test for strippability of semiconducting strippable insulation screen (when applicable)	Table 2 and Annex B of IS 8097-2	
		b	Volume Resistivity	Table 2 and Annex E of IS 8097-2	
		4	Physical Tests on Outer Sheath	IS 7098 part 2	
		a	Ageing in Air Oven	IS 10810 - 11	
		b	Shrinkage Test	IS 10810 - 12	
		c	Hot deformation	IS 10810 - 15	
		d	Loss of mass in air oven	IS 10810 - 10	
		e	Heat Shock	IS 10810 - 14	
		f	Thermal Stability	IS 10810 - 60	
		3.4		g	

		The Tata Power Company Limited Corporate Engineering-Quality Assurance Inspection & Testing			
TPQAIT-QAXX-00-EX-SQP-138 REV.1		STANDARD QUALITY PLAN FOR MEDIUM VOLTAGE CABLES (3.3 kV to 33 kV)			Date of Issue: 29.06.2023
Sr. No.	COMPONENT / OPERATION	CHARACTERISTICS CHECKED		TYPE / METHOD OF CHECK	Remarks
1	2	3		4	7
	Type tests	h	Carbon black content of polythene sheath	IS 10810-32	
		5	Test for thickness of insulation and sheath	IS 10810-6	
		6	Partial discharge test on full drum	IS 10810-46	
		7	IR volume resistivity test	IS 10810-14	
		8	High voltage test	IS 10810-60	
		9	Flammability Test (in case of FRLSH only)	IS 10810-53	
		a	Oxygen Index	IS 10810-58	
		b	Temperature Index	IS 10810-64	
		c	Test for halogen acid gas emission	IS 10810-59	
		d	Flame retardent test on single cable	IS 10810-61	
		e	Flame retardent test on bunch cable	IS 10810-62	
		f	Smoke Density Rating	IS 7098 part 2	
		10	Thermal ageing test for complete cable	IS 10810 - 19.9	
		11	Bending Test	IS 10810 - 50	
		12	Dielectric Power Factor Test as a function of voltage & temperature	IS 10810 - 48	
13	Heating Cycle Test of complete cable	IS 10810 - 49			
14	Impulse withstand test	IS 10810 - 47			
3.5	TR XLPE Type Test	1	Type Test as indicated in contract technical specifications	Technical Specifications	
3.6	Optional Tests (If applicable as per contract technical specifications)	1	Resistance to Ultra Violet Radiation on outer sheath	The retention values of TS and ultimate elongation after the tests shall be minimum 60% of TS and ultimate elongation before test. (DIN 53387 or ASTM-G-154)	Test Certificates (not older than one year) from recognised testing laboratory to be furnished for review for similar design mix. In case test certificates are not available, test is to be conducted on randomly selected one sample by Tata Power, in approved lab before acceptance of cable.
		2	Accelerated water absorption test on PVC Insulation	NEMA-WC-70	
		3	Water Absorption on outer sheath	IS-10810 Part 33, Type-B compound as per IS-5831	Water Absorption value shall not exceed 10 mg/sq.cm
4.0	Document review & Issuance of IRN	Review of Quality dossier (*) & Inspection report		Review	(*) along with index.

		The Tata Power Company Limited Corporate Engineering-Quality Assurance Inspection & Testing			
TPQAIT-QAXX-00-EX-SQP-138 REV.1		STANDARD QUALITY PLAN FOR MEDIUM VOLTAGE CABLES (3.3 kV to 33 kV)		Date of Issue: 29.06.2023	
Sr. No.	COMPONENT / OPERATION	CHARACTERISTICS CHECKED	TYPE / METHOD OF CHECK	Remarks	
1	2	3	4	7	
N O T E	A) STATUTORY REQUIREMENTS WILL BE COMPLIED BY THE CONTRACTOR. B) ALL MATERIAL SHALL BE AS PER APPROVED DRAWINGS / DATA SHEET. C) TATA POWER / ITS REP IDENTIFICATION STAMP ON MATERIALS WILL BE PRESERVED, IF REQD, SAME SHALL BE TRANSFERRED BY TATA POWER / ITS REP ONLY. 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 INCLUDING ADDITIONAL TESTING REQUIREMENTS AS PER CONTRACT SPECIFICATION. F) INSPECTION OF SPARES SHALL BE MANUFACTURED & INSPECTED AS PER APPLICABLE CLAUSES OF THIS QUALITY PLAN. SPARES OFFERED FOR INSPECTION SHALL BE PREFERRED ALONG WITH MAIN ITEMS (IF ORDERD). G) CALIBRATION CERTIFICATES OF THE EQUIPMENT USED FOR TESTING SHALL BE PROVIDED FOR REVIEW. H) AS PER SEPCIFICATION PROPER PAINTING & PACKING SHALL BE ENSURED BY VENDOR BEFORE SHIPMENT TO AVOID ANY TRANSIT DAMAGE. I) TATA POWER RESERVES THE RIGHT TO DEMAND / VERIFY/ AUDIT/ WITNESS ANY OF THE CHECK POINTS MENTIONED IN THE SCOPE OF SUPPLIER. J) JOINTING IN THE CONDUCTOR DURING MANUFACTURING OF CABLES IS NOT PERMITTED.				
	* As applicable as per IS 8130.				
	Confidential and Proprietary -- The Tata Power Company Limited				
			NG/ RP 	SR	GJ
	B	Review of standard quality plan			
A	First issue	RG	CRB	SS	
Rev. No	Reason for Revision	Prepared By & Date	Checked By & Date	Approved By & Date	

TATA POWER

GENERAL REQUIREMENTS OF QUALITY ASSURANCE & INSPECTION

(For Supply Contract only)

[SHALL BE A PART OF GENERAL TECHNICAL CONDITION]

Document No.: TPQA&I-QAXX-00-EX-PRC-312 REV 0



Rev 00 Dated 14/09/2017	RGSRD <i>as</i>	CRB <i>CRB/Smiley</i> <i>18/09/17</i>	SS <i>Smiley</i>
Revision no. & Date	Prepared By	Reviewed By	Approved by <i>18/09/17</i>

TABLE OF CONTENTS

	Page No
1.0 PURPOSE	03
2.0 SCOPE	03
3.0 DEFINITION	03 - 04
4.0 QUALITY ASSURANCE PROGRAM	05
5.0 SUPPLIER QUALITY MANAGEMENT SYSTEM	05 - 08
6.0 INSPECTION CATEGORISATION PLAN, WELDING & NDT REQUIREMENTS	08 - 09
7.0 INSPECTION AT SHOP	09 - 11
8.0 QUALITY DOSSIER	12
9.0 ATTACHMENTS	12



1.0 PURPOSE

Purpose of this document is to provide uniform general Quality requirements & guidelines to be implemented by the Supplier/Contractor. This is to maintain the OWNER's Quality Management System (QMS) for the specific supply contract.

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 & inspection 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 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.

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. 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)**
Any third party organization or 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 basis.
- **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)**
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.
- **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.
- **Hold Point/ Customer hold point (CHP)**
A check point for an activity mentioned in approved MQP, 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, 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 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)**

It is a report on deviation/ non-compliance with respect to the requirements laid down in the PO/ Technical Specification, MQP, Codes & standards.

4.0 QUALITY ASSURANCE PROGRAMME

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. Such program shall be outlined by the Bidder/ Supplier/ contractor to ensure that the equipment and services under the scope of contract whether manufactured/ 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. Any deviation with respect to all above requirements (as specified in SQP, 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 material, 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 Program. 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 shall be drawn up by the Bidder/ Supplier/ Contractor separately 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**.
- 5.4 In these approved manufacturing 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.

- 5.5 All the critical & major items shall be procured from the sub-vendors approved by OWNER. A tentative/ preferred list of sub-vendors for some of the items are indicated in Technical Specification. Based on which Bidder/ Supplier/ Contractor shall propose a list of sub vendors for bought out items for approval from OWNER. 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 Majeure 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 department 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 years for similar product.
- ix. Performance certificates issued by other customers.
- x. Valid Type Test Reports (not older than 5 years).
- xi. Certification of/ by reputed agencies (ISO/ ASME/ CE/ UL/API/ etc.) & also approval certificates from other customers etc.
- xii. Quality Manual.
- xiii. Assessment report by contractor/ supplier and their own experience.

5.6 **Non Conformance Report (NCR)**

Wherever the non-conformity is found during inspection either by Supplier or OWNER or its representatives, NCR shall be issued in prescribed format. Manufacturer /Supplier shall indicate the Correction / CAPA and submit these NCRs 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 format.

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

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 in this regard to the Supplier/ Contractor. Such NCR shall be dealt as above.

