

Open Tender Notification

For

For Supply of Testing Instruments for TPCODL

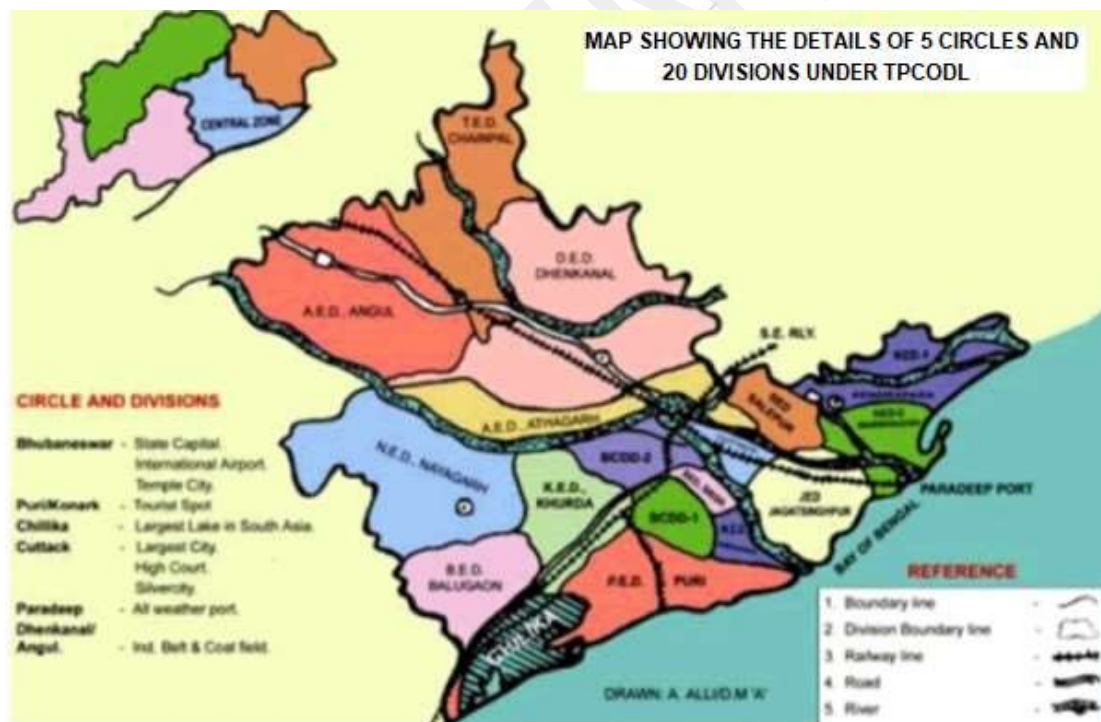
Tender Enquiry No.: TPCODL/P&S/2025-26/1000002871

Due Date for Bid Submission: 25-06-2025 [up to 22:00 Hrs.]

TP Central Odisha Distribution Limited
1st Floor, Anuj Building, Plot No.29, Satya Nagar, Bhubaneswar, Odisha
751007

PREAMBLE

TP Central Odisha Distribution Limited (TPCODL) is a joint venture between Tata Power and the Government of Odisha with the majority stake being held by Tata Power Company (51%). TPCODL is a state electricity distribution utility with sole rights to distribution of electricity in the Central Zone in Odisha covering the distribution circles of Bhubaneswar, Cuttack, Paradeep and Dhenkanal in accordance with the Electricity Act. Tata Power Company has successfully won the bid to own the license for the distribution and retail supply of electricity in Odisha's five circles constituting Central Electricity Supply Utility of Odisha (CESU). It came into operation with effect from 01.06.2020. TPCODL serves a population of 1.36 Crore with Customer Base of 26 Lakh and a vast Distribution Area of 29,354 Sq. Km. The primary business activity includes purchase of power from GRIDCO Ltd at BSP rate and distribute to consumers. The field structure has been presented below:



INFORMATION TO THE BIDDERS TO PARTICIPATE IN E-TENDER SYSTEM OF TPCODL**-: Steps for E-tender submission:-**

Bids are to be submitted only through online e-procurement platform, ARIBA. Any other form of bid submission will not be accepted. Online Link for submission of bid through ARIBA will be sent only after confirmation of payment of tender fee from bidder.

Step 1:

The bidder can get primary information about the tender from the Newspaper advertisement / TPCODL website <www.tpcentralodisha.com> and can download the tender document from the Vendor Zone above website.

Step 2:

Non-Refundable Tender Participation Fee, as indicated in tender document, to be submitted before last date of tender fee payment, in the form of direct deposit/NEFT/RTGS in the following bank account.

Account Name: TP Central Odisha Distribution Limited
Bank Name: State Bank of India,
IDCO Towers, Bhubaneswar
Bank Account No. : 10835304915
IFSC Code : SBIN0007891

Step 3:

Eligible and Interested bidder to send an email to TPCODL attaching duly signed and stamped letter on Bidder's letterhead, with following details, expressing their intend to bid against above tender:

SI No	Description	Bidder's Response
i)	Tender Enquiry No.	
ii)	Description of materials / Works Tendered	
iii)	Name and address of the bidding company	
iv)	Name of the authorized contact person	
v)	Contact No. authorized person	
vi)	E-mail Id of the where online ARIBA link to be mailed.	
vii)	Tender Fee details (Amount / NEFT-RTGS UTR No / Date), Ref	
viii)	GST No. of bidder	

E-mail has to be sent to package owner Arabinda Sahu <arabinda.sahu@tpcentralodisha.com> with copy to <Asish Karmakar <Asish.Karmakar@tpcentralodisha.com> before "Last date and time for payment of Tender Participation Fee".

Step 4:

On receipt of the document as mentioned in Step 3 above and after due verification of the same, ARIBA link for participation in the tender will be sent to bidder's mail address from ARIBA system.

Step 5:

In this mail there will be an online link as [Click Here](#) to participate in the tender.

Step 6: Click "[Click Here](#)" to access this event.

Step 7:

If bidder is bidding first time for TPCODL through ARIBA site then please "Sign UP" by creating User Name and password as mentioned in Sign Up page. Please follow the process, as mentioned in the Sign Up page, during creation of User Name and password. Also a simple one-page registration screen will open for first time user. All * mark mandatory field to be filled in.

Those who are already having User Name and password for accessing TPCODL events, they can LOGIN using same User Name and password.

If bidder has got User name and password for their other customer, same will not be applicable for TPCODL.

Step 8: You will be able to see the RFQ

Step 9: After review and downloading of all documents click on "[Review Pre-requisites](#)"

Step 10: Review and accept "**Bidder Agreement**".

Step 11: You can see attached pdf tender document against clause no 1.1.1 (Introduction).

Step 12: Vendor has to attach pdf version of technical bid in clause no. 2.1 and 2.2. In this field do not attach any price document.

Price schedule is attached in clause no.3.2. Same has to be downloaded and price and tax details to be filled in as per the format given, print to be taken in vendor's letter head and signature and seal to be made by authorised person. PDF version of this price bid to be attached in clause 3.2 For Price Bid put all the unit price and taxes and duties in provided field. Put "0" (ZERO) in not applicable field.

Step 13: After successfully putting Techno commercial offer and price part then click on "[Submit Entire Response](#)"

Step 13: In addition to above, Bidder shall have to mail to Package owner Arabinda Sahu <arabinda.sahu@tpcentralodisha.com> regarding items for which they have quoted their bid in the following table format before last date of bid submission.

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1.0 Event Information

1.1 Scope of work

Open Tenders are invited through the e-tender bidding process from interested Bidders for entering into Contract for supply of various **Testing instruments** as defined below:

Sl. No.	Description of materials	Unit	Qty	EMD Amount (Rs.) *	Tender Fee incl. of GST (Rs.)**
1.	CB CRM	EA	4	50,000/-	5,000/-
2.	CB TIMER	EA	4		
3.	Transformer Winding Resistance Kit	EA	3		
4.	Transformer Turns Ratio Meter	EA	3		
5.	CT-VT Analyser	EA	3		
6.	Low End I.R. Enabled Thermovision Camera	EA	20		
7.	Cable Height Meter	EA	40		
8.	Binocular Optical Zoom-10X LENS Dia-50MM	EA	10		
9.	Advanced Secondary Injection Kit IEC 618	EA	1		
10.	DFR Test Set	EA	1		
* EMD is exempted for MSMEs registered in the State of Odisha. ** MSMEs registered in the State of Odisha shall pay tender fee of Rs. 1,000/- including GST. For details of MSME norms, pls refer "Annexure VIII". *** Bidders may submit quotations for one or more items, provided they meet the qualifying criteria specified for each item.					

1.2 Availability of Tender Documents

Please Refer "Procedure to participate in the e-Tender".

1.3 Calendar of Events

(a)	Date of sale/ availability of tender documents from TPCODL Website	From 29.05.2025 onwards
(b)	Date by which Interested and Eligible Bidder to pay Tender Fee and confirm participation as mentioned in "Procedure	11.06.2025

	to Participate in Tender”	
(c)	Last Date and time of receipt of pre-bid queries, if any	13.06.2025
(d)	Last Date of Posting Consolidated replies to all the pre-bid queries as received	19.06.2025
(e)	Last date and time of submission of Bids through AIBA E-Tender Portal	25.06.2025; 22:00 Hours

Note :- In the event of last date specified for submission of bids and date of opening of bids is declared as a closed holiday for TPCODL, Bhubaneswar office the last date of submission of bids and date of opening of bids will be the following working day at appointed times.

1.4 Mandatory documents required along with the Bid:

- 1.4.1 EMD of requisite value and validity
- 1.4.2 Tender Fee in case the tender is downloaded from website
- 1.4.3 Requisite Documents for compliance to Qualification Criteria mentioned in Clause 1.7.
- 1.4.4 Drawing, Type Test details along with a sample of each item as specified at Annexure I (as applicable)
- 1.4.5 Duly signed and stamped ‘Schedule of Deviations’ as per Annexure III on bidder’s letter head.
- 1.4.6 Duly signed and stamped ‘Schedule of Commercial Specifications’ as per Annexure IV on bidder’s letter head.
- 1.4.7 Proper authorization letter/ Power of Attorney to sign the tender on the behalf of bidder.
- 1.4.8 Copy of PAN, GST, PF and ESI Registration (In case any of these documents is not available with the bidder, same to be explicitly mentioned in the ‘Schedule of Deviations’)
- 1.4.9 Signed copy of this RFQ as an unconditional acceptance.

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

1.5 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 ‘Annexure III - Schedule of Deviations’ and same shall be submitted as a part of the Technical Bid.

1.6 Right of Acceptance/ Rejection

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

- 1.6.1 EMD of requisite value and validity
- 1.6.2 Tender fee of requisite value
- 1.6.3 Price Bid as per the Price Schedule mentioned in Annexure-I
- 1.6.4 Necessary documents against compliance to Qualification Requirements mentioned at Clause 1.7 of this Tender Document.
- 1.6.5 Filled in Schedule of Deviations as per Annexure III
- 1.6.6 Filled in Schedule of Commercial Specifications as per Annexure IV.
- 1.6.7 Receipt of Bid within the due date and time.

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

1.7 Qualification Criteria

The bidder should meet the following criteria:

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- a) The **average annual turnover** of the bidder shall be a minimum of **Rs. 2.00 Crore in last three financial years**. (FY 2021-22, FY 2022-23, FY 2023-24). Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria. Copy of audited Balance Sheet and P&L Account / Turn over Certificate to be submitted in this regard.
- b) Bidder should be either an **Original Equipment Manufacturer (OEM) or authorized dealer/distributor of OEM** for which they are submitting their bid. In the case of OEM, the bidder must submit a Factory License Certificate / MoA mentioning nature of Business in this regard. The dealer/ distributor is required to submit an Authorization Letter from OEM in this regard in OEM letter head.
- c) OEM should have **In-house testing facilities** for acceptance test as per tender specifications. In case of authorized dealer/ distributor, they should arrange for inspection at OEM's premises. Self-undertaking to be submitted in this regard in OEM letter head.
- d) Bidder/OEM should have **supplied similar instruments** as mentioned in Tender technical specification **during the last 05 years**. Copy of supply order and client certified performance certificate or completion certificate or document evidencing supply of materials should be submitted to establish. If a bidder is an authorized dealer/ distributor of OEM, supply experience of OEM shall also be considered.
- e) **At least two (02) Performance Certificate** by any Discoms / PSUs / Reputed companies is to be submitted. The work against these issued certificates should be completed **in last 07 years** from the date of bid submission. The performance certificate of the client need to be submitted. In case the bidder has got previous association with TP Discoms for supply of similar product, performance feedback of the same will be solely considered irrespective of the performance certificate issued by bidder's other customers.
- f) Bidder must have all statutory compliance like valid PAN, and GSTN registration and Odisha MSME certificate (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. Bidders must agree to these rules prior to participating. In addition to other remedies available, TPCODL 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. A bidder who violates the market place 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/NIT

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 TPCODL. This includes all bidding information submitted to

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TPCODL. All tender documents remain the property of TPCODL and all suppliers are required to return these documents to TPCODL upon request. Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

2.0 Evaluation Criteria

- The bids will be evaluated technically on the compliance to tender terms and conditions.
- The bids will be evaluated commercially on **individual item basis (all-inclusive lowest cost at item level)** as calculated in Schedule of Items [Annexure I] . TPCODL reserves the right to split the order line item wise and / or quantity wise, among more than one Bidders. Hence all bidders are advised to quote their most competitive rates.
- Bidder has to mandatorily quote as per schedule of line item[Annexure-I]. Failing to do so TPCODL may reject the bid. Bidder has to submit a unpriced bid with in part-1 technical bid document, for the each line item that he quote for.

NOTE: In case of a new bidder not registered, factory inspection and evaluation shall be carried out to ascertain bidder's manufacturing capability and quality procedures. However TPCODL 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 TPCODL shall be final and binding on the bidder in this regard.

2.1 Price Variation Clause: The prices shall remain **FIRM** during the entire contract period.

3.0 Submission of Bid Documents

3.1 Bid Submission

Bidders are requested to submit their offer in line with this Tender document through e-tendering process.

Please note all future correspondence regarding the tender, bid submission, bid submission date extension, Pre-bid query etc will happen only through TPCODL E-Tender system (Ariba).

No e-mail or verbal correspondence will be responded. All communication will be done strictly with the bidder who have done the above step to participate in the Tender.

Bids shall be submitted in 3 (Three) parts:

FIRST PART: "EMD" as applicable for the line item(s) shall be submitted. The EMD shall be valid for 210 days from the due date of bid submission in the form of NEFT/ RTGS / Bank Guarantee ~~/ Bank Draft / Bankers Pay Order~~ (issued from a Scheduled Bank) favoring 'TP Central Odisha Distribution Limited' payable at Bhubaneswar. The EMD (BG) has to be strictly in the format as mentioned in General Condition of Contract, failing which it shall not be accepted and the bid as submitted shall be liable for rejection. A separate non-refundable tender fee of stipulated amount also needs to be transferred online through NEFT/ RTGS in case the tender document is downloaded from our website.

TPCODL/ TPCODL Bank Details for transferring Tender Fee and EMD is as below:

Account Name: TP Central Odisha Distribution Limited

Bank Name: SBI, IDCO Towers, Bhubaneswar

Bank Account No. : 10835304915

IFSC Code : SBIN0007891

EMD is strictly preferred in form of Bank Guarantee and to be delivered at the following address. However in view of present situation if Bidder is finding it difficult to make and submit BG for EMD amount, they can do online transfer of EMD amount in the above mentioned Account and submit proof of the same as part of Bid Submission.

Please note that in such case, Tender Fee and EMD should be strictly 2 separate transactions.

Please note as return of EMD from Bank Account is non standard practice the same may take more time than return of EMD BG.

EMD Original Hard Copy shall be delivered at the following address in Envelope clearly indicating Tender Reference/ Enquiry Number, Name of Tender and Bidder Name

Chief (Procurement & Stores)

TP CENTRAL ODISHA DISTRIBUTION LIMITED,

1st Floor, Anuj Building, Plot No.29, Satya Nagar, Bhubaneswar, Odisha 751007

SECOND PART: “TECHNICAL BID” shall contain the following documents:

- a) Documentary evidence in support of qualifying criteria
- b) Technical literature/GTP/Type test report etc. *(if applicable)*
- c) Qualified manpower (if available)
- d) Testing facilities *(if applicable)*
- e) No Deviation Certificate as per the Annexure III – Schedule of Deviations
- f) Acceptance to Commercial Terms and Conditions viz Delivery schedule/period, payment terms etc. as per the Annexure IV – Schedule of Commercial Specifications.
- g) Quality Assurance Plan/Inspection Test Plan for supply items *(if applicable)*

The technical bid shall be properly indexed and is to be submitted through TPCODL E-tender System (Ariba) only. Hard Copy of Technical Bids need not be submitted.

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and the TPCODL, 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

THIRD PART: “PRICE BID” shall contain only the price details and strictly in format as mentioned in Annexure I (separate Price Bid for Lot-A & Lot-B shall be submitted) with explicit break up of basic prices, Taxes & duties, Freight etc. In case any discrepancy is observed between the item description stated in Schedule of Items mentioned in the tender and the price bid submitted by the bidder, the item description as mentioned in the tender document (to the extent modified through Corrigendum issued if any) shall prevail. Price Bid is to be submitted in soft copy through TPCODL E-Tendering system (Ariba) only. **Hard copy of Price Bid not be submitted.**

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

Please note all correspondence regarding the tender, bid submission, bid submission date extension, Pre-bid query etc will happen only through TPCODL E-Tender system (Ariba).

No e-mail or verbal correspondence will be responded. All communication will be done strictly with the bidder who have done the above step to participate in the Tender.

Communication Details:

Package Owner- Contract Branch

Name: Mr. Arabinda Sahu
Designation: Executive Engineer – Contracts
Contact No: 94383-19343
E-Mail ID: arabinda.sahu@tpcentralodisha.com

Escalation Matrix

Name: Mr. Asish Karmakar
Designation: HOD -Contracts
Contact No: 87684-55566
E-Mail ID: Asish.Karmakar@tpcentralodisha.com

Bidders are strictly advised to communicate with Package Owner through TPCODL E-tender System (Ariba) only. They need to pay Tender Participation Fee and receive the Ariba log-in. Above escalation details are for reference purpose only.

3.3 Bid Prices

Bidders shall quote for the entire Scope of Supply / work with a break up 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 TPCODL. 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 break up 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 Specifications / Scope of Work 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.

3.5 Period of Validity of Bids

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

Notwithstanding clause above, the TPCODL 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 TPCODL against the risk of bidder's conduct which would warrant forfeiture.

The EMD shall be denominated in any of the following form:

- Banker's Cheque/ Demand Draft/ Pay order drawn in favor of "TP Central Odisha Distribution Limited", payable at Bhubaneswar.
- Online transfer of requisite amount through NEFT/ RTGS.
- Bank Guarantee valid for 210 days after due date of submission.

The EMD shall be forfeited in case of:

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

Or

- b) The case of a successful bidder, if the Bidder does not
- i) accept the purchase order, or
 - ii) furnish the required performance security BG

3.9 Type Tests (if applicable)

The type tests specified in TPCODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/ reject such bids rests with TPCODL.

4.0 Bid Opening & Evaluation process

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 the TPCODL's processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

4.2 Technical Bid Opening

The bids shall be opened internally by TPCODL. Participating Bidders will get mail intimation from TPCODL E-Tender system (Ariba) when their Technical Bids are opened.

First the envelope marked "EMD" will be opened. Bids without EMD/ cost of tender (if applicable) of required amount/ validity in prescribed format, shall be rejected.

4.3 Preliminary Examination of Bids/ Responsiveness

TPCODL 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. TPCODL may ask for submission of original documents in order to verify the documents submitted in support of qualification criteria.

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 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.

Prior to the detailed evaluation, TPCODL 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 TPCODL and/or the TPCODL 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, TPCODL may, at its discretion, ask the Bidder for a clarification on its Bid for any deviations with respect to the TPCODL 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 TPCODL.

4.5 Price Bid Opening

Price Bid of only Technically and / or safety qualified Bidders shall be considered and open internally by TPCODL. Bidders will get mail intimation from TPCODL E-Tender system (Ariba) when their Price Bids are opened.

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 TPCODL without any further correspondence in this regard.

4.6 Reverse Auctions

TPCODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products/ services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached as Annexure VI of this document. The bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form attached as Annexure VI as a token of acceptance for the same.

Reverse Auction shall be as per the below approach:

No of bidders to be allowed in RA process shall be : Total No of bidders on whom tender would be split PLUS 2 more bidders .

Illustrative example: Total no of qualified bidders is 10 & tender needs to split amongst 4 bidders.

PLUS 2 means $(04 + 02 = 06)$ means lowest 6 bidders i.e., L1 to L6 bidders would be allowed in the RA process. Balance, H1 to H4 bidders would not be allowed in the RA process.

In case – Total no of qualified bidders is equal to or less than the PLUS 2 number, all qualified bidders shall be allowed in the RA process.

Illustrative example: Total no of qualified bidders is 4 & tender needs to split amongst 2 bidders. PLUS 2 means $(02 + 02 = 04)$, so all 4 qualified bidders would be allowed in the RA process .

Illustrative example: Total no of qualified bidders is 3 & tender would be awarded to single party only. PLUS 2 means $(01 + 02 = 03)$, so all 3 qualified bidders would be allowed in the RA process

TPCODL reserves the right to revise above criteria without assigning any reason thereof.

5.0 Award Decision

TPCODL 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 Annexure I (Schedule of Items) subject to any corrections required in line with Clause 4.3 above. The decision to place rate contract / purchase order / LOI solely depends on TPCODL on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that TPCODL may deem relevant.

TPCODL 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 TPCODL reserves the right to award other suppliers who are found fit.

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. Schedule of Items (Annexure I)
2. Post Award Contract Administration (Clause 7.0)
3. Submission of Bid Documents (Clause 3.0)
4. Scope of Work and SLA (if any)
5. Technical Specifications (Annexure II)
6. Inspection Test Plan (if any)
7. Acceptance Form for Participation in Reverse Auction (Annexure VI)
8. General Conditions of Contract (Annexure VII)

7.0 Post Award Contract Administration

7.1 Special Conditions of Contract

7.1.1. Award of Contract:

After finalization of tender, Purchase Order shall be issued on successful bidder.

7.1.2. Price / Rates / Taxes:

The Contract price shall remain **FIRM** till Contract period except statutory variation in Taxes, which shall be to the account of TPCODL against Tax Invoice.

7.1.3. Delivery Period:

Delivery period shall be **60 days** from date of receipt of release order / CAT-A issuance, whichever is later.

7.1.4. Guarantee Period:

Bidder shall stand guarantee towards design, materials, workmanship & quality of process/manufacturing of items under the 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 the Company up

to a period of **5 Years from the date of last supply made under a PO**, supplier shall be liable to undertake to replace/rectify such defects at his own costs.

7.1.5. Performance Bank Guarantee:

Business Associate (BA) shall submit applicable Performance Bank Guarantee within 30 days of issuance of PO. PBG applicable shall be **10% of PO Value** valid till end of the Guarantee Period of contract basing on the stipulated delivery period plus additional 1 month claim period. The B.G validity period shall be extended from time to time as may be required under the contract.

7.1.6. Drawing/ Submittal/ Inspection:

The relevant drawings and GTPs/ type test report need to be submitted as per technical specification. The relevant shall be submitted within one week of receipt of order by the successful bidder to TPCODL for approval. In case, re-submission of drawings is required on request of TPCODL, same needs to be submitted back to TPCODL within 7 days of such request.

7.1.7. Payment Terms:

On delivery of the materials in good condition and certification of acceptance by certified official, Associate shall submit the Bills/ Invoices in original in the name of TP Central Odisha Distribution Limited to Invoice Desk. The payment shall be released within **45 days** from the date of submission of certified bills/ invoices.

7.1.8. Liquidated Damages:

If the Contractor fails to supply the Materials/Equipment within the schedule delivery period, TPCODL has the right to levy LD **@1% for each week** of delay or part thereof of the contract price of undelivered portion of the materials supplied beyond scheduled delivery period subject to the maximum of **10% of the total un-delivered contract price of a PO**.

7.1.9 Delivery location:

TPCODL Store at Cuttack or at Bhubaneswar, Odisha.

7.2 Climate Change

Significant quantities of waste are generated during the execution of project and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. This would ensure the minimization of environmental and social impact in order to combat the climate change.

7.3 Ethics

TPCODL is an ethical organization and as a policy TPCODL 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.

TPCODL work practices are governed by the Tata Code of Conduct which emphasizes on the following:

- We shall select our suppliers and service providers fairly and transparently.
- 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.

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- Our suppliers and service providers shall represent our company only with duly authorized 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.
- 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.
- We respect our obligations on the use of third party intellectual property and data.

Bidder is advised to refer GCC attached for more information.

Any ethical concerns with respect to this tender can be reported to the following e-mail ID: ethics@tpcentralodisha.com.

8.0 Specification and standards:

Attached separately with tender.

9.0 General Condition of Contract

Any condition not mentioned above shall be applicable as per GCC for Supply attached along with this tender.

10.0 Safety

Safety related requirements as mentioned in our safety Manual is put in the Company's website and same shall be strictly followed.

<http://www.tpcentralodisha.com>

All Associates shall strictly abide by the guidelines provided in the safety manual at all relevant stages during the contract period.

ANNEXURE I

Schedule for Items

Sl. No	Item Description	Unit	Qty	Unit price (Exl GST) (In Rs.)	GST (In Rs.)	Unit Price (Incl. GST) (In Rs.)	Total Amount (In Rs.)
a	b	c	d	e	f	g=e+f	h=gxd
1	CB CRM	EA	4				
2	CB TIMER	EA	4				
3	Transformer Winding Resistance Kit	EA	3				
4	Transformer Turns Ratio Meter	EA	3				
5	CT-VT Analyser	EA	3				
6	Low End I.R. Enabled Thermovision Camera	EA	20				
7	Cable Height Meter	EA	40				
8	Binocular Optical Zoom-10X LENS DIA-50MM	EA	10				
9	Advanced Secondary Injection Kit IEC 618	EA	1				
10	DFR Test Set	EA	1				
TOTAL							

NOTE:

- Prices shall be firm.
- Bidders may submit quotations for one or more items, provided they meet the qualifying criteria specified for each item.**
- The bids will be evaluated commercially on **individual item basis (all-inclusive lowest cost at item)**.
- The bidders are advised to quote prices strictly in the above format. Failing to do so, bids are liable for rejection.
- The bidder must fill each and every column of the above format. **Mentioning "extra/inclusive" in any of the column may lead for rejection of the price bid.**
- No cutting/ overwriting in the prices is permissible.

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- The unit price with GST in column no.7 (g), is landed price (including ex-work price, loading, unloading, transit insurance etc.) at store site Bhubaneswar/Cuttack of TPCODL.

Signature & Seal of the Bidder

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ANNEXURE II
Technical Specifications

Attached separately with the tender.

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ANNEXURE III**Schedule of Deviations**

*Bidders are advised to refrain from taking any deviations on this TENDER. Still in case of any deviations, all such deviations from this tender document shall be set out by the Bidders, Clause by Clause in this schedule and submit the same as a part of the **Technical Bid**.*

Unless specifically mentioned in this schedule, the tender shall be deemed to confirm the TPCODL's specifications:

S. No.	Clause No.	Tender Clause Details	Details of deviation with justifications

By signing this document we hereby withdraw all the deviations whatsoever taken anywhere in this bid document and comply to all the terms and conditions, technical specifications, scope of work etc. as mentioned in the standard document except those as mentioned above.

Seal of the Bidder:

Signature:

Name:

ANNEXURE IV

Schedule of Commercial Specifications

(The bidders shall mandatorily fill in this schedule and enclose it with the offer Part I: Technical Bid. In the absence of all these details, the offer may not be acceptable.)

S. No.	Particulars	Remarks
1.	Prices firm or subject to variation (If variable indicate the price variation clause with the ceiling if applicable)	Firm
1a.	If variable price variation on clause given	Not applicable
1b.	Ceiling	Not applicable
1c.	Inclusive of GST	Yes (18% rate)
1d.	Inclusive of transit insurance	Yes
2.	Delivery	As per Tender
3.	Guarantee clause acceptable	As per Tender
4.	Terms of payment acceptable	As per Tender
5.	Performance Bank Guarantee acceptable	As per Tender
6.	Liquidated damages clause acceptable	As per Tender
7.	Validity (180 days) (From the date of opening of technical bid)	Yes
8.	Inspection during stage of manufacture	Yes
9.	Rebate for increased quantity	No
10.	Change in price for reduced quantity	No
11.	Covered under Small Scale and Ancillary Industrial Undertaking Act 1992	Yes / No (If Yes, indicate, SSI Reg'n No.)

Signature & Seal of the Bidder

ANNEXURE V

Checklist of all the documents to be submitted with the Bid

Bidder has to mandatorily fill in the checklist mentioned below:-

S. No.	Documents attached	Yes / No / Not Applicable
1	EMD of required value	
2	Tender Fee as mentioned in this RFQ	
3	Company profile/ organogram	
4	Signed copy of this RFQ as an unconditional acceptance	
4(i)	Unpriced bid for the line Item that quoted for(Annexure-I) schedule of Item (Un Price bid) (mention quoted/not quoted against the Line item)	
5	Duly filled schedule of commercial specifications (Annexure IV)	
6	Sheet of commercial/ technical deviation if any (Annexure III)	
7	Balance sheet for the last completed three financial years; mandatorily enclosing Profit & loss account statement	
8	Acknowledgement for Testing facilities if available (duly mentioned on bidder letter head)	
9	List of Machine/ tools with updated calibration certificates if applicable	
10	Details of order copy (duly mentioned on bidder letter head)	
11	Order copies as a proof of quantity executed	
12	Details of Type Tests if applicable (duly mentioned on bidder letter head)	
13	All the relevant Type test certificates as per relevant IS/ IEC (CPRI/ ERDA/ other certified agency) if applicable	
14	Project/ Supply Completion certificates	
15	Performance certificates	
16	Client Testimonial/ Performance Certificates	
17	Credit rating/ Solvency certificate	
18	Undertaking regarding non blacklisting (On company letter head)	
19	List of trained/ Untrained Manpower	

Signature & Seal of the Bidder

Annexure VI**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, TPCODL intends to use the reverse auctions 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. TPCODL shall provide the user id and password to the authorized representative of the bidder. *(Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).*
2. TPCODL will make every effort to make the bid process transparent. However, the award decision by TPCODL would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPCODL, 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 TPCODL.
6. In case of intranet medium, TPCODL shall provide the infrastructure to bidders. Further, TPCODL 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 TPCODL.
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 TPCODL 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 TPCODL.
12. 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

Annexure VII

General Conditions of Contract –
Attached separately with the tender.

Annexure VIII**Preferential norms for procurement from Local MSMEs****1) Tender Fees**

To participate in the tender, MSMEs registered in the State of Odisha shall pay Rs.1,000/- including GST towards cost of tender paper.

2) Earnest Money Deposit (EMD)

EMD shall be exempted for MSME registered in the State of Odisha. However, Bidder shall be barred to participate in the tendering process for a period of 2 years in case it backs out post award of the contract.

3) Qualification Requirement for Open Tenders

Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria.

For past experience, instead of relying on the volumes / value of earlier Supplies / Projects, assessment of the Bidder shall be done on the basis of feedback from Customers. Past performance experience at Tata Power and its Group Companies shall supersede feedback from other Customers.

4) Reservation for MSME

It shall be mandatory to procure at least 20% of the total volume of the procurement from MSME registered in the State of Odisha (however, it shall not apply where goods/services are not available with the MSME), subject to matching L1 discovered prices and meeting technical specifications including quality requirements.

5) Performance Bank Guarantees

Performance Bank Guarantee for MSME registered in the State of Odisha shall be 25% of the value normally prescribed.

Annexure IX

Safety Policy and Safety Terms and Conditions –
Attached separately with the tender.

Annexure X

Tata Code of Conduct

The Owner abides by the Tata Code of Conduct in all its dealing with stake holders and the same shall be binding on the Owner and the Contractor for dealings under this Order/ Contract. A copy of the Tata Code of Conduct is available a tour website:

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

The Contractor is requested to bring any concerns regarding this to the notice of our Chief Procurement & Stores mail ID: pkjain@tatapower.com.

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Annexure XI



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

TATA POWER
Lighting up Lives!





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 POWER
Lighting up Lives!



Annexure-XII Quality, Safety, Occupational Health & Environment



TP CENTRAL ODISHA
DISTRIBUTION LIMITED

(A Joint Venture of Tata Power and Government of Odisha)



Integrated Management System Policy

Quality, Safety, Occupational Health, Environment

We at TP Central Odisha Distribution Limited are committed to deliver world class service and reliable power through an energised workforce leading to ever increasing satisfaction of its customers, environmental protection and safe and healthy working condition.

This will be achieved by:

- Complying with all the requirements of ISO-9001, ISO-14001 and ISO-45001 management system standards through engaged workforce
- Complying with applicable Legal requirements
- Continually improving Quality, Environment and Occupational Health & Safety Performance
- Ensuring Environmental protection through Prevention of Pollution
- Conservation of Natural Resources
- Creating a work environment which encourages team work, safe work practices, learning and innovation
- Providing safe and healthy conditions that prevents work related injury and illness
- Eliminating hazards and reducing OH&S Risk
- Ensuring participation and consultation of workers

This policy will be made available to interested parties.

Date: 1st June, 2023

Arvind Singh
Chief Executive Officer

Annexure-XIII**UNDER TAKING**

Tender No:

Tender Subject:

This is to certify that

1. Apart from our bid in the name ofwe have not participated in this tender through any other name who is/are related firm (where owner, Partner, Director are same or holding stake in such firm).

2. In case such relation is found out between our firm and any other firm who has participated in this tender, TPCODL reserves right to disqualify bids from all such related firms or cancel Purchase Order placed on such firm/firms.

Signature and company seal of bidder

	TATA POWER COMPANY LIMITED, ODISHA		
	TECHNICAL SPECIFICATION		
Doc. Title	Meter for measurement of Contact Resistance of circuit breakers, isolators, bus bar joints, welded joints etc.		
Doc. No	ENG-GEN-34	Eff. Date: 01.04.2020	
Rev. No	00	Page 1 of 4	
Prepared By:	Reviewed By:	Approved By:	Issued By:

1. SCOPE:

The scope of this technical document is to procure an instrument for measurement of contact resistance meter, capable of directly measuring micro-ohm values at 100 Amps DC under live switchyard conditions.

The instrument, along with all the accessories, should reliably measure contact resistance of circuit breakers, isolators, bus bar joints, welded joints etc., under the hostile electrostatic noise found in live EHV switchyards.

The specific requirements are covered in the enclosed general technical requirement.

The instrument shall be used outdoors, and should be capable of operation throughout the year under site conditions for testing un-mounted apparatus or apparatus that are mounted but isolated inside the power system equipment.

2. CLIMATIC CONDITIONS OF THE INSTALLATION:

1. Maximum altitude above sea level 1,000m
2. Maximum ambient air temperature 50°C
3. Maximum daily average ambient air temperature 35°C
4. Minimum ambient air temperature 0°C
5. Maximum relative humidity 95%
6. Average number of thunderstorm days per annum (isokeraunic level) 70
7. Average number of rainy days per annum 120
8. Average annual rainfall 150cm
9. Earthquakes of an intensity in horizontal direction - equivalent to seismic acceleration of 0.3g
10. Earthquakes of an intensity in vertical direction - equivalent to seismic acceleration of 0.15g (g being acceleration due to gravity)
13. Wind velocity: 300 km/hr, 200 km/hr and 160 km/hr. environmentally, some of the regions, where the work will take place includes coastal areas, subject to high relative humidity, which can give rise to condensation. Onshore winds will frequently be salt laden. On occasions, the combination of salt and condensation may create pollution conditions for outdoor insulators. Some places are in heavily industrial polluted areas. Therefore,
Outdoor material and equipment shall be designed and protected for use in exposed, heavily polluted, salty, corrosive and humid coastal atmosphere

3. GENERAL TECHNICAL PARTICULARS:

Initiator		HOG (Engineering)	
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	TATA POWER COMPANY LIMITED, ODISHA		
	TECHNICAL SPECIFICATION		
Doc. Title	Meter for measurement of Contact Resistance of circuit breakers, isolators, bus bar joints, welded joints etc.		
Doc. No	ENG-GEN-34		Eff. Date: 01.04.2020
Rev. No	00		Page 2 of 4
Prepared By:	Reviewed By:	Approved By:	Issued By:

Sr. No	DESCRIPTION	REQUIREMENT	BIDDER RESPONSE (OFFERED INSTRUMENT SPECIFICATION)
1	Resistance Ranges:	199.9 $\mu\Omega$ and 1999 $\mu\Omega$	
2	Resolution :	0.1 $\mu\Omega$ & 1 $\mu\Omega$ respectively	
3	Accuracy:	Value $\pm 2\% \pm 2$ digit	
4	Current:	100 A DC	
5	Display:	Two, 3½ digit ½ inch LCD, for current and resistance values	
6	Output	100 A DC	
7	Power	230 V AC $\pm 15\%$, 50 Hz $\pm 10\%$, 75 VA	
8	Battery	Instrument operation on inbuilt rechargeable Battery & AC Supply.	
9	Dimensions and Weight	Lightweight not exceeding 10 kg's. And for portable use	
10	Standard Accessories	- Calibrated Test Cables 15 m long, with Ck clamps of 75 mm opening - 1 set - Calibrated Test Cables 5 m long, with Ck clamps of 75 mm opening - 1 set - Calibrated Test Cables 20 m long, with Ck clamps of 75/100/150mm opening – 1 set - Master Earthing Cable, 10m long 1 - set - Mains Chord 3 m long - 1 no. - Spare fuses - 1 set - Carrying case for Test Lead Set - 1no. - Instruction Manual - 1no	

Initiator		HOG (Engineering)	
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TATA POWER COMPANY LIMITED, ODISHA			
TECHNICAL SPECIFICATION			
Doc. Title	Meter for measurement of Contact Resistance of circuit breakers, isolators, bus bar joints, welded joints etc.		
Doc. No	ENG-GEN-34	Eff. Date: 01.04.2020	
Rev. No	00	Page 3 of 4	
Prepared By:	Reviewed By:	Approved By:	Issued By:

11	Safety feature	Auto trip provision with alarm signal in case of occurrence of body leakage for safety purpose	
12	Warranty	5 years	
13	Type Test / Standard	- IEC 62271 / IS 13118 - Dry Heat Test under IEC 60068-2-2, - Steady State Damp Heat Test under IEC 60068-2-78, - Cyclic Test under IEC 60068-2-14, - Vibration Test under IEC 60068-2-6, - Bump Test under IEC 60068-2-29, - Mechanical Shock Test under IEC 60068-2-27, - Safety Test under IEC 61010-1	
14	Demonstration	Bidder has to provide proper demonstration of the quoted instrument within a week of the bid opening.	