- 5.7 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 supplier's risk & cost only. No IRN/ dispatch clearance shall be issued for the same as post facto.
- 5.8 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.
- 5.9 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.
- 5.10 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.
- 5.11 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.
- 5.12 **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.
- 5.13 **Failure to Pass Tests**
If any item/ equipment fails 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.

- 5.14 Major repair/rectification procedures to be adopted to make the job acceptable shall be subject to the approval of the OWNER/ its authorized representative.
- 5.15 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.
- 5.16 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.
- 5.17 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.
- 5.18 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) (for package supply PO)

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.

ICP, MQP-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

- 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.
- 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 1st 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 Working Days
- ii. Overseas (Outside India) Inspection : 30 Working 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 along with inspection request.

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 calls 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 department) 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

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 ATTACHMENT

1. Exhibit A – MQP Format
2. Exhibit B – Shop Inspection Request Format
3. Exhibit C – ICP Format
4. Exhibit D – IRN Format
5. Exhibit E – NCR Format

Exhibit - A

Supplier Logo	THE TATA POWER COMPANY LIMITED	 TATA TATA POWER Document No Page 1 of 1
Supplier Document No	PROJECT NAME Supplier Name & Address	

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

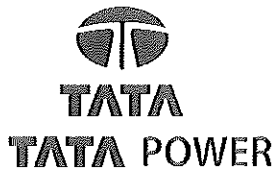


Supplier Logo	Manufacturing Quality Plan for	Document No. (As given by PDM, Tata Power)
Supplier Document No	Manufacturer Name & Address	Date & Revision
	PACKAGE NAME	Page .. of

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
- Statutory requirements will be complied by the contractor/ Supplier.
 - Material samples drawn for check testing will be witnessed by TATA POWER or its representative.
 - For stage inspections, copies of relevant documents will be furnished to TATA POWER for review.
 - The extent of check for manufacturer shall be 100%.
 - Column 6 will be as per TATA POWER approved drawings / data sheets / contract documents wherever applicable.
 - 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



Corporate Engineering – QA&I

Factory Inspection Request Format

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

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.	THE TATA POWER COMPANY LIMITED	 TATA TATA POWER Document No Page 1 of 1
	PROJECT NAME	
	Supplier Name & Address	
	ICP - PACKAGE NAME	

Document Title: INSPECTION CATEGORIZATION 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.	THE TATA POWER COMPANY LIMITED PROJECT NAME	 TATA TATA POWER Document No Page 1 of 1
	Supplier Name & Address	
	ICP - PACKAGE NAME	

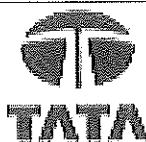
Sl. No.	Item Description	Imported / Domestic	Manufacturing / Bought Out	Manufacturing Quality Plan No. (No. given as per TATA Power Procedure)	Inspection Category	First Schedule Submission Date*	Final Approval Date*
1	Example: PUMP				A / B / C		
2							
3							
4							
5							
6							

*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





TATA POWER COMPANY LIMITED

Corporate Engineering-QAIT

Inspection Release Note

IRN No:

Date:

Project / Plant:

Tata Power PO No.:

Date:

Supplier / Sub-Supplier:

Location:

Material / Equipment Details:

PO Item / BBU No.	DESCRIPTION OF ITEM / EQUIPMENT	Tag / ID No. / S. No.	QUANTITY CLEARED EARLIER	OFFERED QUANTITY (Current Lot)	ACCEPTED QUANTITY (Current Lot)

Reference Inspection Report (s):

Identification:

NCR Status:

☐

OPEN

☐

CLOSED

☐

NIL

Comments (if any):

Results of Inspection:

Documents reviewed and certify that Inspection carried out as per the approved MQP / Engineering Documents/ Drawings.

Above Equipment/ Item (s) cleared for issuance of MDCC.

Document Reviewed By*:

Name:

Issue Date:

Inspection Date (s):

Inspected By:

Signature:

STAMP

Approved By:

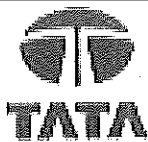
Name:

Date:

Note:

1. Issuance of this report and acceptance of NC, if any are without prejudice to contractual obligations of the Supplier / manufacturer and does not absolve him from obligations and guarantees set forth in purchase order documents issued by Tata Power.
2. **This is Tata Power internal communication.** Project Manger/ Officer / User to ensure contractual, commercial & projects requirements before issuing Material Dispatch Clearance Certificate (MDCC) to contractor/vendor.

* If inspection is attended by QA&I engineer, issuance of IRN will be done by same engineer.

	TATA POWER COMPANY LIMITED	Corporate Engineering - QA/T
	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	



C1 - SCHEDULE OF QUANTITIES & PRICES					
S No	Description	Unit	Unit Price	Taxes	Total Price
Bidders to attach copy of unpriced copy of price schedule					
Seal of the Company			Signature		
Date			Name		
			Designation		

C2 - PROJECT TIME SCHEDULE								
Bidders to attach copy of Project schedule								
Seal of the Company			Signature					
Date			Name					
			Designation					
Note: The bidder shall indicate schedule of milestones and also attach/furnish a detailed bar chart identifying customer inputs.								

C3- SCHEDULE OF DEVIATIONS FROM TECHNICAL SPECIFICATIONS

All deviations from this specification, shall be set out by the Bidders, indicating clause no and page in this schedule. Unless ***specifically*** mentioned in this schedule, the tender shall be deemed to conform to the purchaser's specifications:

S No	Clause No	Details of Deviations with Justifications					
We confirm that there are no deviations.							
Seal of the Company			Signature				
Date			Name				
			Designation				

C4- SCHEDULE OF DEVIATIONS FROM GENERAL & SPECIAL CONDITIONS OF CONTRACT

All deviations from this specification, shall be set out by the Bidders, indicating clause no and page in this schedule. Unless **specifically** mentioned in this schedule, the tender shall be deemed to conform to the purchaser's specifications:

[illegible]

C5- SCHEDULE OF DRAWINGS & DOCUMENT SUBMISSION				
S No	Title of Drawing / Document	Target Date of Submission	For Information / Review / Approval	Remarks
1.0	Overall Dimensions			
1.1				
1.2				
2.0	Layout			
2.1				
2.2				
3.0	SLD / P&ID			
3.1				
3.2				
4.0	GA of Equipment / Skids			
4.1				
4.2				
5.0	O&M Manual			
5.1				
5.2				
Seal of the Company			Signature	
Date			Name	
			Designation	
Note: The titles of drawings / documents listed out in the schedule are examples. The bidder shall list out all relevant drawings / documents.				

C6- SCHEDULE OF RECOMMENDED SPARES

As part of the proposal, the BIDDER shall indicate below the list of recommended spares for three years of trouble free operation of the equipment/system offered by him.

[illegible]

C7 - SCHEDULE OF SPECIAL ERECTION/MAINTENANCE TOOLS & TACKLES

As part of the proposal, the BIDDER shall indicate below, the list of erection/maintenance tools & tackles offered by him.

[illegible]

C8 - SCHEDULE OF PLACES OF MANUFACTURE, TESTS AND INSPECTION		
For major equipment / systems, the Bidder shall indicate the name of the Manufacturer / SUBCONTRACTOR and place of test and inspection		
ITEM OF EQUIPMENT	Manufacturer / SUBCONTRACTOR	PLACE OF TESTING & INSPECTION
Seal of the Company		Signature
Date		Name
		Designation

[illegible]

Signature	
-----------	--

Name

Designation

FORMAT F.1

AFFIDAVIT (ON LETTER HEAD)

I, S/o Director of M/s.....
..... having its registered office at do hereby solemnly affirm and
declare as follows:

1. That I have been authorized to execute this affidavit on behalf of this company by the Board of Directors vide its resolution passed on
2. That Tata Power vide advertisement published in had invited offers for Tender Reference No _____.
3. That in response to the said advertisement as stated in paragraph (2) above, our firm has submitted its proposal to Tata Power.
4. That the proposals of our firm M/s containing necessary information and particulars furnished as response to the Tender Document.
5. That our firm have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against our firm, nor our firm have been expelled from any project or contract by any public authority or private firm nor have had any contract terminated by any public authority or private firm for breach of our part.
6. That our firm during the last three years, neither failed to perform on any agreement, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against us.

That the statements made in paragraph 1 to 6 of the foregoing affidavit as above are true to my knowledge and belief and if anything is found contrary, I stand liable to be prosecuted under appropriate Act / laws in force.