4. Construction features, NAME PLATE AND MARKING:

The equipment shall be provided with durable and weather-proof casing, and legible name plate, effectively secured against removal. The name plate shall be indelibly and distinctly marked with all essential particulars as per the relevant standards along with the following. The terminal markings shall also be in line with the requirements of the relevant standards.

Initiator		HOG (Engineering)	
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	TATA POWER COMPANY LIMITED, ODISHA		
	TECHNICAL SPECIFICATION		
Doc. Title	Meter for measurement of Contact Resistance of circuit breakers, isolators, bus bar joints, welded joints etc.		
Doc. No	ENG-GEN-34	Eff. Date: 01.04.2020	
Rev. No	00	Page 4 of 4	
Prepared By:	Reviewed By:	Approved By:	Issued By:

The instrument shall have a built-in constant current source, a precision instrumentation amplifier, digital readout and control logic for accurate and precision measurements.

5. GENERAL TERMS & CONDITIONS:

- Operating manual and all accessories to be provided by bidder
- Necessary training to TPCODL personnel regarding operating instrument shall be in the scope of bidder.

6. CALIBRATION CERTIFICATE/TEST REPORTS:

Bidder to provide the Calibration certificate & test reports at the time of supply of material which has got approved during factory inspection. All the tests shall be conducted at NABL/NPL accredited lab as per the relevant standards. Test should have been conducted in certified test laboratories for all instruments to be supplied. In the event of any discrepancy in the test reports i.e. any test report not acceptable/ type test not carried out, the same shall be carried out without any cost implication to TPCODL along with PDI inspection call. The AMC of 5 years shall be inbuilt in the scope of order, including the repair and annual calibration of the instrument. It's obvious to mention that self-calibrated kits are most welcome since they are huge expense reliever.

Initiator		HOG (Engineering)	
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	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, BHUBANESHWAR		
	TECHNICAL SPECIFICATION		
Doc. Title	Meter for measurement of Timing of circuit breakers		
Doc. No		Eff. Date:	
Rev. No	00	Page 1 of 4	
Prepared By:	Reviewed By:	Approved By:	Issued By:

1. SCOPE:

The scope of this technical document is to procure an instrument for measurement of breaker operation time of main contacts of 3 poles connected end to end, simultaneously, under live switchyard conditions. The instrument should measure & display the Open, Close & Close-Open timings of main contacts of all types of HV and EHV circuit breakers under live switchyard conditions. The instrument, along with all the accessories, should reliably measure breaker timing of circuit breakers, and load break switches, under the hostile electrostatic noise found in live EHV switchyards.

The specific requirements are covered in the enclosed general technical requirement.

The instrument shall be used outdoors, and should be capable of operation throughout the year under site conditions for testing un-mounted apparatus or apparatus that are mounted but isolated inside the power system equipment.

2. CLIMATIC CONDITIONS OF THE INSTALLATION:

The service conditions shall be as follows:

1. Maximum altitude above sea level 1,000m
2. Maximum ambient air temperature 50°C
3. Maximum daily average ambient air temperature 35°C
4. Minimum ambient air temperature 0°C
5. Maximum relative humidity 95%
6. Average number of thunderstorm days per annum (isokeraunic level) 70
7. Average number of rainy days per annum 120
8. Average annual rainfall 150cm
9. Earthquakes of an intensity in horizontal direction - equivalent to seismic acceleration of 0.3g
10. Earthquakes of an intensity in vertical direction - equivalent to seismic acceleration of 0.15g (g being acceleration due to gravity)
11. Wind velocity: 300 km/hr, 200 km/hr and 160 km/hr. environmentally, some of the regions, where the work will take place includes coastal areas, subject to high relative humidity, which can give rise to condensation. Onshore winds will frequently be salt laden. On occasions, the combination of salt and condensation may create pollution conditions for outdoor insulators. Some places are in heavily industrial polluted areas. Therefore, Outdoor material and equipment shall be designed and protected for use in exposed, heavily polluted, salty, corrosive and humid coastal atmosphere

Initiator		Approver	
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TPCODL	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, BHUBANESHWAR		
	TECHNICAL SPECIFICATION		
Doc. Title	Meter for measurement of Timing of circuit breakers		
Doc. No		Eff. Date:	
Rev. No	00	Page 2 of 4	
Prepared By:	Reviewed By:	Approved By:	Issued By:

The design of equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.1 g.

3. GENERAL TECHNICAL PARTICULARS:

Sr. No.	DESCRIPTION	REQUIREMENT	BIDDER RESPONSE (OFFERED INSTRUMENT SPECIFICATION)
1	Channels:	3	
2	Control of CB:	Through 300V/30A SSRs to Trip and Close the connected CB	
3	Output:	4 line 20 character backlit display (LCD preferred)	
4	Range:	Upto 999 ms with several ranges.	
5	Resolution :	0.1 ms	
6	Accuracy:	Value of 0.05% (+/-) 1 digit	
7	Test leads:	Set of 15 m, wear resistant Test Cables, and mains supply chord.	
8	Input Power	230 V AC $\pm$ 15%, 50 Hz $\pm$ 10%, 75 VA	
9	Battery	Kit should be able to operate on both Mains & Inbuilt Battery Kit should able to conduct min of 50 No's operations	
10	Dimensions and Weight	Lightweight not exceeding 7 kgs. And for portable use	
11	Safety feature	Auto trip provision with alarm signal in case of occurrence of body leakage for safety purpose	
12	Test Reports	Instrument should have inbuilt memory to save min of 50 Results with date & time of Testing.	
13	Communication	Kit should have RS232/USB port for downloading data to PC	
14	Warranty	5 years	

Initiator		Approver	
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	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, BHUBANESHWAR		
	TECHNICAL SPECIFICATION		
Doc. Title	Meter for measurement of Timing of circuit breakers		
Doc. No		Eff. Date:	
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Prepared By:	Reviewed By:	Approved By:	Issued By:

15	Demo	Bidder has to demonstrate the KIT within one week from the tender opening	
16	STANDARD ACCESSORIES	● Calibrated Test Cables 15 m long - 1 set ● Master Earthing Cable, 10 m long -1 set ● Mains Chord, 3 m long -1 no. ● Spare fuses -1 set ● Carrying case for Test Lead Set-1no. ● Instruction Manual -1 no ● Data Analysis Numerical Software with communication cable - 1 set.	

Initiator		Approver	
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	TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED, BHUBANESHWAR		
	TECHNICAL SPECIFICATION		
Doc. Title	Meter for measurement of Timing of circuit breakers		
Doc. No		Eff. Date:	
Rev. No	00	Page 4 of 4	
Prepared By:	Reviewed By:	Approved By:	Issued By:

4. Construction features, NAME PLATE AND MARKING:

The equipment shall be provided with durable and weather-proof casing, and legible name plate, effectively secured against removal. The name plate shall be indelibly and distinctly marked with all essential particulars as per the relevant standards along with the following. The terminal markings shall also be in line with the requirements of the relevant standards.

The instrument shall have the capability of testing all the 3 poles of gang operated CB, or 3 single pole CB simultaneously with the feature to measure, display and print CLOSE, OPEN AND C-O times in various configurations, by giving requisite instruction to the CB. The meter shall be capable of auto and self-calibration feature. The instrument should also be able to store data of the tests carried out, in a time-stamped downloadable format and must be in a format to be saved, viewed and organized on Computer using latest version of Windows platform. The software has to be supplied free or in all-inclusive price.

5. GENERAL TERMS & CONDITIONS:

- Operating manual and all accessories to be provided by bidder
- Necessary on-site training to TPCODL personnel regarding operating instrument shall be in the scope of bidder
- Bidder should have to do successful field demonstration at TPCODL site on the same quoted instrument during technical evaluation.

6. CALIBRATION CERTIFICATE/TEST REPORTS:

Kit should be suitable and tested for for Dry Heat Test, Steady State Damp Heat Test, Change of Temp Test, Vibration Test, Bump Test under IS9000, Safety Test under IEC 61010-1 and All EMC Tests in NABL/NPL accredited lab. Copy of Type test report shall be submitted along-with the bid

Factory Test & Calibration report (Traceable to NABL) should be submitted at the time of Pre Dispatch Inspection call.

Bidder to provide the Calibration certificate & test reports at the time of supply of material. All the tests shall be conducted at NABL/NPL accredited lab as per the relevant standards. Test should have been conducted in certified test laboratories for all instruments to be supplied. In the event of any discrepancy in the test reports i.e. any test report not acceptable/ type test not carried out, same shall be carried out without any cost implication to TPCODL. The AMC of 5 years shall be inbuilt in the scope of order, including the repair and annual calibration of the instrument. Auto and self-calibrated equipment is preferable.

Initiator		Approver	
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	TATA POWER CENTRAL ODISHA LIMITED, BHUBANESWAR		
	TECHNICAL SPECIFICATION		
Doc. Title	Standard Technical particulars for Transformer winding resistance meter		
Doc. No	ENG-GEN-27	Eff. Date: 01.04.2020	
Rev. No	00	Page 1 of 3	
Prepared By:	Reviewed By:	Approved By:	Issued By:

1. SCOPE:

The scope of this technical document is to give design & constructional features for the Transformer winding resistance meter. The specific requirements are covered in the enclosed General Technical Requirements.

The instrument should be suitable for offline measurement of DC winding resistance of transformer (including OLTC), reactors, motors, generator etc. up to 765kV class, in live switchyards environment up to 765kV level, as per applicable standards / testing procedure.

2. CLIMATIC CONDITIONS OF THE INSTALLATION:

1. Maximum altitude above sea level 1,000m
2. Maximum ambient air temperature 50°C
3. Maximum daily average ambient air temperature 35°C
4. Minimum ambient air temperature 0°C
5. Maximum relative humidity 95%
6. Average number of thunderstorm days per annum (isokeraunic level) 70
7. Average number of rainy days per annum 120
8. Average annual rainfall 150cm
9. Earthquakes of an intensity in horizontal direction - equivalent to seismic acceleration of 0.3g
10. Earthquakes of an intensity in vertical direction - equivalent to seismic acceleration of 0.15g (g being acceleration due to gravity)
11. Wind velocity: 300 km/hr, 200 km/hr and 160 km/hr. environmentally, some of the regions, where the work will take place includes coastal areas, subject to high relative humidity, which can give rise to condensation. Onshore winds will frequently be salt laden. On occasions, the combination of salt and condensation may create pollution conditions for outdoor insulators. Some places are in heavily industrial polluted areas. Therefore, Outdoor material and equipment shall be designed and protected for use in exposed, heavily polluted, salty, corrosive and humid coastal atmosphere

3. GENERAL TECHNICAL REQUIREMENTS:

Winding resistance testing is an important part of a transformer maintenance activity. Transformers are subject to overloading with larger temperature variations. Winding resistance measurements can assure that the connections are made correctly and that no open or short circuits are present.

Sl. No.	Technical particulars	TPCODL Requirements	Bidder Response
1	Input Power	230 Volts $\pm$ 10%, 50 Hz, Single phase AC supply	
2	Testing current	25A, 10A, 5A, 1A, 100mA, 10mA	
3	Resistance range	Up to 2Kohms	

Initiator		HOG (Engineering)	
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	TATA POWER CENTRAL ODISHA LIMITED, BHUBANESWAR		
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Doc. No	ENG-GEN-27	Eff. Date: 01.04.2020	
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Prepared By:	Reviewed By:	Approved By:	Issued By:

		Minimum 799.9μΩ should be measured in 25A current range And 1.999mΩ should be measured in 10A current range.	
4	Accuracy	Value of 0.5% (+/-) 5 digit	
5	Open Circuit Voltage	minimum of 50V DC for quick stabilization of results	
6	Resolution	Best resolution- 0.1 μΩ (Scale of resistance should include μΩ & mΩ) 4½ digit	
7	Display	Color LCD viewable in bright daylight, actual value of the current	
8	Measuring temperature (For Kit with RTD Probe)	0 to 100°C, with a resolution of 0.1°C and an accuracy of ±1°C	
9	Built-in Memory	minimum 2000 results with time stamping	
10	Feature	- Automatic calculation of temperature compensated reading of resistance for Copper & Aluminum - Auto discharge after test - Warning messages for current raising	
11	Housing	Rugged with wheels & retractable extension handle	
12	Dimensions	To be provided by bidder	
13	Weight	Should be for portable use with light weight	
14	Test Leads	Shall be suitable to test HV/EHV transformers	
15	PC interface	USB for laptop	
16	Operating temperature	-10 °C to 50 °C	
17	Storage temperature	-20 °C to 60 °C	
18	Protection	- Over Voltage - Short circuit - Back EMF - Accidental disconnection of test leadset - Over Temperature / Thermal Overload	
19	Warranty	5 years	

4. NAME PLATE AND MARKING:

The equipment shall be provided with durable and legible name plate, effectively secured against removal. The name plate shall be indelibly and distinctly marked with all essential particulars as per the relevant standards along with the following. The terminal markings shall also be in line with the requirements of the relevant standards.

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	TATA POWER CENTRAL ODISHA LIMITED, BHUBANESWAR		
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5. CALIBRATION CERTIFICATE/TEST REPORTS:

Bidder to provide the calibration & Type test reports at the time of supply of material. All the tests shall be conducted in certified test laboratories. All type test reports as mentioned in GTP have to be submitted along with bids. In the event of any discrepancy in the test reports i.e. any test report not acceptable/ type test not carried out, the same shall be carried out without any cost implication to TPCL. Comprehensive AMC of 5 years shall be inbuilt in the scope of the order, including the repair & annual calibration of instruments. Self-calibrated kit is recommended.

Initiator		HOG (Engineering)	
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	TATA POWER CENTRAL ODISHA LIMITED, BHUBANESWAR		
	TECHNICAL SPECIFICATION		
Doc. Title	Specification for Transformer Turns Ratio Meter		
Doc. No		Eff. Date:	
Rev. No	00	Page 1 of 4	
Prepared By:	Reviewed By:	Approved By:	Issued By:

1. SCOPE:

This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at the store /site of the Transformer turns ratio meter complete with all accessories for efficient and trouble free operation.

2. Applicable Standards:

The equipment covered by this specification shall, unless otherwise stated, be designed, manufactured and tested in accordance with latest editions of the following Standards /IEC and shall confirm to the regulations of local statutory authorities.

- ANSI/IEEE C57.12.90: IEEE standard test code for liquid-immersed distribution, power and regulating transformers
- IEC 60076.1 (2000): Transformer turns ratio meter

3. CLIMATIC CONDITIONS OF THE INSTALLATION:

1. Maximum altitude above sea level 1,000m
2. Maximum ambient air temperature 50°C
3. Maximum daily average ambient air temperature 35°C
4. Minimum ambient air temperature 0°C
5. Maximum relative humidity 95%
6. Average number of thunderstorm days per annum (isokeraunic level) 70
7. Average number of rainy days per annum 120
8. Average annual rainfall 150cm
9. Earthquakes of an intensity in horizontal direction - equivalent to seismic acceleration of 0.3g
10. Earthquakes of an intensity in vertical direction - equivalent to seismic acceleration of 0.15g (g being acceleration due to gravity)
11. Wind velocity: 300 km/hr, 200 km/hr and 160 km/hr. environmentally, some of the regions, where the work will take place includes coastal areas, subject to high relative humidity, which can give rise to condensation. Onshore winds will frequently be salt laden. On occasions, the combination of salt and condensation may create pollution conditions for outdoor insulators. Some places are in heavily industrial polluted areas. Therefore, Outdoor material and equipment shall be designed and protected for use in exposed, heavily polluted, salty, corrosive and humid coastal atmosphere

4. GENERAL TECHNICAL REQUIREMENTS:

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	TECHNICAL SPECIFICATION		
Doc. Title	Specification for Transformer Turns Ratio Meter		
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Prepared By:	Reviewed By:	Approved By:	Issued By:

The Automatic Single as well as Three Phase Transformer Turns Ratio Meter should be capable for testing of all types of power transformers, instrument transformers and distribution transformers of all types under live switchyard conditions up to 765kV class.

SI No.	PARTICULARS	REQUIREMENT	Bidder Response (Specification of Offered Instrument)
1	Turns Ratio Accuracy	±0.20% (0.8 to 4,000) ±0.25% (4,001 to 10,000) For Excitation Current Values no greater than preset value.	
2	Temperature Range	Operating: -20° C to 55° C (-5° F to 130° F) Storage: -40° C to 60° C (-55° F to 140° F)	
3	Relative Humidity	Operating: 0 to 95% non condensing Storage: 0 to 95% non condensing	
4	Protective Devices	High voltage side shorting relay, transient voltage suppressors and gas surge voltage protectors	
5	Measuring Time	Less than 5 seconds	
6.a	Phase Angle Measurement (three phase)	- 179.9 ° to + 180 ° Max. error ± 0.05 °	
6.b	Mag.Current Measurement	1 mA – 2000 mA ± 1 mA	
6.c	Current (rms) Accuracy	±5% rdg ±0.5 mA	
7	Display Full Graphics	LCD module, adjustable back-lighting, wide temperature range, 128 x 64 dots (21 characters by 8 lines)	
8	Safety/EMC/Vibration	Meets the requirements of IEC-1010-1, CE and ASTM D999.75	

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	TATA POWER CENTRAL ODISHA LIMITED, BHUBANESWAR		
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SI No.	PARTICULARS	REQUIREMENT	Bidder Response (Specification of Offered Instrument)
9	Measurement Method	ANSI/IEEE C57.12.90 and IEC 600076.1 (2000)	
10	Excitation Voltage	with Selectable steps upto 100 V AC, 50Hz	
11	Excitation Current range	0 to 2000 mA, 4-digit resolution	
12	Auxiliary Supply	230V $\pm$ 15%	
13	Dimensions	as furnished by the bidder. portable to carry in van/sedan.	
14	Weight	as furnished by the bidder. Suitable to carry by hand less than 10 KG	
15	Storage	Result storage capacity of 500 No's of results along with Tag of Transformer details.	
16	Connectivity	Able to connect laptop via LAN & USB cable for data downloading of results and inserting transformer details.	
17	Self-Calibration	Self-calibration feature (optional)	
18	Battery life operation	Up to 12 hours of field operation	
19	Accessories	- Leads for both HV and LV side of length 10 meter each in duplicate. Carry case both for leads and kits. - Power Cord - Lan / USB Cable for communication - software in USB - User Manual both Hard & Soft Copy	
20	Test results assessment	Kit should automatically asses test results and provide pass or fail feature with editable tolerance limit.	

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	TATA POWER CENTRAL ODISHA LIMITED, BHUBANESWAR		
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SI No.	PARTICULARS	REQUIREMENT	Bidder Response (Specification of Offered Instrument)
21	Warranty	5 Years from date of supply	

5. NAME PLATE AND MARKING:

The equipment shall be provided with a durable and legible name plate, effectively secured against removal. The name plate shall be indelibly and distinctly marked with all essential particulars as per the relevant standards along with the following. The terminal markings shall also be in line with the requirements of the relevant standards.

5. CALIBRATION CERTIFICATE/TEST REPORTS:

Bidder to provide the Type test reports at the time of supply of material. All the tests shall be conducted in certified test laboratories. All type test reports as mentioned in GTP have to be submitted along with bids. In the event of any discrepancy in the test reports i.e. any test report not acceptable/ type test not carried out, the same shall be carried out without any cost implication to TPCODL. Comprehensive AMC of 5 years shall be inbuilt in the scope of the order, including the repair & annual calibration of instruments. Self-calibrated kit is recommended.

Initiator		HOG (Engineering)	
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	TATA POWER COMPANY LIMITED, ODISHA		
	TECHNICAL SPECIFICATION		
Doc. Title	CT Analyser for Protection Current Transformers		
Doc. No	ENG-GEN-33	Eff. Date: 01.04.2020	
Rev. No	00	Page 1 of 6	
Prepared By:	Reviewed By:	Approved By:	Issued By:

1. SCOPE:

The scope of this technical document is to procure fully automatic, microprocessor based instrument for testing relaying current transformers to International & National Standards.

The instrument should be a lightweight and portable test set that determines the excitation characteristics, turns ratio, winding polarity and winding resistance of single-ratio or multi-ratio relaying current transformers.

The instrument, along with all the accessories, should be suitable for making complete commissioning tests on relaying CTs according to that would be normally conducted prior to connecting such CTs to protective relays and commissioning the protective relaying system.

The specific requirements are covered in the enclosed general technical requirement.

2. CLIMATIC CONDITIONS OF THE INSTALLATION:

1. Maximum altitude above sea level 1,000m
2. Maximum ambient air temperature 50°C
3. Maximum daily average ambient air temperature 35°C
4. Minimum ambient air temperature 0°C
5. Maximum relative humidity 95%
6. Average number of thunderstorm days per annum (isokeraunic level) 70
7. Average number of rainy days per annum 120
8. Average annual rainfall 150cm
9. Earthquakes of an intensity in horizontal direction - equivalent to seismic acceleration of 0.3g
10. Earthquakes of an intensity in vertical direction - equivalent to seismic acceleration of 0.15g (g being acceleration due to gravity)
11. Wind velocity: 300 km/hr, 200 km/hr and 160 km/hr. environmentally, some of the regions, where the work will take place includes coastal areas, subject to high relative humidity, which can give rise to condensation. Onshore winds will frequently be salt laden. On occasions, the combination of salt and condensation may create pollution conditions for outdoor insulators. Some places are in heavily industrial polluted areas. Therefore, Outdoor material and equipment shall be designed and protected for use in exposed, heavily polluted, salty, corrosive and humid coastal atmosphere

3. Standards:

ANSI Specification C57.13.1

IEC Specification IEC 44-1.

The CTs under test shall be as per IS 2705, IEC 60044-1 & IEC 61869-2.

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4. GENERAL TECHNICAL PARTICULARS:

Sr. No.	DESCRIPTION	REQUIREMENT	AVAILABLE (To Be Filled By Bidder)
1	Ratio Test:	1 to 2000 @ accuracy 0.05% 2000 to 5000 @ accuracy 0.1% 5000 to 10000 @ accuracy 0.2%	
2	Winding Resistance	Range: 0 to 100Ω Range: 0 to 100Ω Accuracy: ±1% Accuracy: ±1% Best Resolution: 1mΩ Best Resolution: 1mΩ	
3	Current Display	0 to 5A AC Accuracy: ±1% of rdg Resolution: 3 digits. Resolution: 3 digits.	
4	RMS	Range: 1mA to 10A Range: 1mA to 7A Accuracy: ±2% (5mA to 10A) Accuracy: ±2% (5mA to 7A) Resolution: 3 digits Resolution: 3 digits	
5	Voltage Display	Range: 1 to 10,000 V Range: 1 to 10,000 V Accuracy: ±2% ±0.5V Accuracy: ±2% ±0.5V Resolution: 3 digits. Resolution: 3 digits	
6	Hysteresis Loss	Range: 0VA to 10KVA Range: 0VA to 10KVA Best Resolution: 1mVA Best Resolution: 1mVA	
7	Power Factor	Range: 0 to 1.0 Range: 0 to 1.0 Resolution: 0.01 Resolution: 0.01	
8	Frequency	50 Hz.	
9	Remanence (Optional)	Range: 0 to ±100% Range: 0 to ±100% Resolution: ±1% Resolution: ±1% Accuracy: ±3% Accuracy: ±3%	
10	Demagnetization	Accuracy: ±3% Accuracy: ±3%	
11	Output	Voltage 12 volts DC 24 volts DC	

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		Current 20 amperes maximum (Peak) 10 amperes maximum (Peak)	
12	Interface	Display: The unit must have onboard display for ease of operation at site. Only Laptop operated model without onboard display is not acceptable. PC: RS-232 serial port RS-232 serial port Printer: USB Port	
13	Mains Powered	Input: 100-250 Volts, 50-60 Hz. Max 2A The CT Analyzer kit should be able to display improper grounding indication	
14	Dimensions and Weight	Lightweight not exceeding 10 kgs. And for portable use	
15	Cable Set	Primary and secondary cables capable of connecting to 132 kV CT primary (15 m approx.) , Secondary Cables(3 metres), Ground cables (5m), USB and RS 232 chords of appropriate sizes.	
16	Safety feature	• “Auto Cut” feature shall be provided for safety purpose • Auto trip provision with alarm signal in case of occurrence of body leakage for safety purpose • Automatically demagnetizes the test CT • IEC 61010-1 • The Test Set shall be Type Tested for Safety, EMI-EMC from third party labs	
17	Warranty period	5 Years	
18	Additional safety requirement	The kit and accessories shall be robust and rugged enough so that it can be transported safely at different locations. The transportation	

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		case and packing of the kit shall be such that the transportation from one station to other will not affect the performance and accuracy of measurement of kit. Measurement cables for Primary connection shall be 15m long, for secondary it shall be at least 6m. PC interface cables, Power supply cables, Operating manual, Original CD and software, Application CD etc. hard carrying case etc. shall also be supplied. The kit must be in successful operation in major Indian Utilities and manufacturers. Accuracy of the kit should match with conventional test report. Results will be compared manufacturers test report for metering class accuracy measurement.	
19	Services after Sale	Bidder will have to submit the documentary evidence of having established a mechanism for prompt services by OEM and when required by TPCODL	
20	Commissioning, Handing Over of the Instrument	Successful bidder will have to commission the instrument to the satisfaction of TPCODL. The supplied instrument, failed during the demonstration at site shall be rejected and no repairs are allowed.	
21	Repeatability	It should offer repeatability of test results in charged 33kV/11kV/110kV/220kV/400kV switchyard.	
22	Operation	There should be possibility to operate the unit with onboard display for ease during site conditions.	
23	Storage/ Memory	The equipment should be capable of storing at least 1000 test results.	
24	Display	The unit must have onboard display for ease of operation at site. Only Laptop operated	

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	TATA POWER COMPANY LIMITED, ODISHA		
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		model without onboard display is not acceptable.	
25	Additional Features	• Simulate different burdens & currents • Analyze the effect of CT saturation • Measure VT ratio • Immediate good/bad evaluation (Automatic evaluation according to IEC, IEEE and to customized or local/national standards) • Remanance & residual Magnetism	

The kit should be able to perform the following tests to be carried out on CTs:

- CT ratio and phase angle accuracy
- Polarity
- CT winding resistance
- CT excitation
- Excitation Loss
- Hysteresis Loss
- Eddy Current Loss
- Knee point
- Point of Max permeability (45° slope point)
- Remanence (Optional)
- Composite Error
- Demagnetization
- Turns Ratio
- I.S.F/ALF

The kit shall be able to plot the excitation curve and locate the knee point voltage and current in real time.

It should offer repeatability of test results in charged 33kV/11kV/110kV/220kV/400kV switchyard.

The instrument shall be capable to

- Provides a graphical presentation of the CT excitation characteristics.
- Determines the IEC 10/ 50 knee point and the point of maximum permeability (ANSI 45° Slope Point).
- Detects shorted turns or insulation problems within the test CT, thus avoiding commissioning of faulty equipment.
- Measures the Hysteresis loss and plots hysteresis curves of CT cores.
- Asses Pass/Fail of test based on IEC & IEEE standard.

Initiator		HOG (Engineering)	
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	TATA POWER COMPANY LIMITED, ODISHA		
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5. NAME PLATE AND MARKING:

The equipment shall be provided with durable and legible name plate, effectively secured against removal. The name plate shall be indelibly and distinctly marked with all essential particulars as per the relevant standards along with the following. The terminal markings shall also be in line with the requirements of the relevant standards.

5. GENEARAL TERMS & CONDITIONS:

- Operating manual/software/connectors/leads and all accessories for operation of the equipment is to be provided by bidder.
- Necessary training to TPCL personnel regarding operating the instrument shall be in the scope of bidder.

6. CALIBRATION CERTIFICATE/TEST REPORTS:

Bidder to provide the Calibration certificate & test reports at the time of supply of material. All the tests shall be conducted at NABL accredited lab as per the relevant standards. Test should have been conducted in certified test laboratories for all instruments to be supplied. In the event of any discrepancy in the test reports i.e. any test report not acceptable/ type test not carried out, same shall be carried out without any cost implication to TPCL.

The AMC of 5 years shall be inbuilt in the scope of order, including the repair and annual calibration of the instrument. It is recommended if the kit can be self calibrated.

7. Demonstration:

TPCODL can call any bidder for demonstration of the testing kit to check the technical suitability of the instrument before opening of the price bids. Bidder will have to demonstrate the quoted testing kit before officers nominated by TPCODL at their own cost. Equipment failed during demonstration will be not accepted for evaluation.

8. Training:

Supplier shall have to ensure kit is made user friendly for all the CTs available in TPCODL. The supplier shall have to arrange necessary training to engineers of TPCODL

Initiator		HOG (Engineering)	
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TATA POWER COMPANY LIMITED, ODISHA			
TECHNICAL SPECIFICATION			
Doc. Title	SPECIFICATION FOR INFRARED THERMOSCANNING CAMERA		
Doc. No	PRE-GEN-15	Eff. Date: 01.04.2020	
Rev. No	00	Page 1 of 8	
Prepared by:	Reviewed By:	Approved By:	Issued By:

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Initiator		HOG (Standardization & Procurement III)		HOD (ENGINEERING)	
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	NORTH TATA POWER COMPANY LIMITED, ODISHA		
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Prepared by:	Reviewed By:	Approved By:	Issued By:

1. SCOPE

This specification covers technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at stores/ site, performance of Thermoscanning camera complete with all accessories for trouble free and efficient operations.

2. APPLICABLE STANDARDS:

The equipment covered by this specification shall unless otherwise stated, be designed, manufactured and tested in accordance with the latest editions of the following Indian, International Standards and shall conform to the regulations of the local Statutory authorities:

- a) IEC 60529 : Degree of Protection provided by enclosures (IP code)
- b) IEC 60068-2-29 : Environmental testing, Part 2: Tests – Test Eb and guidance: Bump
- c) IEC 60068-2-7 : Environmental testing, Part 2: Tests – Test Ga: Acceleration, steady state
- d) IEC 61010-1 : Safety requirements for electrical equipment for measurement, control and Laboratory use.

3. CLIMATIC CONDITIONS OF THE INSTALLATION:

- a) Max. Ambient Temperature : 50 deg.C
- b) Max. Daily average ambient temp : 40 deg.C
- c) Min. Ambient Temperature : 0 deg.C
- d) Maximum Humidity : 100%
- e) Minimum Humidity : 10%
- f) Average No. of thunderstorm per annum : 50
- g) Average Annual Rainfall : 750 mm
- h) Average No. of rainy days per annum : 60
- i) Rainy months : June to Oct.
- j) Altitude not exceeding : 300 meters.
- k) Wind Pressure : 126kg/sq. m up an elevation of 10m.

Atmosphere is generally laden with mild acid and dust suspended during dry months and subjected to fog in cold months. The design of the equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.1g.

Initiator		HOG (Standardization & Procurement III)		HOD (ENGINEERING)	
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	NORTH TATA POWER COMPANY LIMITED, ODISHA		
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4. GENERAL TECHNICAL REQUIREMENTS:

Sl No.	Particulars	TPCODL Requirements	Bidder Response (Offered Instrument Specification)
1	IR resolution / Detector Resolution	160 × 120 pixels	
2	Thermal sensitivity/NETD	< 70 mK / < 80 mK	
3	Field of view (FOV)	54° × 42°	
4	Minimum focus distance	- Thermal: 0.1 m (0.32 ft) - MSX: 0.3 m (0.98 ft) / 0.5m	
5	Spatial resolution (IFOV)	6.3 mrad/pixel	
6	Image frequency	8.7 Hz / 9Hz	
7	Focus	Focus Free (Auto Focus)	
8	Digital zoom	Yes, zoom pinch, 1–4× continuous	
	Detector data		
9	Detector type	Focal plane array, uncooled microbolometer	
10	Spectral range	8–14 μm	
11	Detector pitch	12 μm	
	Image presentation		
12	Display resolution	640 × 480 pixels	
13	Screen size	3.5 in	
14	Auto orientation	Yes	
15	Touch screen	Yes, capacitive / Joystick controller	
16	Display technology	IPS / TFT	
17	Image adjustment	- Automatic level and span - Manual level and span 1-Touch level and span	
18	Image modes	- Infrared image - Visual image - MSX - Picture in picture (IR area on visual image)	
19	Gallery	Yes, incl. thumbnails and custom folder structure	
	Measurement		
20	Object temperature range	–20 to 400°C (–4 to 752°F) / –20 to 650°C	

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NORTH TATA POWER COMPANY LIMITED, ODISHA			
TECHNICAL SPECIFICATION			
Doc. Title	SPECIFICATION FOR INFRARED THERMOSCANNING CAMERA		
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SI No.	Particulars	TPCODL Requirements	Bidder Response (Offered Instrument Specification)
21	Accuracy at ambient temp. 10 to 35°C (50 to 95°F) and object temp. above 0°C (32°F)	• 0 to 100°C (32 to 212°F): ±3°C (±5.5°F) • 100 to 400°C (212 to 752°F): ±3%	
22	Measurement analysis	Required	
23	Measurement functions	• Spot • Box with max./min.	
24	Measurements correction	• Emissivity; matt/semi-matt/semi-glossy + custom value • Reflected apparent temperature Atmospheric compensation	
25	Color palettes	• Iron • Gray • Rainbow • Arctic • Lava • Rainbow HC	
26	Set-up commands	• Local adaptation of units, language, date and time formats • Screen brightness (high, medium, low)	
27	Languages	Arabic, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, simplified Chinese, Spanish, Swedish, traditional Chinese, Turkish	
28	Camera software update	• Automatic over Wi-Fi • USB via computer	
	Storage of images		
29	Storage media	Built In	
30	Image storage capacity	> 5000 sets of images	
31	Image file format	Standard JPEG, 14-bit measurement data included	
	Image annotations		
32	Text	Soft keyboard on touchscreen, auto-prompt for note when image is saved	

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SI No.	Particulars	TPCODL Requirements	Bidder Response (Offered Instrument Specification)
33	Non-radiometric video streaming	Yes; MSX, Thermal, Visual, Picture in Picture. USB Video Class colorized uncompressed with overlay 9 Hz. /NA	
34	Wi-Fi	802.11 a/ac/b/g/n (2.4 and 5 GHz) (5 GHz only for indoor use in Japan and Canada)	
35	USB	USB 2.0, Type-C connector	
36	Bluetooth + EDR	• Frequency range: 2400–2484 MHz • Max. output power: 10 dBm	
	Power System		
37	Battery type	Rechargeable Li ion battery (built-in)	
38	Battery voltage	3.7 V	
39	Battery capacity	1800 mAH	
40	Battery operating time	4 Hours	
41	Battery charge life	>500 cycles	
42	Charging system	USB-C (1-A)	
43	Charging time	2 Hrs	
44	Charging temperature	35°C (95°F)	
45	External power operation	5 V, USB-C	
46	Power management	Adjustable stand-by and automatic shut-down	
	Environmental data		
47	Operating temperature range	–10 to 50°C (14 to 122°F)	
48	Storage temperature range	–40 to 70°C (–40 to 158°F)	
49	Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity 25°C to 40°C (77°F to 104°F) / 2 cycles	
50	Relative humidity	95% relative humidity 25°C to 40°C (77°F to 104°F) non-condensing	
51	EMC	• EN 301 487-1 • EN 301 489-17 • FCC 47 CFR Part 15 Class B	
52	Magnetic fields	EN 61000-4-8 level 5	

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NORTH TATA POWER COMPANY LIMITED, ODISHA			
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SI No.	Particulars	TPCODL Requirements	Bidder Response (Offered Instrument Specification)
53	Radio spectrum	• ETSI EN 300 328 • EN 301 489 • FCC Title 47 CFR Part 15 • RSS-247 Issue 2	
54	Battery regulations	• UL 1642 • EN 62133 ed 2	
55	Battery charging efficiency	• BC Title 20 • 10 CFR Section 430.23 (aa)	
56	Encapsulation	Camera housing and lens: IP 54 (IEC 60529)	
57	Shock	25 g (IEC 60068-2-27)	
58	Vibration	2 g (IEC 60068-2-6)	
59	Drop	Designed for 2 m (6.56 ft)	
60	Safety	EN 62368-1	
61	Environmental safety	• REACH Regulation EC 1907/2006 • RoHS2 Directive 2011/65/EC • WEEE Directive 2012/19/EC • Proposition 65	
62	Declaration of conformity	Required	
	Physical data		
63	Weight (including battery)	250 grams	
64	Size (L × W × H)	To be mentioned by bidder	
65	Battery weight	To be mentioned by bidder	
66	Tripod mounting	UNC ¼"-20	
67	Housing material	• PC and ABS, partially covered with TPE • Aluminum	
68	Packaging, type	Cardboard box	
69	Packaging, contents	• Printed documentation • Wrist strap lanyard • USB cable • Pouch	
70	Packaging, weight	0.52 kg (1.14 lb)	
71	Guarantee	5 years from date of Supply for instrument and 10 years for sensor	

5. GENERAL CONSTRUCTIONS

Should be robust, easy to handle and be able to use as per operating conditions mentioned in GTP.