Stamp:

Sign:

Name:

Place and date:

Note: In case of any arbitration / judicial proceeding / legal litigation initiated against or by the bidder in last three years then the same have to Annexed to this Affidavit

FORMAT F.2

**PROFROMA OF LETTER OF UNDERTAKINGS
(To be submitted by the Bidder along with his Bid)**

ON BIDDER's LETTER HEAD

Ref..... Date.....

To

Head – Procurement

The Tata Power Company Limited, Smart Center of Procurement Excellence, 2nd Floor, Sahar Receiving Station, Near Hotel Leela, Sahar Airport Road, Andheri East, Mumbai-400059

Dear Sir,

I / We have read and examined the entire Tender Document to the (Full scope of work)

I / We hereby submit our Bid and undertake to keep our Bid Valid for a period of 180 days from the date of bid opening i.e. up to

I / We hereby further undertake that during said period.

I / We shall not vary/alter or revoke my / our Bid.

This undertaking is in consideration of Tata Power agreeing to open my Bid and consider and evaluate the same for the purpose of award of work in terms of provision of tender specifications.

Should this Bid be accepted, **I / We** also agree to abide by and fulfill all the terms & conditions of provision of the above mentioned bid documents.

Signature along with Seal of Co.....

(Duly authorized to sign the Tender on behalf of the Bidder)

Name

Designation

E-mail (used in E-Tender):

Name of Co.

(In Block Letters.)

FORMAT F.3

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder)

In a bid to make our entire procurement process more fair and transparent, Tata Power intends to use the reverse auctions through E-Tender system as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. Tata Power shall log-in to the authorized representative of the bidder.
2. Tata Power will make every effort to make the bid process transparent. However, the award decision including sharing of work would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of Tata Power, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of Tata Power.
6. Tata Power has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case of an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out-rightly rejected by Tata Power.
8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at Tata Power site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for time extension of the auction event shall be considered by Tata Power.
12. Detailed price split of E-auction price will be submitted within 24 hours from completion of E-auction. If not submitted, the original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder

FORMAT F.4

Format of BID BG / EMD

Whereas (Name of the Contractor), a Company incorporated under the Indian Companies Act 1956, having its Registered office at _____, (hereinafter called the "BIDDER") has in response to your Invitation to Bid against Enquiry No. _____ dated _____, for (name of work), offered to supply and/or execute the works as contained in Employers letter dated _____.

AND WHEREAS BIDDER is required to furnish to you a Bank Guarantee for the sum of Rs. _____/-(Rupees ____ only) as Earnest Money against Bidder's offer as aforesaid.

AND WHEREAS we, (name of the bank) having our Registered Office at _____ and Branch office at _____, have at the request of Bidder, agreed to give you this Guarantee as hereinafter contained.

NOW THEREFORE, in lieu of earnest money deposit, we, the undersigned, hereby covenant that the aforesaid Bid of the BIDDER shall remain open for acceptance by you during the period of validity as mentioned in the Bid Document or any extension thereof as requested by you and if Bidder shall for any reason back out, whether expressly or impliedly, from this said Bid during the period of its validity or any extension thereof as aforesaid, we hereby guarantee to you the payment of the sum of Rs. _____/-(Rupees ____ only) on demand and without demur and notwithstanding the existence of any dispute between you and the BIDDER in this regard and we hereby further agree as follows:

- (a) You shall have the right to file/make a claim on us under the Guarantee for a further period of six months from the said date of expiry.
- (b) That this guarantee shall not be revoked during its currency without your written express consent.
- (c) That you may without affecting this guarantee grant time or other indulgence to or negotiate further with BIDDER in regard to the conditions contained in the said Bid

document and thereby modify these conditions or add thereto any further conditions as may be mutually agreed upon between you and BIDDER.

- (d) That the guarantee hereinbefore contained shall not be affected by any change in the constitution of our Bank or in the constitution of BIDDER.
- (e) That any account settled between you and BIDDER shall be conclusive evidence against us of the amount due hereunder and shall not be questioned by us.
- (f) That this guarantee commences from the date hereof and shall remain in force till BIDDER, if his Bid is accepted by you, furnishes the Contract Performance Guarantee as required under the said specifications and executes formal Contract Agreement as therein provided or till ____Days (__ days) from the date of submission of the Bid by the BIDDER i.e. (expiry date), whichever is earlier.
- (g) That the expression, BIDDER and Bank, and OWNER herein used shall, unless such an interpretation is repugnant to the subject or context, include their respective successors and assignees.
- (h) Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs._____/-(Rupees _____ only) and the Guarantee will remain in force upto and including and shall be extended from time to time for such period or periods as may be desired by you. Unless a demand or claim under this Guarantee is received by us in writing within six months from (expiry date), i.e. on or before (claim period date), we shall be discharged from all liabilities under this guarantee thereafter.
- (i) Any claim/extension under the guarantee can be lodgeable at issuing outstation bank or at Mumbai branch and claim will also be payable at Mumbai Branch. **(To be confirmed by Mumbai Branch by a letter to that effect)**

Notwithstanding anything contained herein above:

- a) Our liability under this Bank Guarantee shall not exceed Rs._____/-(Rupees _____ only).
- b) This Bank Guarantee shall be valid upto ----- 200.
- c) Our Liability to make payment shall arise and we are liable to pay the guaranteed amount or any part there of under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ----- 200.

FORMAT OF PERFORMANCE BANK GUARANTEE

Note: a) Format shall be followed in toto
b) Claim period of six months must be kept up
c) The guarantee to be accompanied by the covering letter from the bank confirming the signatories to the guarantee on the Bank's letter head.

The Tata Power Co Ltd
34, Sant Tukaram Road
Carnac Bunder,
Mumbai 400 009

Our Letter of Guarantee No.....

Contract/Purchase Order No.....dated.....

- 1.0 You have entered into a Contract No..... with.....
.....(hereinafter referred to as " the Vendor")
for the supply and delivery of (hereinafter
referred to as "the said equipment") for the price and on the terms and
conditions contained in the said contract.
- 2.0 In accordance with the terms of the said contract, " the Vendor" has
agreed to furnish you with an irrevocable and unconditional bank
guarantee in a form and from a bank acceptable to you as security for the
due performance by " the Vendor" of all his contractual obligations under
the said contract in an amount equal to 10% (ten percent) of the total value
of the contract to be valid from the date of contract and up to 12 months
from the date of satisfactory commissioning of the said equipment into
service or 18 months from the date of delivery whichever is earlier.
- 3.0 In consideration thereof, we, hereby irrevocably and
unconditionally guarantee to pay to you on demand and without demur and
without reference to " the Vendor" such amount or amounts not exceeding
the sum of Rs.....(Rupees
only) being 10% (ten percent) of the total value of the contract on receipt of
your intimating that " the Vendor" has not fulfilled his contractual
obligations. You shall be the sole judge for such non-fulfilment and " the
Vendor" shall have no right to question such judgement.

- 4.0 You shall have the right to file/make your **claim** on us under the guarantee for a **further period of six months** from the said date of expiry.
- 5.0 This guarantee shall not be revoked without your express consent and shall not be affected by your granting time or any other indulgence to “ the Vendor”, which shall include but not be limited to, postponement from time to time of the exercise of any powers vested in you or any right which you may have against “ the Vendor” and to exercise the same in any manner at any time and either to enforce or forbear to enforce any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision, have the effect of relieving our bank from its obligation under this guarantee.
- 6.0 We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to “ the Vendor” 's liabilities in respect of the premises.
- 7.0 This guarantee shall not be affected by any change in the constitution of our Bank or “ the Vendor” or for any other reason whatsoever.
- 8.0 Any claim/extension under the guarantee can be lodged at issuing outstation branch or at Mumbai branch and also become payable at our issuing outstation bank or at the Mumbai branch as per confirmatory letter/letters of the concerned bank branches as attached. **(This Confirmatory letter is to be obtained from Mumbai Branch by the vendor and submitted along with the Performance Bank Guarantee and is applicable for PBG submitted from Banks located outside Mumbai).**
- 9.0 Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs..... (Rupees only) and the guarantee will remain in force up to and including(Date) and shall be extended from time to time for such period or periods as may be desired by “ the Vendor” .
- 10.0 Unless a demand or claim under this guarantee is received by us in writing within six months from (expiry date) i.e. on or before(claim period end date) we shall be discharged from all liabilities under this guarantee thereafter.
- 11.0 For any correspondence in relation to extension / invocation / discharge of bank guarantee contact us at Tel No. _____ and Bank branch email id _____

Dated at , this day of2020 .