6. MARKING

The body of the camera shall be appropriately marked with "PROPERTY OF TPCL, ODIHSA" such that it is permanent.

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7. TESTS

All routine, acceptance & type tests shall be carried out in accordance with the relevant IS/IEC. All routine /acceptance tests shall be witnessed by the purchaser/his authorized representative. All the components shall also be type tested as per the relevant standards. The camera shall be calibrated against standards which are traceable to National / International standards.

8. TYPE TEST CERTIFICATES

The bidder shall furnish the type test certificates of the individual component for the tests as mentioned as above as per the corresponding standards, if asked for by TPCL. All the tests shall be conducted by CPRI/ERDA as per the relevant standards. 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 TPCL.

9. PRE DISPATCH INSPECTION

The Material shall be subject to inspection by a duly authorized representative of the TPCL. Inspection may be made at any stage of manufacture at the discretion of the purchaser 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 TPCL's representatives at all times when the work is in progress. Inspection by the TPCL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPCL.

Following documents shall be sent along with material

- Test reports
- MDCC issued by TPCL
- TPCL Invoice in duplicate
- Packing list
- Drawings & catalogue
- Guarantee / Warrantee card
- Delivery Challan
- Other Documents (as applicable)

10. INSPECTION AFTER RECEIPT AT STORES

The material received at TPCL store will 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 Project Engineering department.

11. GUARANTEE

5 years from the date of supply for camera and 10 years for detector.

12. PACKING

Bidder shall ensure that all 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.

13. TENDER SAMPLE

Not Applicable.

14. QUALITY CONTROL

The bidder shall have a prove track of not less than 10 years in Infrared camera manufacturing and servicing in international market. 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

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	NORTH TATA POWER COMPANY LIMITED, ODISHA		
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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. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out inspections.

15. MINIMUM TESTING FACILITIES

Bidder shall have adequate in house testing and repair facilities for carrying out all routine tests & acceptance tests as per relevant International / Indian standards. It is mandatory to have at least one service lab with calibrated Black body & other facilities in India

16. MANUFACTURING ACTIVITIES

The successful bidder will have to submit the bar chart for various manufacturing activities clearly elaborating each stage, with quantity. This bar chart should be in line with the Quality assurance plan submitted with the offer. This bar chart will have to be submitted within 15 days from the release of the order.

17. SPARES, ACCESSORIES AND TOOLS

Not Applicable.

18. DRAWINGS AND DOCUMENTS

Not Applicable

All the Documents and Drawings shall be in English Language.

Instruction Manuals: Bidder shall furnish two (2) soft copies (CD) and four (4) hard copies of nicely bound manual (in English Language) covering erection and maintenance instructions and all relevant information pertaining to the main equipment as well as auxiliary devices.

19.

SCHEDULE OF DEVIATIONS (TO BE ENCLOSED WITH TECHNICAL BID)

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:

S. 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

Initiator		HOG (Standardization & Procurement III)		HOD (ENGINEERING)	
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	TATA POWER CENTRAL ODISHA DISTRIBUTION LTD		
	TECHNICAL SPECIFICATION		
Doc. Title	STP FOR CABLE HEIGHT METER		
Doc. No		Eff. Date:	
Rev. No	00	Page 1 of 3	
Prepared by:	Reviewed By:	Approved By:	Issued By:

1.0	SCOPE	This specification covers the technical requirements of packing, forwarding & supply of Cable Height Meter with all accessories & mandatory spares for efficient & trouble free operation.			
2.0	APPLICABLE STANDARDS	The equipment covered under this specification, shall unless otherwise stated, be designed , manufactured & tested in accordance with latest editions of the following Indian & International standards :			
		IEC 61557-5	Specification for electrical safety of Low voltage measurement – equipment for testing , measuring or monitoring of protective measures		
		IEC 1010	Isolation & safety standards for electronic instruments		
		EN ISO 9001	Quality Assurance System		
		EMC regulations	CE sign, IEC61326		
		IEC/EN61010-01, 031	Instrument & accessories safety.		
		IEC 61000-4-3.	Electromagnetic radiation immunity		
		IEC 61000-4-2	Electrostatic immunity		
3.0	CLIMATIC CONDITIONS FOR INSTALLATION	The service conditions shall be as follows: 1. Maximum altitude above sea level 1,000m 2. Maximum ambient air temperature 50°C 3. Maximum daily average ambient air temperature 35°C 4. Minimum ambient air temperature 0°C 5. Maximum relative humidity 95% 6. Average number of thunderstorm days per annum (isokeraunic level) 70 7. Average number of rainy days per annum 120 8. Average annual rainfall 150cm 9. Earthquakes of an intensity in horizontal direction - equivalent to seismic acceleration of 0.3g 10. Earthquakes of an intensity in vertical direction - equivalent to seismic acceleration of 0.15g (g being acceleration due to gravity) 11. Wind velocity: 300 km/hr, 200 km/hr and 160 km/hr. environmentally, some of the regions where the work will take place includes coastal areas, subject to high relative humidity, which can give rise to condensation. Onshore winds will frequently be salt laden. On occasions, the combination of salt and condensation may create pollution conditions for outdoor insulators. Some places are in heavily industrial polluted areas. Therefore, Outdoor material and equipment shall be designed and protected for use in exposed, heavily polluted, salty, corrosive and humid coastal atmosphere			
		The design of equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.1 g.			
4.	GENERAL TECHNICAL REQUIREMENTS				
		Sr. No	Description	TPCODL Requirement	Bidders Compliance
		1	Application	It shall be able to measure the height of the cable. It shall be battery operated.	
		2	Measuring functions	The equipment shall be suitable for non-destructive measurement of distance, and height of the cable.	

Initiator		Approval	
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Doc. Title
STP FOR CABLE HEIGHT METER
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		3	Measuring Range	0.08 to 100 meters	
		4	Accuracy	+/- 1.5mm	
		5	Measurement range of incline measurement	0 – 360deg (4 X 90deg)	
		6	Measurement time	<0.5 seconds	
		7	Power Supply	Rechargeable battery	
		8	Units of Measurement	Selectable m/cm/ft/inch/ft-inch	
		9	Memory	Min of 50 readings	
		10	Laser	650nm, <1mW; red colour	
		11	Weight	< 250g	
		12	Accessories	Protective Bag, Carrying Strap Battery & Charger	
		13	Advanced Features	• Auto Power OFF Bluetooth connectivity Camera with ZOOM facility for far objects optimum visibility	
		14	Display	2.8" IPS Colour display + optical bonding for better readability	
		15	Mains	Should be able to operate kit on both mains and battery	
		16	Electrical safety	Ingress Protection: IP 54 for splash water proof & dust proof, Robust Housing	
		17	Mechanical Design	LXBXH: vendor to provide. Weight (with battery): vendor to provide. Terminal connections to be provided on top cover of the equipment.	
		18	Auto Power Off	Required after 5 mins of last operation.	
5	GENERAL CONSTRUCTIONS	The digital instrument shall be able to perform the measurement of distance & height up to 100m range. It should be robust construction and should ha IP54 for splash water proof and dust proof			
6.0	WARRANTY	Warranty of the equipment shall be 5 years from the date of receipt of the material. Vendor has to provide calibration facility from NABL accredited Lab for the guarantee period. In case of any fault during the warranty period vendor shall provide the equivalent replacement / repair the equipment within two days from the date of complaint.			

Initiator

Approval

	TATA POWER CENTRAL ODISHA DISTRIBUTION LTD		
	TECHNICAL SPECIFICATION		
Doc. Title	STP FOR CABLE HEIGHT METER		
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		Comprehensive AMC of 5 years shall be inbuilt in the scope of the order, including the repair & annual calibration of instruments. It's obvious to mention self-calibrated kits are less expensive since annual calibration is not required.
7.0	SAMPLE	Bidder must provide successful field demonstration at TPCODL during tender evaluation
8.0	GURANTEED TECHNICAL PARTICULARS	Bidder has to provide GTP compliance as per General Technical Requirements mentioned in point No.4 of this table
10.0	CALIBRATION CERTIFICATE/TEST REPORTS	Bidder to provide type test reports of the equipment during Bid submission & calibration test reports at the time of Pre Dispatch Inspection. All the tests shall be conducted in certified NABL test laboratories & traceability certificate has to be provided. In the event of any discrepancy in the test reports i.e. any test report not acceptable, same shall be carried out without any cost implication to TPCODL. Comprehensive AMC of 5 years shall be inbuilt in the scope of the order, including the repair & annual calibration of instruments. It's obvious to mention self-calibrated kits are less expensive since annual calibration is not required.

Initiator		Approval	
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TPCODL binocular specifications

Any Reputed Make:

a)Nikon b)Celestron c)Fujinon.

Magnification:	10x
Objective Lens Diameter:	50mm (1.97")
Angular Field of View:	5.6°
Linear Field of View (@1000 yds) / @1000 m):	294.2 ft (98.1 m)
Exit Pupil:	4.8mm (.19")
Eye Relief:	17.4mm (.68")
Close Focus:	8.2 ft (2.5 m)
Interpupillary Distance (max):	74mm (2.91")
Interpupillary Distance (min):	56mm (2.2")
Diopter Adjustment Range:	±3

Twilight Factor: 22.3

Relative Brightness: 25

Limiting Stellar Magnitude: **Ideal:** 10.99
Moderate: 9.99
Poor: 8.99

Lens Coatings: Multi-Coated

Prism Glass (Type): Bak-4

Prism Coatings: N/A

Weight: 27 oz (765 g)

Environmental Protection: Waterproof

Nitrogen Filled: Yes

Tripod Adaptable: Yes

Carrying Case: Cloth

Dimensions: 158mm x 127mm x 56mm (6.2" x 5" x 2.2")

Note: - All specification criteria has to be matched as close as possible.

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- 2. APPLICABLE STANDARDS**
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- 15. TESTING FACILITIES**
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- 17. SPARES, ACCESSORIES AND TOOLS**
- 18. DRAWINGS AND DOCUMENTS**
- 19. SCHEDULE "A" GUARANTEED TECHNICAL PARTICULARS**
- 20. SCHEDULE "B" DEVIATIONS**

1. SCOPE

This specification covers technical requirements of supply, design, constructional features & transportation of Advanced Relay Testing kit for efficient and trouble free operations at TPCODL/TPNODL/TPSODL/TPWODL stores/site.

2. APPLICABLE STANDARDS

Safety	IEC 61010-1
Shock:	MIL-PRF-28800F (30 g/11ms half-sine) IEC 60068-2-27 (15 g/11 ms half-sine)
Vibration:	MIL-PRF-28800F (10-500 Hz, 2.05 g rms) IEC 60068-2-6 (10-150 Hz, 2 g)
Transit Drop:	MIL-PRF-28800F (10 drops, 46 cm), ISTA 1A
Electromagnetic Compatibility Emissions:	IEC 61326-2-1, IEC 61000-3-2/3, FCC Subpart B of Part 15 Class A
Immunity	IEC 61000-4-2/3/4/5/6/8/11

3. CLIMATIC CONDITIONS OF THE INSTALLATION:

SL. NO.	CONDITONS	VALUES
1	Max. altitude above sea level	1200m
2	Max. Ambient Temperature	50 °C
3	Max. Daily average ambient temp	35 °C
4	Min Ambient Temp	0 °C
5	Maximum temperature attainable by an object exposed to sun	60 °C
6	Maximum Humidity	95%
7	Minimum Humidity	10%
8	Average No. of thunderstorm days per annum	70
9	Average Annual Rainfall	150 cm
10	Average No. of rainy days per annum	120
11	Thermal Resistivity of soil	150 Deg. Ccm/W
12	Wind Pressure	126 kg/sq. m up to an elevation of 10 meter.
14	Earthquakes of intensity in horizontal direction	equivalent to seismic acceleration of 0.3g

15	Earthquakes of intensity in vertical direction	equivalent to seismic acceleration of 0.15g
16	Wind velocity	300 km/hr.

TPCODL/TPNODL/TPSODL/TPCODL/TPWODL/TPWODL/TPSODL service area has heavy saline conditions along the coast and High cyclonic Intensity winds with speed up to 300 Km ph. The atmosphere is generally laden with mild acid and dust in suspension during the dry months and is subjected to fog in cold months.

4. GENERAL TECHNICAL REQUIREMENTS:

The relay test kit shall be computer-based and fully automatic and shall have the following features: It shall have cybersecurity features with an ISO/IEC 11889-compliant Trusted Platform Module. The manufacturer should have a calibration setup and service centre in India. Also, the manufacturer would have a registered office for technical support in India. OEM should provide a letter for providing service & support on both hardware and software for at least 5 years from the supply of the test Kit.

4.1 Functional requirement

The equipment is required functionally to test the following electromechanical, solid state and numerical protection relays.

- Distance relays (ground and phase distance)
- Over current relays (directional and non-directional, definite time and inverse time)
- Frequency relays (over-and under)
- Voltage relays (over and under)
- Power relays (directional)
- Differential relays (including harmonic restraint feature)
- Bus bar protection relays (biased low/high impedance)
- Other associated protection relay functions: auto-reclose function, power swing, Sync-check, etc.
- Single and three phase transducers (voltage, current, power (W, VA, VAR), phase and frequency)

4.2 Hardware Specification

- Integrated network interfaces for IEC 61850 IEDs
- Support of latest communication protocols (GOOSE, R-GOOSE, MMS, Sampled Values with

configurable datasets as per IEC 61869)

- Relay test kit should not exceed more than 13 KG and portable unit to carry & capable of testing electromechanical relays, static Relays & Microprocessor Based relays.
- Flexibly equipped with user configurable output channels with up to 7 voltage outputs or 07 current outputs.
- Outputs:
 - Current: 4×30A + 3×30A in three ranges Range1 (0...1.25A), range 2(0...6A) & range 3(0...30A)
 - Accuracy: 0.10% of reading + 0.03% of range (Guaranteed)
 - Voltage: 4×300V + 3×300V range of 0...75V & 0...300V
 - Accuracy: 0.07% of reading + 0.01% range (Guaranteed)
 - Phase angle accuracy: 0.10°(Guaranteed)
 - Frequency range: 0...5kHz
 - Auxiliary DC output: 12...264VDC
- Binary outputs: 04 No's
- Binary inputs: 10 No's with resolution 100μs Potential-free, potential-sensing
- Total Harmonic distortion shall be THD+N less than <0.05% for both voltage & current outputs.
- Operation temperature: -10...+50°C & Humidity: 5...95%, non-condensing
- Interfaces: 3 PoEthernet ports, 1 USB type-C port, 1 USB type-A port, 1 Safety Link interface
- Time synchronization: Inbuilt PTP supported @IEEE 1588-2008, IEEE C37.238-2011, IEC 61869-9-3
- CYBERSECURITY:
 - It's crucial to ensure the test sets do not serve as a gateway for cyber-attacks, thus guaranteeing the security of critical infrastructure.
 - It shall have comprehensive protection from cyber threats with features like- Secure Boot, encrypted communication, tamper-proof firmware, and
 - Protection against firmware tampering: Secure Boot and Measured Boot with ISO/IEC 11889-compliant Trusted Platform Module (TPM2.0)
- Safety:
 - Safety key interlock shall be provided for safe operation of the test kit and personnel using it. There shall be a functional push button for switching between 'safe' and 'active' modes.
 - Protection against unauthorized use: password protected communication with the Test Set.
- Troubleshooting and analysis using hybrid signal recording

4.3 SOFTWARE SPECIFICATION:

Software shall be user-friendly and easy to use. It shall be possible to create one test document for one relay and generate one combined report for all functional tests for a relay. For this necessary software modules like pause, execute etc. must be there. It shall be possible to insert test instructions and wiring diagram for different tests in a relay. Kit shall have possibility for System based tests and close loop integrated Energy meter testing with scanning head.

A. General functions:

- The software must be compatible to RIO & XRIO Standard. Software should have provision to Import Direct software settings which should eliminate to feeding settings. All manufacturers templates should be available with respect to various protections like Distance, Differential, OC and Generator protections. It should be upgradeable free-of charge
- The testing software must have the possibility of adding test points in manual and automatic mode directly as Symmetrical components values (Direct, Inverse (Positive, Negative and Zero sequence)
- The testing software must have Vector Diagram representation that shows the test point quantities during the test and at any time after the test is finished if the specific test point is selected. The vector diagram must also be part of the report.
- The testing software must have the possibility of fault quantity ramping (voltage or current, amplitude or phase) for all fault loops LE, LL, LLL
- The testing software must have the possibility of creating sequence of minimum 100 states for typical prefault, fault postfault applications with flexible trigger conditions time, binary inputs with logical AND and OR, Key Pressed, or External Triggers from GPS. The sequence must be executed in real time, delays between the states are not permissible. When working with a sequence of states it must be possible to trigger them with a GPS signal
- The testing software must have the possibility of adding test points in manual and automatic mode directly as Power (input values as power)
- The testing software must have possibility of power S,P,Q quantity ramping as 3-phase or single –phase powers
- Control of the GPS satellite receiver must be possible within test software. PTP protocol must be supported to perform end-to-end testing.
- Test software must have possibility to operate in primary or secondary values (Z, R, X, S, P, Q, V, I) and allow toggling between theses 2 operation modes at any time (before during or after the test)
- The testing software must have the possibility of Impedance quantity ramping as IZI, Phi, R, and X for fault loops LE, LL, and LLL

- The test software must have the possibility to export the automatically generated test report as .rtf (Rich Text Format) file, csv format (Comma Separated Values) & .xml format (Extensible Markup Language)
- **Relay software should have a facility to vary 2 parameters or more like Voltage Amplitude & Current Amplitude at a time to create a real fault simulation.**
- **Kit should have internal PTP source.**

B. COMTRADE Playback:

- The test software must provide a signal view that shows the analog signals and the binary inputs and outputs. This signal view must be exportable to COMTRADE format and also it must be possible to insert the graphics in the test report
- The software must include a tool to playback IEEE COMTRADE files and WAV files. The tool must allow scaling of the signals. It must be possible to play back files that have a recording duration longer than 60 minutes at a sampling rate of 3kHz. It must be possible to select multiple transient files that will be played back as a sequence.
- The test software must reproduce transient playback supporting COMTRADE (Binary or ASCII), TRF and PL4 formats. SW must allow also simulation with user defined binary signals
- It must be possible to generate repetitions for the transient playback
- It must be possible to insert a prefault sine simulation with a definable length before the actual COMTRADE playback
- The test software must provide a possibility to create flexible reference signals (binary) at any time in the transient file. And then create measurement conditions to check any binary input with tolerances for automatic pass/fail conditions comparing the actual binary signals to the binary reference signals
- It must be possible to see the state of all the binary inputs and outputs of the test set at any time. In case of fast changes, the software must indicate it with a visual alarm.

C. DISTANCES RELAY TESTING:

- Manual and automatic tests for impedance plane, starter characteristic, auto recloser, Z/ t grading diagram shall be possible.
- The test software must have a functionality to define and perform tests of distance relays by impedance element evaluations using single-shot definitions in the Z-plane with graphical characteristic display
- Test models to be supported: constant current, constant voltage.
- Software must have the possibility of importing relay characteristic from relay manufacturer which are supporting RIO/XRIO export

- Testing of relays with simulation of the arc resistance must be possible & The software must have the possibility of simulating DC offset and setting the fault inception angle
- XRIO file format for the transfer of relay setting parameters to be supported.
- It must be possible to add sequence of prefault, fault & postfault shots and then to execute this automatically including automatic assessment of the correct trip time according to given tolerances
- Adding test points as Z and Phi or as R and X must be possible

D. DIFFERENTIAL RELAY TESTING:

- Templates for all manufacturers should be available to perform automatic testing.
- Kit software should import the relay settings from Relay software using XRIO.
- Kit should perform automatic Slope characteristics testing by Shot test as well as reach test.
- Kit should be capable of injecting 25A both sides (Primary and secondary) for Generator slope test in automated method for 5A Secondary ratio.
- Kit should perform automatic harmonics testing.
- Kit software should have provision to inject 1phase fault (L1-E, L2,E and L3-E), 2-Phase faults(L-L) and 3-phase faults on slope characteristics and verify it.

E. OVER CURRENT RELAY TESTING:

- Manual and automatic test modes shall be available.
- Feeder Protection /OC protection templates for respective manufacturer should be available for automatic testing to avoid settings complications.
- The test software must have a functionality for testing overcurrent protection covering ground fault, phase fault, positive, negative and zero sequence fault models
- It must be possible to test directional and non-directional overcurrent relays and provide test points in backward direction that are automatically assessed positive if the relay blocks
- Library with all standard definite and inverse characteristic (IEC, ANSI, IAC, I2t) must be available and it must be possible to model a non-standard characteristic easily point by point
- It must be possible to extract (digitize) overcurrent inverse-time characteristics from graphical representations (e.g. from a relay manual image)
- Relay test kit Software must test both IDMT Characteristics as well as Directional feature at a time and same should display characteristics of both IDMT as well as Direction during testing.
- Templates should be available for feeder protection to perform automatic testing which should eliminate on understanding Relay Characteristics angle as per relay and possible to perform the faults automatically with respect to different relay manufacturers like Siemens, ABB, Alstom, GE & Etc

H. Automatic test plan creation to easy maintenance testing:

- Test Plans can easily be built, maintained and distributed.
- Common test object data, hardware configuration, and test modules for the different device functions can be collected in one test plan which eliminate testing time during periodic maintenance time.
- *The test plan automatically executes the test modules – one by one, results being stored in the included dynamic report*
- The modules Pause, Execute, and Text View make the test plan interactive and let it include the power of other programs
- Test Plan should be one-time investment and later stages it should help to test the respective protection IEDS without feeding settings, creating different faults & etc.
- All major Protections to be available in the template

4.4 Power supply requirements to the equipment shall be as follows:

Nominal input voltage	- 100 – 240 VAC, 1-phase
Permissible input voltage	- 85 ... 264 VAC
Nominal frequency	- 50/60 Hz
Permissible frequency range	-45 ... 65 Hz
Rated current	-12 A at 115 V / 10 A at 230 V
Connection Standard AC socket (IEC 60320)	
Operation temperature	- 3 0 ... +50 °C (+32 ... +122 °F)
Storage temperature	-25 ... +70 °C (-13 ... +158 °F)
Humidity range Relative humidity	5 ... 95 %, non-condensing

4.5 MARKING:

Following details shall be marked on Relay Test Kit:

- Manufacturer's Name
- Serial no.
- Warranty clause
- Property of TPCODL/TPNODL/TPSODL/TPWODL

5. Software Requirement for testing IEC61850:

Following features should be available in relay software for testing of IEC61850 and has to be provided along with relay test kit:

- The software must be able to handle IEDs according to IEC 61850 Ed. 1 and Ed.2
- The software must be able to handle IEDs according to IIEC 61400-25 (Wind)
- The software must handle several IEDs simultaneously
- The software must visualize the definition as defined in the standard as texts

- v. The software must provide the possibility to sniff client/server traffic between other clients and servers and visualize them on ACSI-level
- vi. It must be able to handle SCL-files (.scd, .ssd, .icd, iid...) according to IEC 61850 Ed. 1 and Ed.2 and to create iid/icd files accordingly
- vii. The software must be available in English Language
- viii. The software must simulate data model of IEDs and services as GOOSE and Report
- ix. The software must be available for PC and with a cyber-secure hardware to connect to substation network directly
- x. The software must approve the quality of SCL files and to find issues
- xi. It must be able to use the control functions of IEDs with all possible options
- xii. The software must allow reporting by just dragging the report control blocks
- xiii. The software must explain enumerators as defined in the standard
- xiv. The software must allow structured write to IED
- xv. The software must create DataSets
- xvi. The software must indicate the changes issued by different services in the data model
- xvii. The software must simulate IED utilizing SCL files
- xviii. The software must simulate the entire data model
- xix. The software must simulate GOOSE and change the content as defined for the data model
- xx. The software must simulate Reports and change the content as defined for the data model
- xxi. The software must be capable work as client and server at the same time
- xxii. The software must support the simulation indication as defined in Ed. 2 of IEC 61850
- xxiii. The software must provide GOOSE information to be used in Test Universe
- xxiv. The software must visualize any data object, attribute and DataSet even delivered by different IEDs in a single window
- xxv. The activation window must provide the possibility to zoom the information
- xxvi. The software must handle different network ports for discovering and sniffing
- xxvii. The sniffer software must provide filters for IEDs and different services
- xxviii. The software must capture any traffic and allow to export in pcap and csv
- xxix. The software must save data models of servers in icd/iid files with scheme and edition to be chosen
- xxx. The software must visualize test indication and quality issues
- xxxi. The software must visualize received GOOSEs, Reports and data changes
- xxxii. The software must simulate several IEDs
- xxxiii. The software must support file transfer service.

xxxiv. The software must support setting groups service

6. Specification for relay testing kit (System Based Testing):

Required functionalities for testing a relay with network simulation

- The test software must allow dynamic relay testing through:
 - the simulation of transient voltage and current signals resulting from events (faults, evolving faults, change of switch gears position, etc...) occurring in an electrical network
 - the simultaneous and direct injection of these signals into one or more test objects (protections)
 - the synchronized collection and later observation and evaluation of the reactions of these test objects to the corresponding stimuli
- The test software must provide the ability to model the mentioned electrical network in a fully customized way. The calculations of the transient signals should be directly performed by the test software itself on the base of this network's topology and the events to simulate.
- Several test scenarios involving events (faults, evolving faults, change of switch gears' position, etc...) and based on different or evolving topologies and variation of network parameters can be prepared in a single test document and executed automatically, step by step or in a row.
- The transient simulator must be able to simulate in a realistic (transient) way different events, network situations and topologies, among which, as a non-exhaustive list:
 - power swing and out of step (multiple turns) conditions
 - a three terminal line
 - a parallel line with mutual coupling
 - a double earth fault
 - lines with double infeeds and superimposed load flow
 - series capacitors on series-compensated lines
 - lines with stray capacitances
 - insulated and compensated networks
 - any bus bar topology incl. multiple bus bar segments (double bus bar, triple bus bar, transfer bus), disconnectors, CBs, CTs (with different turns ratios), bays, coupling fields

7. TESTS:

Routine, Acceptance & Type tests shall be carried out in accordance with the relevant IS/IEC/ International standard. Acceptance tests shall be witnessed by a)

TPCODL/TPNODL/TPSODL/TPWODL's authorized representative.

Following tests shall be necessarily conducted on the Laptop additions to others specified in IS/IEC/ANSI standards.

Type tests shall be conducted from CPRI/ERDA/Any Govt. Lab. only.

*In case of any conflict on any technical particular in the specification, the stricter requirement mentioned in the relevant standard shall be valid.

7.1 TYPE TESTS

As per relevant standard mentioned in section 2 Application standards.

7.2 ROUTINE AND ACCEPTANCE TESTS

All acceptance tests mentioned below shall be witnessed by TPCODL/TPNODL/TPSODL/TPWODL's representative during the inspection stage.

Routine & Acceptance Tests

- a) Functional Check
- b) Visual Check

8. TYPE TEST CERTIFICATES:

Bidder shall furnish the type test report of relay test set for the tests as mentioned in Clause no. 7 & 2 of this specification and as per reference standards.

Test Laboratories: Complete set of Type Tests shall be conducted at certified test laboratories, which are CPRI / ERDA/Any Govt. Lab.

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 TPCODL/TPNODL/TPSODL/TPWODL.

9. PRE DISPATCH INSPECTION:

The material shall be subject to inspection by a duly authorized representative of the TPCODL/TPNODL/TPSODL/TPWODL. Inspection may be made at any stage of manufacture at the discretion of the purchaser 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 TPCODL/TPNODL/TPSODL/TPWODL's representatives at all times when the work is in progress. Inspection by the TPCODL/TPNODL/TPSODL/TPWODL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPCODL/TPNODL/TPSODL/TPWODL.

Following documents shall be sent along with material.

- a) Test reports
- b) MDCC issued by TPCODL/TPNODL/TPSODL/TPWODL
- c) Invoice in duplicate

- d) Packing list
- e) Delivery Challan
- f) Guarantee Certificate
- g) Other Documents (as applicable).

10. INSPECTION AFTER RECEIPT AT STORES:

The material received at TPCODL/TPNODL/TPSODL/TPWODL, Odisha store will 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 Engineering department.

11. GUARANTEE:

Bidder shall confirm for guarantee towards design, material, workmanship & quality of process/ manufacturing for integrated product delivered under the contract. In the event any defect is found by TPCODL/TPNODL/TPSODL/TPWODL, up to a period of at least 60 months from the date of commissioning or 66 months from the date of last supplies made under the contract whichever is earlier, 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 TPCODL/TPNODL/TPSODL/TPWODL, failing which TPCODL/TPNODL/TPSODL/TPWODL will be at liberty to get it replaced/rectified at Bidder's risks and costs and recover all such expenses plus the TPCODL/TPNODL/TPSODL/TPWODL's own charges (@ 20% of expenses incurred), from the Bidder or from 'Security cum Performance Deposit' as the case may be.

12. PACKING:

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. Packaging shall be as per climate change perspective. TPCODL/TPNODL/TPSODL/TPWODL encourages to use environment friendly packaging.

Note: Single use plastic not to be used for packing of the material.

13. TENDER SAMPLE:

Quoted instrument has to be demonstrated within 7 days from tender opening at TPCODL/TPNODL/TPSODL/TPWODL for evaluation of the instrument.

14. 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. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out inspections. The bidder shall ensure that the material supplied is as per the Guaranteed Technical Particulars as specified in the specifications.

15. TESTING FACILITIES:

Bidder shall have adequate in-house testing facilities for carrying out all routine tests & acceptance tests as per relevant International / Indian standards.

16. SPARES, ACCESSORIES AND TOOLS

Following accessories has to be provided along with kit

- i. Heavy-duty transport case with wheels and extendable handle and wheels.
- ii. Soft Bag – 2No's (Instrument, Accessories)
- iii. Power Cord 3 meter length.
- iv. Ethernet Cable 3 meter length – 2no's.
- v. Communication Cable (USB / RS232 as applicable) – 1 No's
- vi. Color coded Voltage & Current flexible cables set (3 meter long)
- vii. Flexible cable for all Binary input and output (3 meter long)
- viii. Grounding cable - (green color 6 mtrs)
- ix. Flexible Jumpers – 8 No's
- x. Flexible test lead adapters for connections to narrow terminals – 12 No's
- xi. Flexible test lead adapters with retractable sleeve for connections to non-safety sockets – 12 No's
- xii. Flexible jumpers for paralleling current outputs or shorting neutrals of binary inputs – 4 No's
- xiii. Crocodile clips for contacting pins or screw bolts – 8 No's
- xiv. Flexible terminal adapters for screw-type terminals – 12 No's
- xv. cable lug adapters for M4 (0.15 in) screws – 20No's
- xvi. 10 cable lug adapters for M5 (0.2 in) screws – 10No's
- xvii. GPS controlled time reference with integrated antenna.
- xviii. Software & License in hard copy.
- xix. Required Technical & Operation manual.

17. SCHEDULE- "A" GUARANTEED TECHNICAL PARTICULARS

 	Specification No: ENG-GEN-40xx
 	Specification Name: Technical Specification for Advanced Relay Testing Kit

Bidder to submit completely clause wise compliance of this specification.

18. SCHEDULE “B” DEVIATIONS:

(TO BE ENCLOSED WITH TECHNICAL BID)

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:

SL. 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

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4. GENERAL TECHNICAL REQUIREMENTS
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6. MARKING
7. TESTS
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19. SCHEDULE "A" GUARANTEED TECHNICAL PARTICULARS
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1. SCOPE

This specification covers technical requirements of supply, design, constructional features & transportation of Dielectric Frequency Response Test kit for efficient and trouble free operations at TPCODL/TPNODL/TPSODL/TPWODL stores/site.

2. APPLICABLE STANDARDS

Safety	IEC 61010-1
Shock:	MIL-PRF-28800F (30 g/11ms half-sine) IEC 60068-2-27 (15 g/11 ms half-sine)
Vibration:	MIL-PRF-28800F (10-500 Hz, 2.05 g rms) IEC 60068-2-6 (10-150 Hz, 2 g)
Transit Drop:	MIL-PRF-28800F (10 drops, 46 cm), ISTA 1A
Electromagnetic Compatibility Emissions:	IEC 61326-2-1, IEC 61000-3-2/3, FCC Subpart B of Part 15 Class A
Immunity	IEC 61000-4-2/3/4/5/6/8/11

3. CLIMATIC CONDITIONS OF THE INSTALLATION:

SL. NO.	CONDITONS	VALUES
1	Max. altitude above sea level	1200m
2	Max. Ambient Temperature	50 °C
3	Max. Daily average ambient temp	35 °C
4	Min Ambient Temp	0 °C
5	Maximum temperature attainable by an object exposed to sun	60 °C
6	Maximum Humidity	95%
7	Minimum Humidity	10%
8	Average No. of thunderstorm days per annum	70
9	Average Annual Rainfall	150 cm
10	Average No. of rainy days per annum	120
11	Thermal Resistivity of soil	150 Deg. Ccm/W
12	Wind Pressure	126 kg/sq. m up to an elevation of 10 meter.
14	Earthquakes of intensity in horizontal direction	equivalent to seismic acceleration of 0.3g

15	Earthquakes of intensity in vertical direction	equivalent to seismic acceleration of 0.15g
16	Wind velocity	300 km/hr.

TPCODL/TPNODL/TPSODL/TPCODL/TPWODL/TPWODL/TPSODL service area has heavy saline conditions along the coast and High cyclonic Intensity winds with speed up to 300 Km ph. The atmosphere is generally laden with mild acid and dust in suspension during the dry months and is subjected to fog in cold months.

4. GENERAL TECHNICAL REQUIREMENTS:

The Dielectric frequency response (DFR) analyser should be able to determine the condition of high-voltage insulation systems such as those in power transformers, bushings, cables and generators.

It should automatically analyses and determines the water content and the oil conductivity in different types of cellulose insulation. You can test assets filled with mineral oil, natural and synthetic ester as well as air or vacuum. The measurement results are shown in categories defined by IEC 60422.

The manufacturer should have a calibration setup and service centre in India. Also, the manufacturer would have a registered office for technical support in India. OEM should provide a letter for providing service & support on both hardware and software for at least 5 years from the supply of the test Kit.