Vendor Registration Form

Corporate Contracts

To be Filled in Block letters By Vendor. Note **Annexure 1 - CSM F1** is Mandatory for Service / Composite Vendor Registration

MATERIAL

SERVICE

COMPOSITE

CONSULTANT

Title (M/S., Mr., Mrs., Dr.) *							
Company Name (35 Char) *							
Country code - Mobile No *							
Country Code - Tel. No *							
Country Code - Fax No							
Email ID *							
Street / House No *							
Country *		State *		District *			
City *		Pin code *		Language			
Category	General	MOEF		SC / ST			
	Related Party	MSME / SSI		OBC/Others			
Bank Details (all details to be filled for enabling NEFT Transfer)							
Name of Bank *							
Bank Details ID *		PAN Number *					
Account No. *		Account Holder *					
Bank Key *		Bank Country *					
MICR Code * (Attach Cancelled Cheque)							
IFSC Code *							
IBAN *							
Payment thro RTGS/NEFT*							
Quality / Safety Systems (Mandatory for Service and Composite Vendor Registration)							
OHSAS 18001 Certified		Risk Management Process					
ISO 9001 Certified		ISO 14001 / EMS Certified					
Declaration and Vendor Authorized Signature							
I / We certify that the information furnished above is correct and complete to the best of my/our knowledge and belief. If at any time, I / We are found to have concealed any material information or given any false details, my/our registration shall be liable to summary termination without notice or compensation. I / We are not related to any employee of Tata Power . We have also received a copy of your Tata Code Of Conduct. We hereby confirm that we have read the same and understand the need to follow the same in Spirit and Letter. If we have any concerns we shall bring the same to the notice of your Chief Ethics Officer. Email: cecounsellor@tatapower.com, * Copy also available on our website http://www.tatapower.com/aboutus/code-of-conduct.aspx							
Name *							
Designation *							
Email *							
Signature & Company Seal *							



ERP Vendor India Requirement - Taxation Registration Details

LST / VAT Registration No.	
LST / VAT Registration Date	
CST / TIN Registration No.	
CST / TIN Registration Date	
Service Tax Registration. No.	
Service Tax Registration Date	
Excise Registration No.	
Excise Registration. Date	
Provident Fund No.	
ESI Registration No.	
MSME / SSI Registration No.	
MSME / SSI Registration Date	

Mandatory For SERVICE & COMPOSITE (Material + Service) Vendor Registration

Annexure 1 - CSM F1-'Safety Category Qualification Form	YES		NO		N / A	
OSHAS 18001 Certificate	YES		NO		N / A	
ISO 9001 Certificate	YES		NO		N / A	
ISO 14001 / EMS Certificate	YES		NO		N / A	
Safety Organization Structure	YES		NO		N / A	
Safety Training Process	YES		NO		N / A	
Safety Policy	YES		NO		N / A	
Safety Statistics	YES		NO		N / A	
Address of sites where WIP	YES		NO		N / A	

Check List of Documents enclosed (To be filled by the Vendor)

PAN Card Copy	YES		NO		N / A	
VAT / CST / TIN Registration Certificate	YES		NO		N / A	
Service Tax Registration Certificate (for services)	YES		NO		N / A	
Certificate of Incorporation / Partnership Deed etc	YES		NO		N / A	
Signed Conflict of Interest Declaration	YES		NO		N / A	
MSME Industry Registration (Mandatory if applicable)	YES		NO		N / A	



Evaluation Sheet

(To be filled by **Requisitioner** - After Checking & Verifying Page 1 to 2 and Annexure 1 - CSM F1 Form)

Whether mandatory requirements are filled/attached and verified?	YES		NO		If No, explain reason for waiver in evaluation area	
If registration is for Services also, whether CSM F1 Form has been completed? Documents attached CSM F1 - Safety Category Qualification Form	YES		NO		N / A	
OHSAS 18001/ ISO 9001 / ISO 14001 Certificate	YES		NO		N / A	
Safety Organization Structure	YES		NO		N / A	
Safety Training Process	YES		NO		N / A	
Safety Policy	YES		NO		N / A	
Safety Statistics	YES		NO		N / A	
Evaluation Process Report	YES		NO		N / A	
Company Code & Description -						

Requested By		Approved by (HOD)	
Name		Name	
Signature		Signature	
Department		Department	
ERP Vendor Company Codes			
Company Code *		Sort Key *	
Reconciliation A/C *		Check Double Invoice	
With Holding Tax Country		With Hold Tax	
Terms of Payment		Payment Methods	
ERP Vendor Purchasing Organization			
Purchasing Organization *		Order Currency *	
Schema Group *		Sales Person *	
ABC Indicator *		Terms of Payment	
Service Based Invoice		GR Based Invoice	



ANNEXURE – 1 (CSM F1 - Safety Category Qualification Form)

Type of Vendor - Service / Composite (Material + Service)

Name of the Vendor -

No	Safety Information	Remarks	Attachments		
1	Certificate				
1A	OHSAS : 18001	Yes / No			
1B	ISO : 14001	Yes / No			
1C	ISO : 9001	Yes / No			
2	Safety Statistics for Last Three (03) Years		Year 1	Year 2	Year 3
2A	LTIFR – Lost Time Injury Frequency Rate	Yes / No			
2B	LTISR – Lost Time Injury Severity Rate	Yes / No			
3	Safety Training Process	Yes / No			
4	Safety Organization Structure	Yes / No			
5	Safety Policy	Yes / No			
6	Name and Address of Sites where work are in Progress or worked earlier	Yes / No			

Name, Signature & Company Seal

To be filled by the Tata Power Requestor

Vendor to be registered for CATEGORY

A

B

C

- 1) **Category A**- Vendors eligible to carry out High risk Jobs
- 2) **Category B**- Vendors eligible to carry out technical jobs that are low risk
- 3) **Category C**- Vendors eligible to carry out administrative and office jobs

No	Description	Category "A"	Category "B"	Category "C"
1	Does the Contractor have OHSAS 18001 Certificate?	√		
2	During site visit check for safety adequacy at site	√	√	
3	Check the safety statistics of Contractor	√	√	√
4	Check the safety orientation & training process of contractor	√	√	√
5	Check the organization structure for safety professionals / engineers / supervisors	√	√	
6	Certified / skill workers as a percentage overall work force	√	√	
7	Does the Contractor have ISO 9001 Certificate?		√	√



ANNEXURE – 2 (Conflict of Interest Certification)

Objective

The intent of this disclosure is NOT to prevent an aspirant supplier from making an application, but rather to provide the decision making authorities with information on which Tata Power can make its own judgements and ensure that dealing with such parties is done fairly and transparently by ensuring that people / parties in conflict of interests are involved in the transactions / decision making process.

While requesting a registration, a supplier MUST disclose any actual or potential conflict of interest by giving the details of the person/s within the supplier's company (whether a director or an employee) who may be in actual or potential conflict of interest as per the above referred clause 20 of Tata Code of Conduct.

Conflict of Interest

An actual or potential conflict of interest with supplier's may arise where, directly or indirectly.

- a. A proprietor or partner or director or employee (who is party to a transaction) of the supplier is also a member of family or relative of a Tata Power employee.
- b. A proprietor or partner or director or employee (who is party to a transaction) of the supplier is also a director of family or relative of a Tata Power or Tata Group of companies or a person of influence within Tata Power.
- c. A proprietor or partner or director of the company is also a proprietor or partner or director in another company already registered with Tata Power and competing for similar products and / or services.
- d. A company has subsidiary or associate companies already registered with Tata Power and competing for similar products and / or purpose.

For detailed explanation on when an actual or potential conflict of interest may arise, please refer to the clause 20 of Tata Code of Conduct available on the Tata Power website

www.tatapower.com/aboutus/code-of-conduct.aspx

Format for declaration

Supplier's willing to register with Tata Power need to print the enclosed form which should be printed on the Letter Head of their company and be signed by proprietor / partner / executive directors / person authorized by the company for giving such declaration affixing his name, designation below the signature along with seal of the company.



To

Corporate Contracts
The Tata Power Company Ltd
Technopolis Knowledge Park, CENTEC,
Mahakali Caves Road, Chakala,
Andheri (E), Mumbai 400 093

Declaration on Conflict of Interest

This is to certify that we, M/s _____ are having the following entities / persons in actual or potential conflict of interest while dealing with Tata Power within the spirit of Clause 20 of Tata Code of Conduct.

Name & Designation of the entity / person in conflict of interest	Name of Tata Power person to whom related to	Nature of relationship / conflict

Note – In case there is no conflicts to be declared, please clarify state as NIL in the first row and strike out the balance lines)

This is to further certify that, we M/s _____

- Are not dealing with Tata Power under any other name or through any other subsidiary / associate companies other than the list disclosed above.
- None of our other directors / partners / other proprietors is dealing with Tata Power under any other company name.
- None of the other directors / partners / proprietors / employees holding a position of responsibility and / or authorized to transact with Tata Power has any significant financial interest or other relationship i.e., (Father, Mother, Brother, Sister or any other close family relationship) with any other Tata Power employee or directors of Tata Power or directors of Tata group of companies.