General Technical Specification:

SI No.	Description	Requirement	Offered (To be filled by Bidder)
01	Manufacture & Model		
02	Measurement Principle	- combined time and frequency domain (FDS+PDC) - frequency domain only (FDS) - polarization current only (PDC)	
03	Test Duration for test 10 μ Hz – 1 kHz	30 minutes to 1h 44 minutes	
04	Number of Measurement channels	2	

05	Signal to noise ratio & interference	Maximum AC interference: 10mA (SNR 1:10)	
06	PDC Current Measurement		
	Range	± 20mA	
	Resolution	0.1 pA	
	Input Resistance	10 kΩ	
	Accuracy	0.5% ± 1pA	
	PDC Voltage Source		
	Measurement Voltage	± 200Vpeak	
	Continuous output current	50 mApeak	
07	FDS Specification		
	Measurement Voltage	± 200 Vpeak	
	Measurement Current	50 mApeak	
	Capacitance range	10 pF to 100μF	
	Dissipation factor range	0 – 10	
	Dissipation Factor Accuracy	for capacitance > 100 pF 1% + 3×10 ⁻⁴ (1 mHz - 100 Hz) 2% + 5×10 ⁻⁴ (f<1mHz, f>100 Hz)	
08	Frequency Range		
	Frequency	0.01 mHz to 5 kHz	
	Capacitance	10 pF to 100 μF	
09	Power Supply		
	AC Supply	85 VAC - 264 VAC, 50 Hz	
10	Software Function		
	Measurement Values	Output voltage FDS and PDC Input current (PDC) Dissipation factor (FDS) Capacitance Water content (%) from assessment Geometry values from assessment	
	Assessment	the software could provide an automated procedure for assessing the moisture content of the cellulose (pressboard and paper) of the power transformer insulation in percentage of water content	

		The software could provide a compensation of aging byproducts so the water content isn't overestimated.	
	Display Mode	the software could allow for display of results with the following display mode : - dissipation factor vs. frequency - complex permittivity vs frequency - complex capacitance vs frequency - polarization current in time domain	
	Reporting	Yes	
	Database	The software should be able to use templates which are shared with other transformer test devices. The software should have a data synchronization option.	
	Individual frequency range setting	The required frequency range is determined individually for each asset, considering the individual physical properties of the asset.	
11	Standard Accessories		
	Computer Cables	1 x USB cable	
	Test box for verification of operation	Should be Included	
	Measurement Cables	3 x 18 m triaxial low noise measuring cables 50 ohm	
	Connection Clamps	3 x connection clamp for bushing terminal	
	Transportation Case	Robust, hard Crash proof carrying case for instrument, cables and clamps (transport case resistance to transport shock and vibration)	

5. MARKING:

Following details shall be marked on Test Kit:

- Manufacturer's Name
- Serial no.
- Warranty clause

d) Property of TPCODL/TPNODL/TPSODL/TPWODL

6. TYPE TESTS

As per relevant standard mentioned in section 2 Application standards.

6.1. ROUTINE AND ACCEPTANCE TESTS

All acceptance tests mentioned below shall be witnessed by TPCODL/TPNODL/TPSODL/TPWODL's representative during the inspection stage.

Routine & Acceptance Tests

- a) Functional Check
- b) Visual Check

6.2. TYPE TEST CERTIFICATES:

Bidder shall furnish the type test report of relay test set for the tests as mentioned in Clause no. 7 & 2 of this specification and as per reference standards.

Test Laboratories: Complete set of Type Tests shall be conducted at certified test laboratories, which are CPRI / ERDA/Any Govt. Lab.

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 TPCODL/TPNODL/TPSODL/TPWODL.

7. PRE DISPATCH INSPECTION:

The material shall be subject to inspection by a duly authorized representative of the TPCODL/TPNODL/TPSODL/TPWODL. Inspection may be made at any stage of manufacture at the discretion of the purchaser 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 TPCODL/TPNODL/TPSODL/TPWODL's representatives at all times when the work is in progress. Inspection by the TPCODL/TPNODL/TPSODL/TPWODL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPCODL/TPNODL/TPSODL/TPWODL.

Following documents shall be sent along with material.

- a) Test reports
- b) MDCC issued by TPCODL/TPNODL/TPSODL/TPWODL
- c) Invoice in duplicate
- d) Packing list
- e) Delivery Challan

- f) Guarantee Certificate
- g) Other Documents (as applicable).

8. INSPECTION AFTER RECEIPT AT STORES:

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10. PACKING:

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. Packaging shall be as per climate change perspective. TPCODL/TPNODL/TPSODL/TPWODL encourages to use environment friendly packaging.

Note: Single use plastic not to be used for packing of the material.

11. TENDER SAMPLE:

Quoted instrument has to be demonstrated within 7 days from tender opening at TPCODL/TPNODL/TPSODL/TPWODL for evaluation of the instrument.

12. 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. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out inspections. The bidder shall ensure that the material supplied is as per the Guaranteed Technical Particulars as specified in the specifications.

13. TESTING FACILITIES:

Bidder shall have adequate in-house testing facilities for carrying out all routine tests & acceptance tests as per relevant International / Indian standards.

14. SCHEDULE- "A" GUARANTEED TECHNICAL PARTICULARS

Bidder to submit completely clause wise compliance of this specification.

15. SCHEDULE "B" DEVIATIONS:

(TO BE ENCLOSED WITH TECHNICAL BID)

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:

SL. 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

The Tata Power Company Ltd		<i>Business Associate's Safety Code of Conduct</i>
<i>Document no TPSMS/GSP/CSM/015/REV 08</i>		<i>Date of Issue: 01/04/2024</i>

Business Associate's Safety Code of Conduct

Reason for Change	Date of Last Revision	Prepared By	Reviewed By	Approved by 
CSCC is termed as BASCC. CSCC is internal Process and Safety terms, and condition is binding documents for Business associates. Addition of Definition. Defining responsibility, Procedure added, Appendix 13 to 15 added.	<u>11-May-2015-R1</u> <u>01 August-2023-R7</u>	CFT members from all cluster	Corporate Safety Team.	Suresh H Khetwani (Chief safety and Environment)

The Tata Power Company Ltd		<i>Business Associate's Safety Code of Conduct</i>
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1.0 Objective

- The Tata Power engages Business Associate workforce to execute, run and maintain various operating sites and facilities across locations for various business verticals including Generation, Transmission, Distribution and Renewable must perform work in a manner consistent with Tata Power Policies, Principle, values, working standard applied to activities range from project execution, operation, and maintenance to facilities management.
- The management of Business Associate safety represents a significant challenge for management. Tata Power has a responsibility to ensure that Business Associate s are provided with enough information and support to enable them to conduct their roles safely and without endangering health and safety of their own workforce or that of our staff.

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, Micro grid, Roof top solar etc. This Code of Conduct also applies to all operating and project sites of four Odisha Discom and New business based on mutually agreed timeline for implementation.
- This document is applicable to Odisha Discom also. Odisha Discom are a joint venture between Tata Power and the Government of Odisha with the majority stake being held by Tata Power Company (51%). ODISHA DISCOMS is a state electricity distribution utility with sole rights to distribution of electricity in the Odisha covering the distribution companies such as TPNODL, TPCODL, TPSODL and TPWODL. In accordance with the Electricity Act. ODISHA DISCOMS engages Business Associate workforce to execute, run and maintain various operating sites and facilities across locations the activities range from project execution, operation & maintenance of facilities.

3.0 Definitions

- 3.1. **Contract:** A written agreement between The Tata Power and its Business Associate(s) to supply manpower, services, and/or materials or to carry out the whole or part of any work required by Tata Power (R8).
- 3.2. **Contract Administrator (CA):** An officer from Tata Power, accountable for managing contract related activities for implementation of the entire BASCOC (R8).
- 3.3. **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.
- 3.4. **Site Safety Management Plan:** It is the safety plan agreed between Business Associate and Tata Power-Division/DISCOM. It will contain the entire job specific safety requirement and will be signed by the Business Associate.
- 3.5. **Business Associate /Vendor (BA):** An individual or a company that provides services to Tata Power-Division/DISCOM under a signed contract.
- 3.6. **Business Associate's Supervisor:** The link between The Tata Power and the Business Associates employees. He coordinates the work of his company's employee on site and is responsible & accountable for the safety of contract workforce. He will collaborate with site safety supervisor (SSS) (R8).

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- 3.7. BA Employee(s):** Any person(s) employed by a Business Associate having gate pass of BA to carry out the contracted work, but not employed directly by Tata Power (R8).
- 3.8. Sub-Vendor:** Any entity or person engaged & registered as per Tata Power Sub-vendor norms, by a main/prime Vendor to assist in execution of the job.(R8)
- 3.9. 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.
- 3.10. Expert Service jobs:** Jobs which needs expert services of Business Associate 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.
- 3.11. CEO/Chief/Head of division/Unit/Utility:** Business in charge who is overall custodian of the Tata Power-Division/DISCOM.
- 3.12. Category A: Business Associate/ Vendor:** Vendor eligible to carry out Very High & High risk (as per Tata Power-Division Hazard Identification and Risk Analysis Procedure) and /or Long-Term Contract related to operation and maintenance (O&M) of plant. Vendors must fulfil the requirement specified for Category A in Appendix 4-CSMF-4 of this document.
- 3.13. Category B: Business Associate/ Vendor:** Vendors eligible to carry out technical jobs, that are classified under Medium / ~~low~~ risk. Vendors must fulfil the requirement specified for Category B in Appendix 4-CSMF-4 of this document.
- 3.14. Category C: Business Associate/ Vendor:** Vendors eligible for to carry out low or very low risk administrative and office jobs. For this he must fulfil the requirement specified for Category C in Appendix 4-CSMF-4 of this document.
- 3.15. Category D: Business Associate/ Vendor:** All Consultants, Medical Practitioners or vendors taking job from Tata Power and working from their own premises (e.g., motor rewinding at vendor's shop floor, equipment sent for repair to vendor's works etc.) are classified as Category D Vendor.
- 3.16. 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 13(R8) of this document.
- 3.17. 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.
- 3.18. 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.
- 3.19. Long Duration Jobs:** When the duration of job is more than 12 months, it is considered as long duration job.

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3.20. High Value Jobs: When the value of the job contract is Rs. One Crore or more, it is considered as High value job.

3.21. Strategic Business Unit-SBU/Division/Discom: A strategic business unit is a **fully functional, independently operational setup of a particular business and** an important part of the Tata power company.

4.0 Responsibilities

4.1 Contract Administrator (CA): Contract Administrator is Tata Power-Division /DISCOM representative, who is responsible for ensuring the overall management and implementation of the BASCC standard and process, right from the registration to periodic evaluation of the BA (R8).

4.2 Order Manager/Engineer in Charge: Order Manager is Tata Power-Division /DISCOM representative , who is responsible for:

- 4.2.1 Assessment of Safety Potential of new vendor before registration along with SCG.
- 4.2.2 Safety Evaluation of the bids along with SCG.
- 4.2.3 Finalizing the Site Safety Management Plan along with Business Associate, Safety Concurrences Group, Divisional Safety Head and Expert (External or Internal) if required.
- 4.2.4 Ensuring that potential safety hazards are identified and controlled before any contracted work starts. Hazard identification should be conducted using multi-disciplinary teams which includes members from competent safety professional/execution team/competent BA supervisor & workforce to understand and identify project-specific safety hazards (R8).
- 4.2.5 Ensuring that Pre-work meeting/TBT & Mass meeting are being held either under his/project owner's supervision and/or under the BA's qualified and designated representatives (R8).
- 4.2.6 Ensure 100% safety capability building SHE L1, L2, L3 for Business Associate work force and supervisor before start of Job.
- 4.2.7 Ensure Business Associate SHE L1 safety revalidation test for all work force quarterly or Half yearly for new business such as Odisha Discom.
- 4.2.8 Conduct competency assessment of all critical work force working on High-Risk Jobs based on Experience, Technical skill and Safety capability through Business Associate representative along with division/Discom safety representative.
- 4.2.9 Supervise and ensure work is carried out as per the Site Safety Management Plan including agreed Risk Assessment (HIRA/JSA) and Method Statement.
- 4.2.10 Conduct audit and evaluate Safety Performance of Business Associate including Star rating of Business Associates within specified period as per guidelines and ensure all High-risk & Medium -risk jobs are performed by competent vendors 4-Star&above and 3-star& above respectively.
- 4.2.11 Monthly auditing BA activities to determine compliance with the Safety terms and conditions of the Contract. All violations shall be brought to the attention of the BA'

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proprietor and supervisor(s). If an unsafe act or a condition creates an imminent danger of injury/incident, Order Manager should initiate immediate steps to stop the work and Penalty against violation to be impose on BA as per CSM F12 - Safety Violation Penalty Criteria. Also Feedback on Safety performance and facilitating in safety improvement activities with BA proprietor every month (R8).

- 4.2.12 Ensure Business Associate's adhere to all statutory provisions.
- 4.2.13 In case any Exception needed in agreed safety management plan or in BASCC process for execution of job, document control procedure- **TPSMS/GSP/DC/014** Clouse 6.3 will be applicable, and approval may be obtained by the Order Manager from adequate authority of Chief of Division/CEO of Discom/Chief Corporate Safety.
- 4.2.14 Order Manager for all High Risk shall be HOD/Division Head of Discom and above.(R8)

4.3 Business Associate / Vendor (BA): The person, entity or organisation who is executing the job for Tata Power-Division /Odisha Discom under a contractual agreement and will be responsible for the following.

- 4.3.1 To follow all Tata Power-Division /DISCOM Critical Safety Procedure, Rules and guidelines given in **CSM F2 Safety Terms and Conditions**.
- 4.3.2 Undertake job as per **CSM F9 Site Safety Management Plan** and method statements agreed with the Tata Power-Division /DISCOM.
- 4.3.3 Ensure 100% safety capability building L1, L2, L3 for Business Associate work force and supervisor before start of Job
- 4.3.4 Ensure Business Associate safety revalidation test for all workforce quarterly or Half yearly for new business such as Odisha Discom up to three years.
- 4.3.5 Ensure competency assessment of all critical work force working on High-Risk Jobs based on Experience, Technical skill and Safety capability through Order manager or Engineer in charge representative along with division/Discom safety representative.
- 4.3.6 Raise any concerns about their work and its safety with the Order Manager.
- 4.3.7 Report all injuries, near misses, unsafe acts/conditions, and occurrences to the Order Manager immediately.
- 4.3.8 Ensure that all sub-Business Associate s follow the Tata Power Safety Procedure and agreed **CSM F9 Site Safety Management Plan**. If Business Associate sub vendor 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-Business Associate s follow the Tata Power Safety Procedure and agreed CSM F9 Site Safety Management Plan.
- 4.3.9 To follow all statutory requirements as per the laws of the land.
- 4.3.10 All vendors applying for category "A "jobs or submitting quote for high-risk jobs shall obtain certificates of ISO:9001, ISO:14001 and ISO:45001 before submitting quote for high-risk Jobs or otherwise mention plan to get the certification.
- 4.3.11 The BA shall not sublet/sub-contract, transfer, or assign the Contract or any part thereof without the written permission of the CA/ HOD approved by Chief Procurement officer/ Chief Commercial. In the event a contractor violates this condition, the Procurement division in consultation with the CA shall be entitled to place the Contract elsewhere on

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the BA's account and at the latter's sole risk; in addition, the contractor shall be liable for any loss or damage which the CA may sustain arising out of such placing of the Contract.

4.3.12 For engaging any sub-Vendor, the Prime Vendor as well as the sub-Vendor should be individually registered with Tata Power. Sub-contracting or hiring of others, by the BA to perform the services is subjected to specific, prior approval by the CA/OM. Such approval shall depend upon compliance with the following minimum requirements(R8)-

- i. Sub-vendors identified by the Prime vendor will be subject to the same Safety Potential Evaluation Criteria as the Prime vendor for all Medium-risk/High-risk job where supervision will be done by the sub- vendors. In such cases, vendors must have a Star-rating of 4 or above, for becoming a sub- vendor.
- ii. The SCG team shall evaluate the Safety and technical competency of the sub-contractors for High risk job.
- iii. The Departmental Head will have the authority to approve any sub-contracting process based on requirement as submitted by the Prime Vendor (See CSM F-14 Sub-Vendor Engagement Request Form).
- iv. No Safety potential evaluation shall be conducted for sub-letting of Low risk work.
- v. The Prime vendor shall be fully liable and responsible to Tata Power for the acts, errors, and omissions of its sub-vendors and shall be relieved neither of any obligation to Tata Power under the contract, nor of any other legal requirements.
- vi. The Prime vendor shall use only sub-vendors of demonstrated experience and reliability regarding the services to be provided.
- vii. The Sub-vendor shall agree in writing to be bound by all obligations of the Prime vendor set forth in the Contract.
- viii. Safety performance evaluation shall be done for both prime vendor & sub-vendor.

Types of Sub-contracts and Associated Requirements (R8):

- I. Sub - Vendor working with his own supervision:- Sub-vendors must achieve a minimum Star-rating of 3 for performing High risk jobs under Tata Power supervision or under the Principal/Main Vendor (Prime Vendor).
- II. Sub-vendor working under Prime vendor's supervision (as supplier of manpower):- Manpower-supply contracts have to be supervised by the Prime vendor and the Prime vendor's Star- rating has to be taken into consideration. Vendors supplying manpower need not qualify in the Star-rating assessment.
- III. Only one level of sub-contracting is allowed, and the use of any sub-vendors must be authorised by Tata Power before any contract is finalised. Sub-vendors shall be subject to the same registration and selection/screening processes, as well as the same Safety performance requirements as those required of all Tata Power vendor's. Sub- vendor details are to be attached to the main contract during the RFQ stage. The process of sub-contracting is to be approved by the Chief / Head of the department (Appendix#14).

4.4 BA's Supervisor(R8): The BA's supervisor is the link between Tata Power Management and the BA (including his employees).(R8)

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- 4.4.1 He coordinates the work of his company's employee on site and is responsible & accountable for the safety of BA workforce. He will collaborate with site safety supervisor (SSS). BA's supervisor shall review the Safety requirements with his employees prior to the beginning of each job. Documentation of this review shall be forwarded by him to the Order Manager.(R8)
- 4.4.2 Assigning jobs to his workers, inspection of tools, equipment & PPEs , reporting of incidents & near-misses, housekeeping of work area and carrying out Safety Audits.(R8)
- 4.4.3 Deployment of all applicable Safety standards & procedure as mention in Safety Term& Condition CSMF2 during execution of the jobs.
- 4.4.4 Ensuring job specific training prior to execution of the job.
- 4.4.5 Conducting Tool - box meeting and compliance of SOP & statutory requirements at work place, correction of all unsafe conditions and acts.(R8)
- 4.4.6 BA'S Supervisor will deeply involve in making JSA through participation of work force.(R8)
- 4.4.7 BA's Supervisor will invite all BA employees for participation & engagement daily ensuring 100% in either observation reporting, TBT, Mass Meeting and discussion for Risk Assessment & implementation of control measure.(R8)

4.5 BA's Site Safety Supervisor(SSS)(R8):

- 4.5.1 SSS will carry out daily safety audit and inspections of tools, tackles, equipment and PPEs. They will identify and help in correcting the unsafe acts and unsafe conditions created while executing job t site with the help of BA's supervisors (R8).
- 4.5.2 SSS will ensure his participations in TBT and Mass Meetings regularly. They will also ensure reporting of all incidents & near-misses and participate in incident investigation (R8).
- 4.5.3 SSS will help in risk assessment of activities while developing SOP for the job (R8).
- 4.5.4 SSS will deeply involve in making JSA through participation of work force.
- 4.5.5 SSS will assist for participation & engagement of 100% BA employees daily in either observation reporting, TBT, Mass Meeting and discussion for Risk Assessment & implementation of control measure.(R8)

4.6 Safety Concurrence Group (SCG): It is Cross Functional Team constituted by Contract department with active support from Safety Team of the Tata Power Division/Discom safety team having representatives from Execution Department, Operation Department, Contract Department, and any other department as deemed fit. SCG will be responsible for the following:

- 4.6.1 **Assessment of Safety Potential of new vendor before registration using CSM F1 Process Flowchart for Vendor Registration, CSM F3 Safety Category Qualification Form and CSM F4 Safety Potential Evaluation Criteria along with Star Rating(R8).**
- 4.6.2 **Safety Evaluation of the bids as per evaluation format CSM F7 Safety Bid Evaluation Criteria**
- 4.6.3 **Finalization of the CSM F9 Site Safety Management Plan submitted by the Business Associate.**
- 4.6.4 **During Safety Bid Evaluation for following types of jobs are evaluated:**
 - 4.6.4.1 **High-Risk jobs, Medium Risk job, Major Shutdowns and Outages.**

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4.6.4.2 Capex jobs of High-Risk Category.