We further declare that as and when there is any change to the above certification, we shall intimate to Tata Power about such changes in the status. We also declare that we have read and understood the Tata Code of Conduct – latest version hosted on Tata Power website www.tatapower.com/aboutus/code-of-conduct.aspx and shall abide by all the provisions of the same and will bring any concerns regarding this to the notice of your chief ethics officer on the email id cecounsellor@tatapower.com

This is to certify that the above said information is true to the best of my knowledge and that I have the requisite authority to sign above said declaration in my capacity as _____ (ID No. _____)

Regards,

Name, Signature and Company Seal

HEALTH AND SAFETY POLICY

We, at Tata Power, reaffirm our belief that the health and safety of our stakeholders is of the utmost importance and takes precedence in all our business decisions. In pursuit of this belief and commitment, we strive to:

- Maintain and proactively improve our management systems to minimize health and safety hazards to our stakeholders and all others influenced by our activities.
- Comply and endeavour to exceed all applicable occupational health & safety legal and other requirements by setting the highest standards.
- Integrate health & safety procedures and best practices into every operational activity with assigned line-functional responsibilities at all levels, for improving and sustaining health & safety performance.
- Involve our employees in maintaining a safe and healthy work environment through risk assessments, periodic reviews of operational procedures, safe work methods and adoption of new technology.
- Develop a culture of safety through active leadership and provide appropriate training at all levels to enable employees developing their skills to work safely.
- Incorporate appropriate health & safety criteria into business decisions for selection of plant and technology, performance appraisal of individuals and appointments in key positions.
- Ensure availability at all times of appropriate resources to fully implement the health & safety policy of the company.
- Promptly report incidents, investigate for root causes and ensure lessons learnt shared and deployed across the company.
- Ensure service providers and their workmen align with company's safety codes and practices for the health and safety of personnel working with us.
- Set safety & health metrics as indicators of excellence, monitor progress and continually improve performance.

We shall actively communicate this policy to all stakeholders by suitable means and periodically review its relevance in continuously changing business environment.

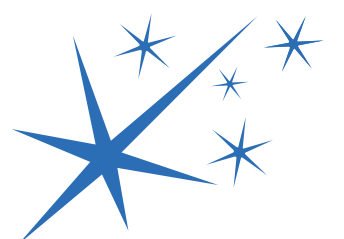


(Praveer Sinha)
CEO & Managing Director

Date: 15th June, 2018

TATA POWER

Lighting up Lives!



CORPORATE ENVIRONMENT POLICY

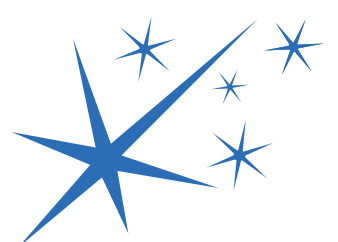
Tata Power is committed to a clean, safe and healthy environment, and we shall operate our facilities in an environmentally sensitive and responsible manner. Our commitment to environmental protection and stewardship will be achieved by:

- 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



(Praveer Sinha)
CEO & Managing Director

Date: 15th 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

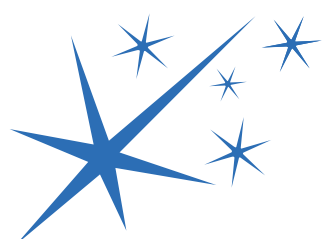
- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the 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: 15th 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)

CONTENTS

Foreword	3
A Our values	4
B Scope and purpose of this Code	5
C Our core principles	7
D Our employees	9
E Our customers	18
F Our communities and the environment	21
G Our value-chain partners	23
H Our financial stakeholders	25
I Governments	27
J Our group companies	29
Raising concerns	30
Accountability	31
Acknowledgement sheet	33

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

21st 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:



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-authorised, 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 29th 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.



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.)

35

NOTES

[illegible]



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



SUPPLIER MANUAL ANSWERING TO E-BIDDING & E-AUCTION

CELEBRATING 100 YEARS OF INVISIBLE GOODNESS

TATA POWER

	Version 1.1
Company Confidential	DEC - 2016

INDEX

1 ACCESSING Ariba SOURCING	3
2 VENDOR SCREEN.....	4
3 SUBMITTING YOUR ANSWERS / PROPOSAL.....	4
<i>3.1.1 Review and Approve “Prerequisites”</i>	<i>6</i>
<i>3.1.2 Select Items or Lots</i>	<i>6</i>
<i>3.1.3 Entering Your Prebid</i>	<i>7</i>
<i>3.1.4 Entering Your Prebid for e-auction.....</i>	<i>8</i>
<i>3.1.5 Participate to the e-auction</i>	<i>9</i>
3.1.5.1 How to submit a price.....	9
3.1.5.2 What to do If you have a problem during the e-auction?	10
4 COMMUNICATING WITH UPM NEGOTIATOR.....	10
5 SUPPLIER FREQUENTLY ASKED QUESTION	11

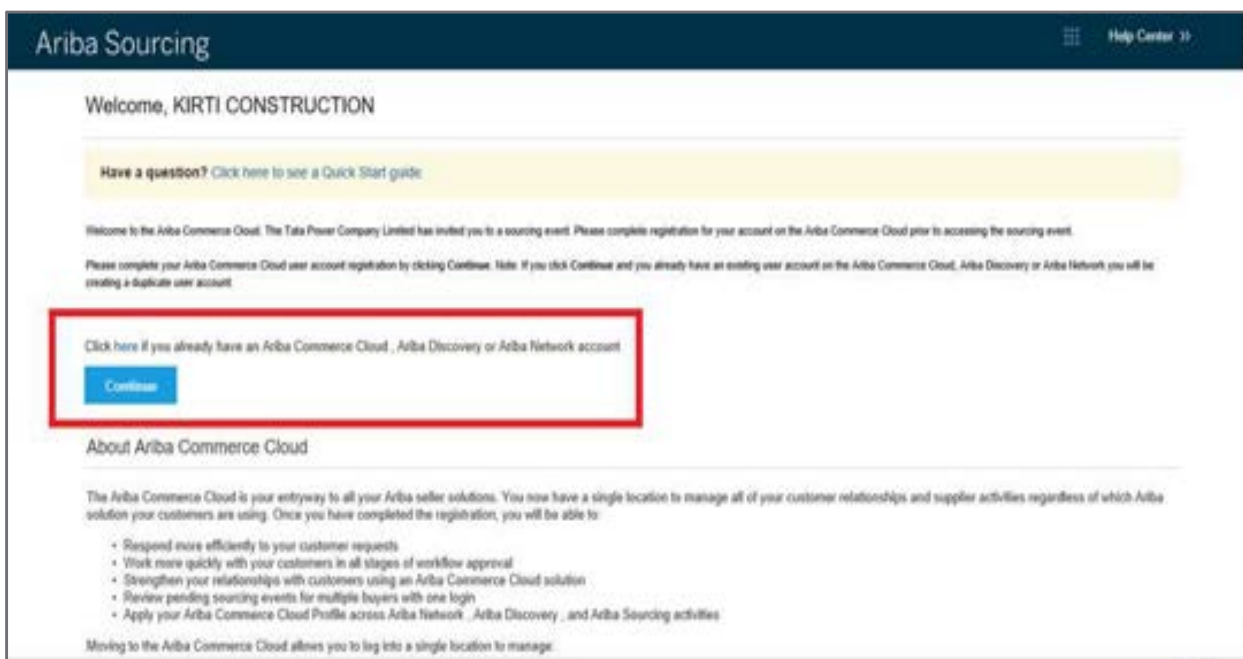
1- Accessing Ariba Sourcing

Step 1: You will get an invitation to your email from Ariba System. Keep this email, it contains your login Information and a direct link to Ariba.

Step 2: Click "Click Here" to access the Ariba Web Site.



Step 3: Supplier has to click on "Continue"



Step 4: The registration process only takes a few moments, with a simple one-page registration. Define your password and secret question. Click “OK”

Company Name* KIRTI CONSTRUCTION

Country* India [IND]

Address* Yeshodeep E3- 88
Sector 22 Koperkhiana Navi Mumbai
400708

City* mumbai

State* maharashtra

Postal Code* 400708

Product and Service Categories* Enter Product and Service Categories [Add] [Browse]

Ship-to or Service Location* Enter Ship-to or Service Location [Add] [Browse]

Tax ID* Optional Enter your Company Tax ID number.

DUNS Number* Optional Enter the nine-digit number issued by Dun & Bradstreet.

Supplier has to fill the form

Expired Password

Your password has expired. Follow these instructions to complete this step: Create a new password and confirm. Select a secret question and answer it to.

Passwords are case-sensitive, and must be between 8 and 28 characters long. They can include any Latin characters and punctuation marks, and must include at least one numeral between the first and last character. They must also include at least one letter. For example, g0rd0n.

The current secret answer that you have entered is different from the one that has been recorded for this user.

New Password* *****

New Password (confirm)* *****

Secret Question* Who is your favorite sports team?

Secret Answer* Three

Submit

Step 5: If it's the first time you are invited to use UPM Ariba, you'll need to accept the “Participant Terms”. Select “I accept the terms of this agreement”. Click “Submit”.

Secret Question* In what city was your mother born?

Secret Answer* *****

Language* English

☒ I have read and agree to the Terms of Use and the Ariba Privacy Statement

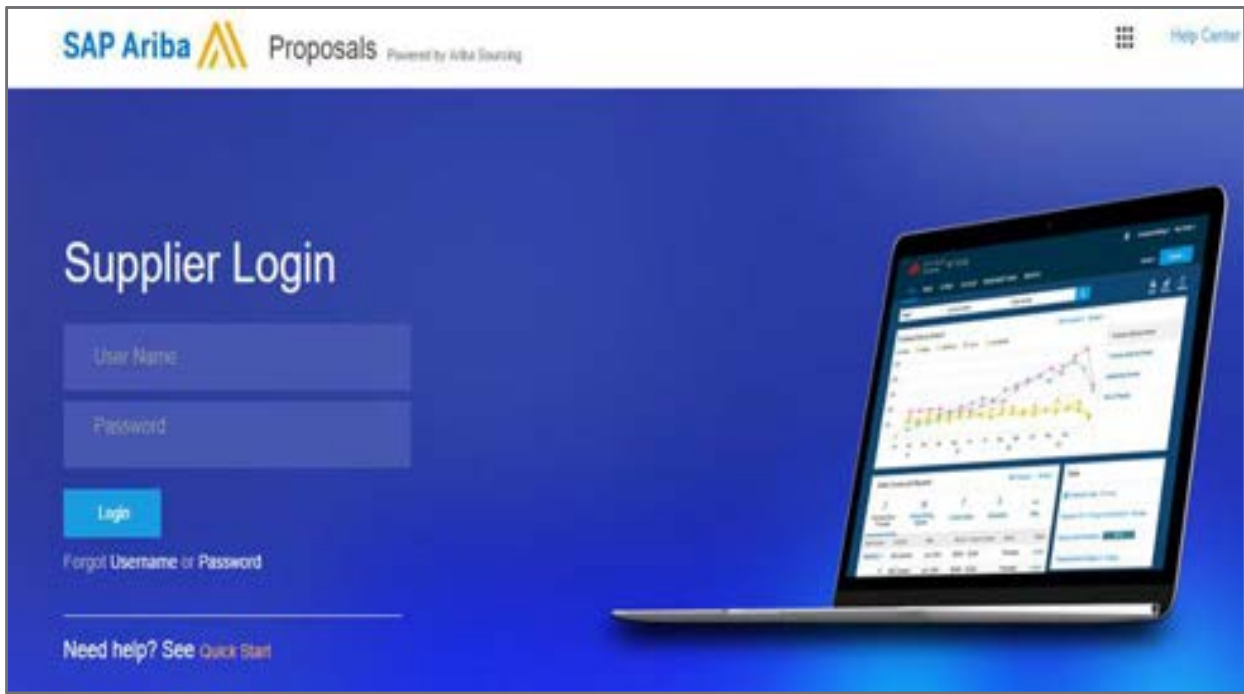
Submit **Cancel**

2 Vendor Screen

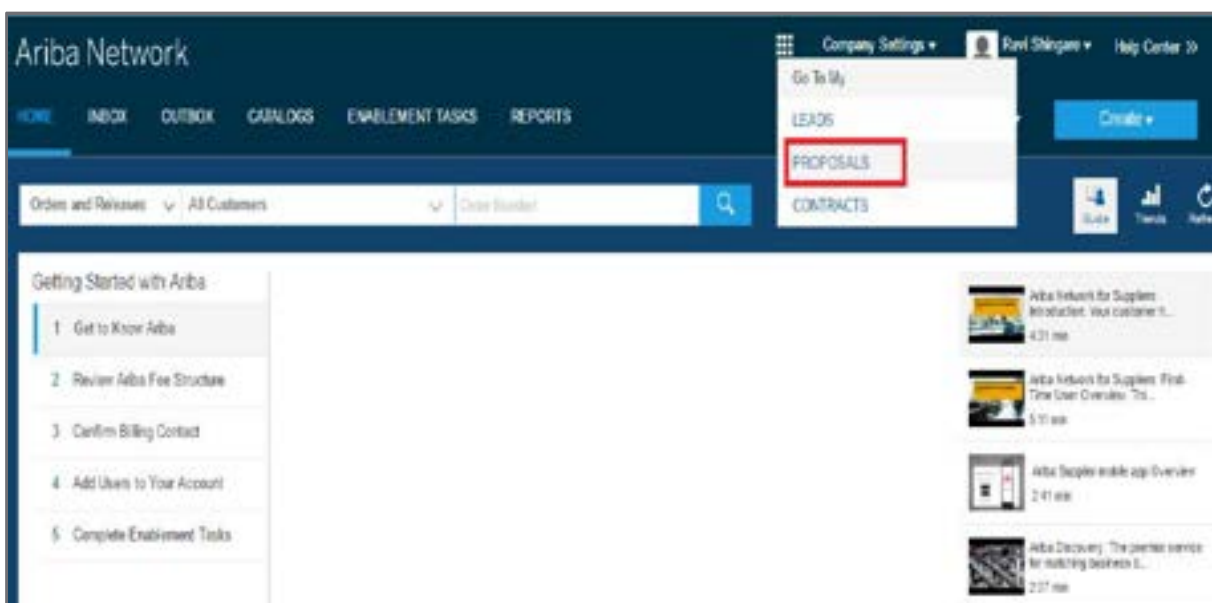
2.1.1 If vendor goes through mail invitation then directly Screen 3.1.1 will appear, but if If you have used Ariba before and have already accessed an event for the buyer-specific account with your current log in ID, click the **Login** button to continue. Log in with your Ariba username and password in order to participate in the event OR you have to follow the following steps.

Step 1 - Log on supplier.ariba.com

Step 2 - Put your USER ID and Password in following screen



Step 3 - Go to ARIBA APPS  and click on Proposals.



3 Submitting Your Answers / Proposal

3.1.1 Review and Approve "Prerequisites"

Step 1: Review and download all documents & then Click on "Review Prerequisites"

The screenshot shows the Ariba SPM Management interface. The top navigation bar includes 'Home | Preferences | Help | Logout'. The main header displays 'Doc14895224 - Hotel RFQ Finland' and a timer 'Time remaining: 4 days 23:00:00'. A yellow banner at the top states: 'Review any record in the prerequisites. Prerequisite questions must be answered below you can view event content or participate in the event. Some prerequisites may require the buyer to review and accept your responses before you can continue with the event. If you decline the terms of the prerequisite, you cannot view the event content or participate in the event.' Below this, a row of buttons includes 'Download Catalog', 'Review Prerequisites' (highlighted with a red box), 'Decline to Respond', and 'Print Event Information'. The left sidebar shows a checklist with '1. Review Event Details' selected. The main content area is titled 'UPM Prerequisites' and lists two items: '1.1 Do You accept UPM General Purchasing Conditions for Products and Services?' and '1.2 Do you accept UPM code of conduct?'. A 'Next >>' button is visible at the bottom right of the prerequisites list.

Step 2: Review and accept "Bidder Agreement".

The screenshot shows the 'Review and Accept Prerequisites' step for event 'Doc681345837 - sourcing-project-001'. The left sidebar shows a checklist with '2. Review and Accept Prerequisites' selected. The main content area displays the 'Bidder Agreement' text, which includes sections on 'Bids', 'Price Quotes', 'Procedures and Rules', 'Confidentiality', 'Bids through Site only', 'Ethical Conduct', and 'Survival'. At the bottom right, there are two radio buttons: 'I accept the terms of this agreement.' (selected) and 'I do not accept the terms of this agreement.'.

3.1.2 Select Items or Lots

Step 1: Select Items. - If you do not want to quote for any items/lots then you do not select that lot / items and then go ahead for select and submit lot.

Step 2: Click "Submit Select Lots".

The screenshot shows the 'Select Lots' step for event 'Doc29687402 - E-auction'. The left sidebar shows a checklist with '3. Select Lots' selected. The main content area displays a table of 'Lots Available for Bidding' with columns for 'Name' and 'Status'. The table lists three items: '1.1 Item 1', '1.2 Item 2', and '1.3 Item 3', all with a status of 'Open'. Below the table, the 'Submit Selected Lots' button is highlighted with a red box. A 'Cancel' button is located at the bottom right of the interface.

3.1.3 Entering your offer for RFQ

Step 1: as per following screen Vendor Dashboard will appear where RFQ from TATA Power will be visible.

Ariba Sourcing

THE TATA POWER COMPANY LIMITED-TEST

Welcome to the Ariba Spend Management site. This site exists in identifying world class suppliers who are market leaders in Ariba, Inc. administers this site in an effort to ensure market integrity.

Events

Title	ID	Post Time
Status: Completed (904)		
Status: Open (1)		
RFQ-Test 11th Aug 2016	Doc905624000	12/16/2016 6:36 PM
Status: Pending Selection (88)		

Tasks

Name	Status	Due Date	Completion Date
------	--------	----------	-----------------

Step 2 - Follow all the steps of 3.1.1 to 3.1.3

Step 3 - Vendor has to submit their techno commercial offer in 2.1. In this field Do No attach any price content. For Price Bid put all the unit price and taxes and duties in provided field. Put "0" (ZERO) in not applicable field.

2. Techno Commercial bid

2.1 Please attach the Techno-Commercial Bid

3. Price Bid

3.1 Bidder to specify the prices either in terms of percentage (%) or Value where the options are available for both. In case price is specified in percentage (%) , please Specify Zero (0) in the amount field and vice-versa.

Item	More...	Amount	Unit
3.2 Bearingfor motor 1.90991	+	15,000.00	INR 30 each
3.3 AMC 20,000 IS-UCCS CONTRACTS	+	35,000.00	INR 35 month
3.4 ANALYSIS TAILRACE WTR SAMPLE	+	35,000.00	INR 45 each

Step 4 - After successfully putting Techno commercial offer and price part then click on "Submit Entire Response"

Submit Entire Response | **Update Totals** | **Save** | **Compose Message**

3.1.4 Entering Your Prebid for e-auction

Before participation to the e-auction you must place a pre-bid. If you haven't placed a Prebid in the Prebid time you won't be able to participate to the auction itself.

Step 1: Populate Your Answers.

Step 2: Click "Submit Entire Response".

The screenshot shows the 'Doc681345837 - sourcing-project-001' page. A yellow banner at the top right indicates 'Time remaining in preview 1 day 04:05:05'. A message states: 'The event owner has requested that you submit a prebid before the end of the preview period. You have not yet submitted a prebid.' The left sidebar contains a checklist with '4. Submit Bids' highlighted. The main content area shows a table with columns 'Name' and 'Extended Price'. The table has three sections: '1 Introduction', '2 Commercial Terms' (with a sub-item '2.1 lot-1' showing '4 core cable' and a quantity of '5000 INR'), and '3 Pricing' (with a sub-item '3.1 FOR SITE DELIVERY' showing 'P&F INCLUSIVE' and a link to 'COMP-L.xlsx'). At the bottom, the 'Submit Entire Response' button is highlighted.

When the Prebid time is still open you can still modify your Prebid:

Click on "revise Prebid" and repeat in step 1 and step 2.

The screenshot shows the same 'Doc681345837 - sourcing-project-001' page. The yellow banner now shows 'Time remaining in preview 1 day 04:02:39'. A green banner states: 'Your prebid has been submitted. you will be notified when the event is open for bidding.' The left sidebar checklist remains the same. The main content area table is identical to the previous screenshot. At the bottom, the 'Revise Prebid' button is highlighted.

3.1.5 Participate to the e-auction

If you have placed a bid in the Prebid time you will be able to participate to the e-auction. E-auctions are rather sort in time (usually less than 20 min per item). Once the time is closed you won't be able to bid anymore.

The screenshot shows the 'Doc681345637 - sourcing-project-001' page. A green banner at the top states 'Your response has been submitted.' and 'Your price rank in the auction'. A red banner on the right indicates 'Bidding time left for the item' with a timer at 00:08:39. The 'My Bid Rank : 1' is displayed. The bid details show 'Bid Amount: 20.00 INR' and 'Name : 2.1 lot-1' with a quantity of 4 core cable. The 'Extended Price' is 4,000.00 INR (3)0. A warning message states: 'You start the auction with your Prebid price. You can modify the price directly here or use the decrement bid functionality'. The 'Submit Current Lot' button is highlighted.

When you want to submit your price presses “submit current lot”

In case the new price you submit is lower by 10% of the starting price (Prebid Price) the following warning Message will be displayed.

To submit the new price, check the box and press submit. If you made a mistake press cancel so that you Mistake would not be submitted.

The screenshot shows the same page as the previous one, but with a warning dialog box. The 'My Bid Rank : 2' is displayed. The warning message states: 'Submit this response? Your bid has generated the following warnings: The value you entered for Item 2.1 (4,000.00 INR) improves your previous bid or the ceiling value (5,300.00 INR) by more than 10%. Check here to ignore the warnings and submit your bid anyway.' The 'Submit Current Lot' button is highlighted.

3.1.5.2 What to do if you have a problem during the e-auction?

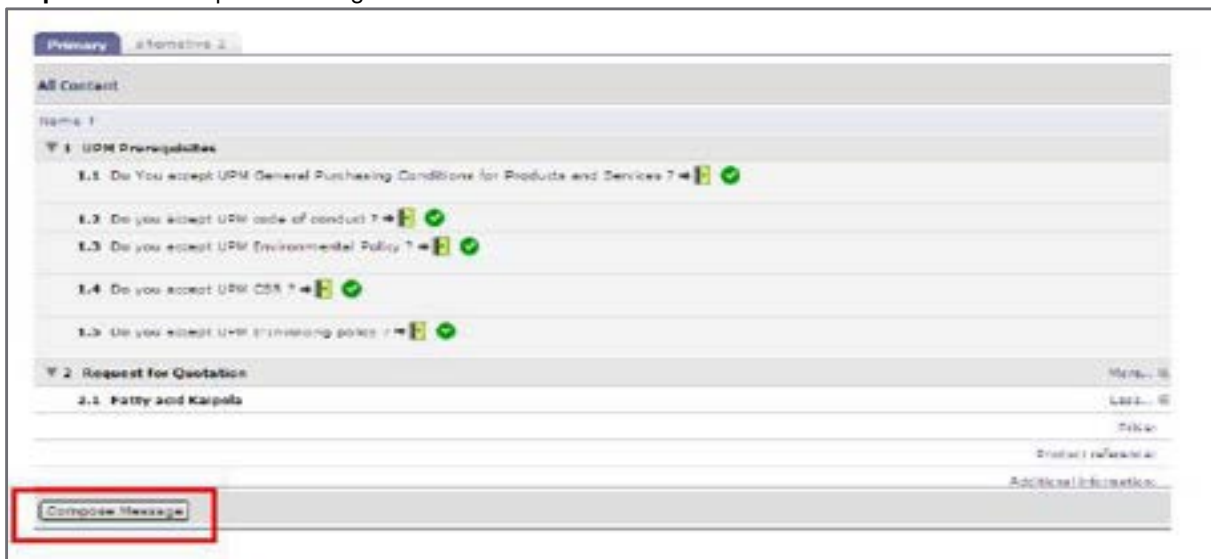
If you have any problem related the system: - **Call first Tata Power e- Bidding / Auction Cell**

➤ e- Bidding /Auction Cell details:-

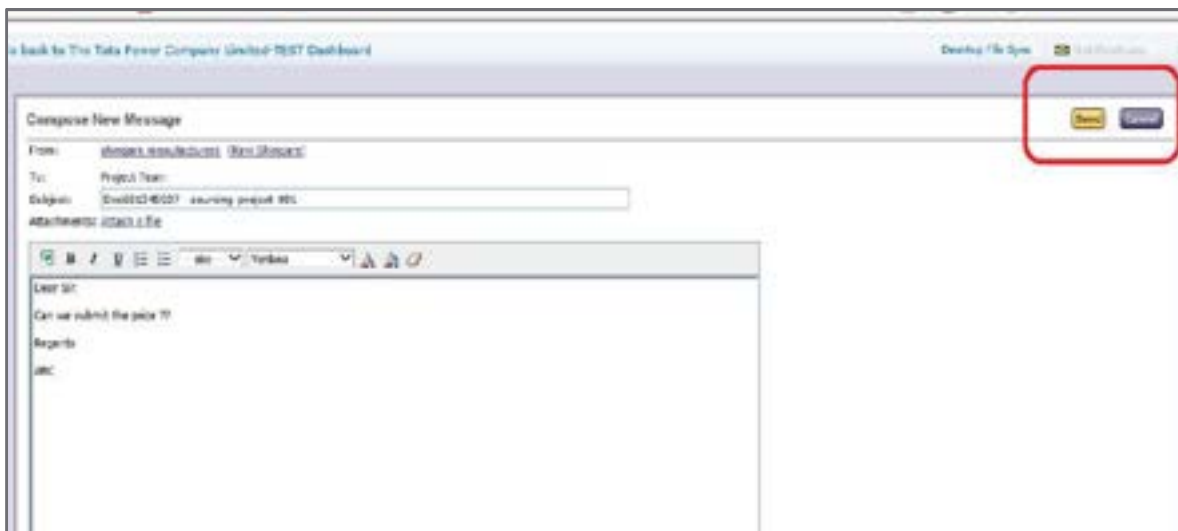
Core team		
Contact Person	E-Mail Id	Contact Details
Ravi Shingare	ravi.shingare@tatapower.com	9029004168
Himanshu Ranjan	himanshur@tatapower.com	9820339961
Escalation Matrix		
Paresh Bhatt	pareshbhatt@tatapower.com	
C T Prakash	ctprakash@tatapower.com	9223545185

4 Communicating with Tata Power Buyer & Auction team during auction / e- bidding

Step 1: Click “Compose Message”.



Step 2: Compose Your Message and click “Send”.



SUPPLIER FREQUENTLY ASKED QUESTIONS

 **If I registered on my buyer's Ariba Sourcing site in the past, do I need to register again?**

Answer- Yes. Although you have registered on your buyer's Ariba Sourcing site in the past, registering on the Ariba Commerce Cloud is required. The registration process only takes a few moments, with a simple one-page registration. Registering on the Ariba Commerce Cloud gives you access to all your buyer relationships with one username and password.

 **What is the Ariba Commerce Cloud?**

Answer: - The Ariba Commerce Cloud is your entry point to all of your seller solutions. Rather than managing log in information for multiple buyers' sites, you will have one log in and one account. This means fewer passwords to remember, easier user maintenance for your company, and a unified profile for your organization.

 **Do I need to add Product and Service Categories during registration?**

Answer:-Yes; this is a required field. Product and Service Categories classify what your company sells, and the system uses this information to match potential business opportunities with your products and services.

Click **Add Product and Service Categories** to select one or more categories from the list of options. During registration, you only need to choose one category, preferably related to the event you are joining. You can add, refine, or remove categories any time after the registration process.

 **Do I need to add ship-to or service locations during registration?**

Answer: - Yes; this is a required field. Ship-to or Service locations inform buyers where your company sells its products or provides its services, and the system uses this information to match potential business opportunities with your products and services.

Click **Add Ship-to or Service Locations** to select one or more sales territories from a list. You can add, refine, or remove ship-to or service locations any time after the registration process.

 **Do I need to enter a D-U-N-S number when I register?**

Answer: - No; this is an optional field. You are only required to complete the fields marked with an asterisk (*). If you enter a D-U-N-S number, and you get a message that the value is already in use, leave the field blank, as D-U-N-S numbers must be unique within the Ariba Commerce Cloud. Your company can have multiple Ariba accounts, but only one account can use the D-U-N-S number.

Additional Information: - D-U-N-S is a registered trademark of Dun & Bradstreet or its subsidiaries in the United States and other countries.

 **Do I need to enter a Tax ID when I register?**

Answer: - No, the Tax ID is an optional field. You are only required to fill in the fields marked with an asterisk (*).

 **What is the difference between the Email and Username fields in my profile?**

Answer: - The Email field represents the email address where you wish to receive email notifications. The Username field is the identifier that you use to access your account. The Username field must be in email format, but you do not have to use a valid email address.

Note: Leave the **This is my username** box checked if you want your email address to be the same as your username.

How do I participate in my buyer's event using an email invitation?

Answer: - Use the **Click here** link in the email notification to access the sourcing event.

While buyers might customize the email content you receive, all email invitations contain a link to access the event.

Depending on your previous experience with Ariba solutions, do one of the following to access the event after you click the link:

- If you are new user, click **Continue** on the welcome page. You continue to register an Ariba account to link with your buyer and participate in the event.
- If you have used Ariba before and have already accessed an event for the buyer-specific account with your current log in ID, click the **Login** button to continue. Log in with your Ariba username and password in order to participate in the event.
- If you already have an existing Ariba Network, Ariba Discovery, or Ariba Sourcing supplier account, but you have not accessed any events for the inviting buyer's site, use the **Click here if you already have an Ariba Commerce Cloud, Ariba Discovery or Ariba Network account** link. After clicking the link, log in with your existing account to move your information to your buyer's site.

Additional Information :- Registering an Ariba account provides you with a consolidated view of all your customer relationships. With this one profile, you can view business opportunities, participate in sourcing events, participate in contract negotiations, and manage orders, catalogs, and invoices.

Why doesn't the link in the email invitation to participate in a sourcing event work?

Answer:-If you cannot click the link, or the link does not open the log in page, highlight and copy the Uniform Resource Locator (URL), and then paste the URL into your web browser.

Can my company have multiple accounts?

Answer:-Your Company can have multiple Ariba accounts, depending on your business needs. For example, if your company has several locations around the world, you might want a separate account for each region.

Most companies choose to have one account with multiple customer relationships, which provides a centralized location to maintain their company profile information and all of their customer relationships.

Additional Information

Consider the following items when deciding whether to have more than one account:

- **Administrators:** For each account, you can have only one account administrator, but the account administrator can provide access to multiple users. All users from your company have their own **Username** and **Password** to access the account.
- **DUNS** (data universal numbering system) **numbers:** You can add your company's DUNS number to only one account. If you plan to have multiple accounts, leave the DUNS number blank during registration.

How do I complete registration if my username already exists?

Answer: - This message means that you already have an Ariba Network, Ariba Discovery, or Ariba Sourcing supplier account registered under username you entered. You can either register a new account by creating a new username, or access one of the following sites to request a password reset for the registered username:

- [Ariba Network](#) (This login page is used for all Ariba Network, Ariba Sourcing, or Ariba Contracts suppliers).
- [Ariba Discovery login page](#)

To reset your password, click the **Having trouble logging in?** Link on the Login page.

Nothing happens when I click Forgot Username and enter my email address

Issue: - Nothing happens when I click the **Forgot Username** link and enter my email address.

Cause: - After you submit your request to retrieve your username, the Ariba Network sends an email notification with usernames that match the email address you submitted.

Some possible reasons why you may not receive this username retrieval email notification:

- The email address on your account does not match the email address you entered when submitting the request.
- Your buyer-specific account was deactivated before you could move it to the Ariba Commerce Cloud. Generally, that means you probably have not participated in an event with that buyer for a while.

Solution: -

- To ensure you receive this email notification:
- Make sure you type the email address configured within your account.

If your buyer-specific account has been deactivated, contact your buyer to determine how to proceed.

Where is my password reset email?

Answer: - After you submit your request for a password reset, Ariba sends instructions to the email address associated with your account. If you didn't receive a password reset email, check the following scenarios to troubleshoot.

The username you entered is in the wrong format, or it isn't associated with the email address you are checking.

- Keep in mind, your username is in the format of a full email address, but it can be associated with any email address you entered previously.
 - Your username is also case-sensitive.
 - To confirm that you are using the correct username and format, return to the Ariba login page, and click the **Having trouble logging in?** link (**Forgot Username** if you're working in Ariba Discovery).
 - Choose **I forgot my username**, and click **Continue**.
 - Enter the email address associated with your account, and click **Submit**.
 - You will receive an email that lists the exact format of the username associated with the email you entered.
-

You entered the correct username, but you still didn't receive the password reset email notification.

- This can occur if the configured email address is different from the account you are checking.
- You might have multiple accounts for your company, so make sure you are attempting to access the correct account.

Your email configuration or company's security settings might also prevent you from receiving the password reset email. To find out, check your junk mail folder or email filter settings to verify that automated emails from Ariba are not blocked from your email account.

 **Why do I get this message on the SAP Ariba Login page: "The username and password pair you entered was not found"?**

Answer: - You entered an incorrect **Username** or **Password**. You might receive this message if you entered a previous **Username** or **Password**. Remember that your **Username** has the format of an email address, and both the **Username** and **Password** are case sensitive.

Click the **Having trouble logging in?** Link on the Login page if you don't remember your log in information.