- 4.6.5 Site safety supervisor deployment for any specific & specialized work will be decided by SCG.(R8)

4.7 HR Department(R8):

- 4.7.1 Ensuring Health (Medical, Drinking water facility & sanitation support) & welfare (canteen services, rest room & sitting facility, first Aid) for BA employees as per social accountability guidelines stipulated in factory rules for all clusters (R8).
- 4.7.2 Ensuring protection of their legal rights, wages, insurance, provident fund etc. through awareness programs and through regular interaction with the contract employees (R8).
- 4.7.3 Enhancing capability competency and skill of BA employees, arranging Safety training for BA employees (R8).

5.0 Procedure

The BASCC specifies systematic requirements to manage safety related to BA' activities. All Tata Power employees shall comply with the provisions of this procedure (R8)

This is guided by a six-step process as enlisted in the Table below: -(R8)

SI No.	Name	Explanation	Key Elements
1	Registration of BA	Pre-Qualification for Registration	Identify BA who comply with Tata Power's Safety principles and standards. 1) <u>CSM F1 - Process Flow Chart for Vendor Registration</u> to be use for vendor registration. 2) <u>CSM F2 Safety Terms and Conditions (R8)</u>: The document CSM F2 Safety Terms and Conditions provides the information about Tata Power-Division /Odisha Discom safety System to the Business Associate. 3) Evaluation of BA's safety category as per <u>CSM F3 - Safety Category Qualification form</u> 4) Evaluation of BA's Safety potential & Star rating as per <u>CSM F4 - Safety Potential Evaluation Criteria</u> before registration.
2	Contract Preparation	Scope of Work, specific Safety clauses based on Safety Hazards Assessment and control measures	Develop Contract orders using <u>CSM F2 - Safety Term & Conditions</u> & specific Safety clauses in the documents to clarify Health and Safety expectations and Sub Vendor engagement as per <u>CSM F14: Sub-vendor Engagement</u>

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			Request Form (R8)
3	Contract Award	Awarding the contract to qualified competent BA/Vendors	Thorough & effective communication and review of Contract Safety specifications at Pre-bid, Post-bid & pre-award meeting. Evaluation as per CSM F7 - Safety Bid Criteria and award contract through CSM F5 - Flow Chart for Issuing RFQ and PO.
4	Orientation and Training	BA workforce Safety training, generic & Skill-based Safety training (SHE L1,L2,L3)	Assure that BA's workers embrace the Tata Power's 'health & safety culture' and follow the Tata Power Safety standards. BA workforce training as per CSM F2 - Safety Term & Conditions (clause 3.3.2)
5	Managing the Work	Safety supervision/function ensuring implementation of Tata Power Safety standards and SOP	Hold Pre-work meetings and assessing field safety execution against contract requirements as per below- 1) CSM F6 – Safety Competency Assessment Form 2) CSM F8 – PPE Requirements 3) CSM F9– Site Safety Management Plan And High Risk job to be considered & managed as per 4) CSM F13- Indicative List of High-Risk Jobs (R8).
6	Periodic Evaluation	Post-work BA's Safety performance Evaluation	BA's Safety Performance evaluation as below- 1) CSM F10 – Process Flow Chart for Safety Performance Evaluation(R8) 2) CSM F11 - Safety Performance Evaluation Criteria 3) CSM F12 – Safety Violation Penalty Criteria and feedback to BA & Procurement, This will include Reward/Recognition & Penalty for safety violation/ accident. Enable all locations to have better access to Safety-qualified and capable BA's

5.1 Registration of Business Associates: Different vendors are to register based on following categories:

- ✓ **Category A- Vendors eligible to carry out High risk Jobs**
- ✓ **Category B- Vendors eligible to carry out technical jobs that are Medium/~~low~~ risk**
- ✓ **Category C- Vendors eligible to carry out administrative and office jobs**
- ✓ **Category D- Outsourced Jobs / Consultants /Medical Practitioners / Suppliers etc.**

For Vendor Registration, Contract Department will issue following documents for evaluation of Business Associate's safety capability.

- 1) **CSM F2 Safety Terms and Conditions (R8):** The document **CSM F2 Safety Terms and Conditions** provides the information about Tata Power-Division /Odisha Discom safety

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System to the Business Associate

- 2) **CSM F3 Safety Category Qualification Form(R8):** Business Associate will submit the **CSM F3 Safety Category Qualification Form** with all relevant details and documents to Vendor Registration Initiator, which will in turn forward it to Safety Concurrence Group (SCG) for evaluation.
- 3) **CSM F4 Safety Potential Evaluation Criteria:** The SCG will evaluate the details submitted by the Business Associate based on a predetermined criteria **CSM F4 Safety Potential Evaluation Criteria along with Star Rating (R8)** for Vendor Registration and will determine the category (Category A/B/C/D) for which the Business Associate will be registered. As mentioned in the above criteria, a site visit may also be organized by SCG prior to registration under Category A and B. In case, the Business Associate does not qualify the safety criteria, the Business Associate will not be registered. However, he may apply afresh for registration after 6 months.

5.1.1 Star Rating(R8):

SCG will evaluate Star Rating as per following -(R8)

- Initially potential Star Rating based on **CSM F4 Safety Potential Evaluation Criteria**
- After 6 month actual star rating assessment to be carried out based on **CSM F4 Safety Potential Evaluation Criteria** and safety performance evaluation.
- Odisha Discom & New Business Star Rating process will be applicable only 1 year after implementation of it.
- Based on Safety capability score Vendors rating will be evaluated (For 3 star rated vendors - within 12 months from previous assessment date and for 4 & 5 Star rated vendors – within 24 months from previous assessment and Re-assessment within three months from previous assessment date when a vendor is unable to achieve Star rating 3)
- Category A - Vendor must require [Safety Star Rating 4](#) and above.
- Category B - Vendor must require [Safety Star Rating 3](#)

***Star Rating will be evaluated by Third Party from FY 26 *(R8)**

5.2 Contract Preparation :

At the time of placing the Purchase Requisition (PR), Order Manager is required to declare the risk involved in the of the job (i.e., High Risk / Medium Risk / Low Risk jobs, based on the RPN in HIRA). If the Job is “High /Medium Risk” then RFQ will be attached **CSM F2 Safety Terms and Conditions** which includes following and safety bid will be evaluated

- 1) **CSM F6 Safety Competency Assessment Form**
- 2) **CSM F8 PPE requirements**
- 3) **CSM F9 Site Safety Management Plan Job Specific Safety Requirement (Educational and Professional Qualification, Skill & Experience Manpower, Tools, and Tackles, e.g., man lifter, use of drone, use & availability of rescue kit, Work Methodology etc.)**

Safety bid evaluation will not be done for category C and D.

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Contracts department will collect duly filled **CSM F6 Safety Competency Form** along with the bid. All other stakeholders will also put their efforts to get all relevant safety data during meeting / discussions with the vendor.

5.3 Contract Award: SCG will evaluate the document as per the **CSM F7 Safety bid evaluation criteria**. If any specific condition related to Contract is required to be conveyed to the Business Associate, Site safety team will attach the same as Annexure for specific conditions of job and submit it to contract team along with safety bid evaluation form. Commercial bid of Business Associate will be considered for evaluation by contract team only if Business Associate is qualified in safety bid. Site Safety Management Plan, defining the complete procedure of executing the job at site will be signed by the Business Associate and SCG after mutual agreement. Contract will attach a copy of Site Safety Management Plan along with PO to the successful bidder. Please refer **CSM F5 Process Flow Chart for issuing RFQ and PO significant health and safety risk associated with it**.

5.4 Capability Building(R8):

5.4.1 Before issuing gate pass:

For Odisha Discom/New business(R8): All Tata Power Business Associate and sub Vendor 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:

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

For Tata Power Divisions:

All Tata Power Business Associate and sub vendor 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.

5.4.2 Before start of actual work:

- Appropriate practical training such as SHE L1, L2& L3 (As per Competency Skill Matrix Annexure - 15)(R8) 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 by Tata Power followed by Post Assessment on the list of 15 critical Safety procedures mentioned under safety procedures. Duration of course is as specified by Division/Discom
- Business Associate shall ensure that concerned workmen are provided with adequate training

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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 (Bronze/Silver/Gold Card), which will be valid for 3 years, post which the workmen have to reappear for assessment.

- *BA Employee who Fail in assessment to be removed from work.(R8)*
- *BA Employee who achieved Bronze card can work for assisting Silver and Gold.(R8)*
- *BA Employee who achieved Silver card can Work under competent supervisors.(R8)*
- *BA Employee who achieved Gold card can Work independently.(R8)*
- *BA Supervisor who achieved Bronze card can be treated as Learner & can only supervise low Risk Job.(R8)*
- *BA Supervisor who achieved Silver can not take permit, Tata Power employee will take permit in such cases.*
- *BA Supervisor who achieved Gold card can take permit & supervise work.(R8)*
- *BA Safety Supervisor who achieved Bronze card can be treated as Learner.(R8)*
- 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 /Discom.
- After expiry of Certificate or Training /Competency Card again one day recertification of L1, L2 and L3 skill training will be provided.
- Quarterly /Half yearly (For Odisha and New business) Revalidation Test - "SHE L1 Revalidation test" will be conducted for the Business Associate's employees to revalidate their safety awareness and knowledge.
- 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.
- 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.
- 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 Business Associate 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.
- All BA's workmen and BA must attend Safety foundation course Training, all workmen engaged in critical jobs must clear and get certified for critical procedures applicable on his work like Work at Height and Electrical safety-LT & HT/LOTO&LC separately and all supervisors must complete supervisor certification in safety.
- Competency assessment of all critical workforce to be carried out for all who has taken L2 training.

5.4.3 Recognition to the Prior Learning in Safety

If "Order Manager" recommends and "Head of the Safety Department of Discom" is satisfied with the safety knowledge and competency of the employee of Business Associate, a test may be conducted by Tata power Skill development Institute/ other recognized institute to assess the

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prior learning in safety. If employees of the Business Associates 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.

5.5 Managing Work(R8):

Order Manger shall -

- 1) Comprehensively assess and ensure field Safety implementation against Contract requirements and the Safety Management Plan.
- 2) Maintain a follow up process that drives continuous improvement in Safety practices and avoids repetition of common errors.
- 3) Order Manager and BA should aim at optimizing Safety performance of the Contract by working in a collaborative manner during the execution of the work. This can be achieved by:
 - Ensure that potential safety hazards are identified and controlled before any contracted work starts. Hazard identification should be conducted using multi-disciplinary teams which includes members from competent safety professional/execution team/competent BA supervisor & workforce to understand and identify project-specific safety hazards.
 - Monthly inspection and replacement of damaged Personal Protective equipment - PPE & Critical Equipment, lifting Tools & Tackles and hand tools used at site.
 - **PTW** - PTW procedure must be adhere and implement at site.
 - Reviewing the Safety Management Plan (**CSM F9– Site Safety Management Plan**) before each stage of work begins.
 - **TBT & Mass Meeting**: Every day Tool box talks to be conducted based on JSA/SOP with maximum participation of BA Workforce & Safety points to be shared by BA employee & line manager and 100% participation of BA employee & workmen in to mass meeting/communication.
 - **BA Self safety audit**: BA Safety Supervisor will carry out daily safety audit and inspections of tools, tackles, equipment and PPEs. They will identify and help in correcting the unsafe acts and unsafe conditions created while executing job at site with the help of BA's supervisors.
 - All respective **Critical safety Rules & Procedures and General safety Rules & Procedures** to be use and implement at site during job.
 - "**Suraksha Samwad**" also known as Safety Interaction is a proactive safety initiative. In this program, leadership engages with BA workmen and employees in a scheduled 30-minute session to discuss and observe safety practices in the workplace.

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- **Reporting safety observations by BA employee:** This involves the active participation of the workforce in identifying and reporting safety observations, which can help prevent accidents and improve safety performance.
- **Felt Leadership for Business Associates Proprietor /Co-ordinators:** This program aims to develop leadership skills within the Business Associates Proprietor/Co-ordinators. It encourages individuals to take ownership of their work and fosters a culture of responsibility and accountability.
- **Behavior based safety program (Jivan Ki Aur):** It aims to create regular awareness among all ground staff. It seeks to sensitize them, establish relationships, foster teamwork, enhance communication, motivate and empower everyone, promote good health, and enable a happy and safe life. The program will cover various activities such as morning meetings, home visits, personal meetings, group meetings, short training sessions, games, and other forms of engagement.

5.6 Periodic Evaluation(R8):

1. During the time of job execution, regular site inspection will be carried out by the Tata Power-Division /DISCOM officials **mainly Line manager (R8)** to evaluate monthly safety performance of the Business Associate as per **CSM F11 Safety Performance Evaluation Report (R8)** and monthly score will be maintained by the Order Manager. Violations will be dealt as per **CSM F12 Safety Violation Penalty Criteria**. Please refer **CSM F10 Process Flow Chart for Safety Performance Evaluation**. Percentage of retention amount is usually mentioned in safety terms and conditions.
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 Business Associate, if such delays are attributable to Business Associate.
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.
6. **Site contract team will arrange Quarterly meetings with Order Manager to take feedback for Safety performance of Business Associates In-turn Site Leadership and Site Contract team will give feedback of safety performance to BA proprietors so as to take Corrective actions (R8).**
7. **CSM F11 Safety Performance Evaluation Report (R8) to be used to evaluate Star Rating of Business Associate for lead & Lag Indicator.**

5.6.1 Safety performance retention:

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

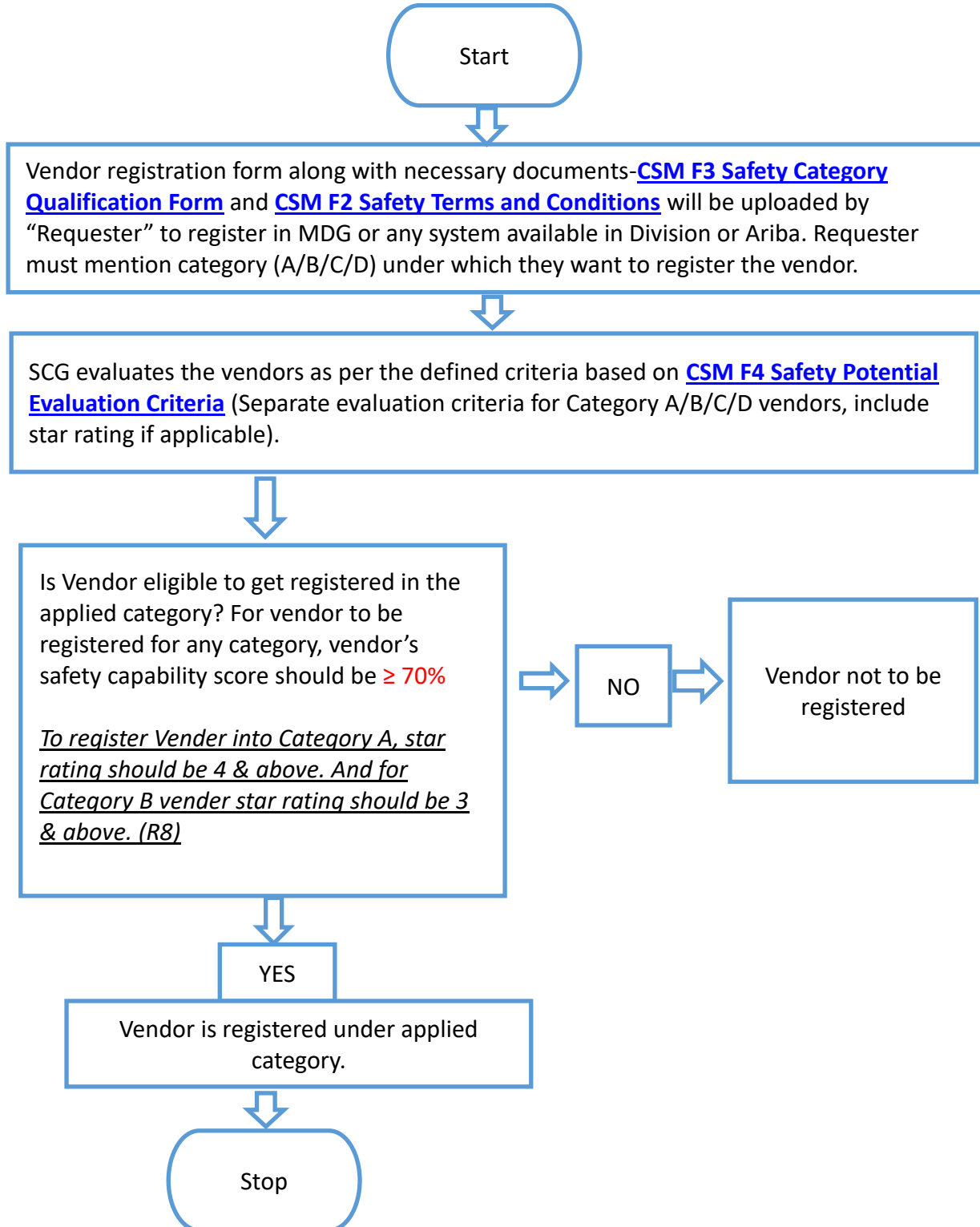
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Performance Score of Business Associate s. The retention amount will be calculated based on contract value as below.

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

1. The safety retention amount will not be applicable if there is clause of Contract Performance Bank Guarantee (CPBG) and safety performance of Business Associate is as per desired criteria.
2. If safety performance of Business Associate is not as per desired criteria (as per Appendix 10 – CSM F10 – Process Flow Chart for Safety Performance Evaluation and Appendix 11: CSM F11 - Safety Performance Evaluation Criteria. then safety retention percentage as mentioned in table above will be deducted from running bill.
3. Bidder to give 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 or it shall be within its right to recover such sum from accounts payable or the CPBG or the retention of the Business Associate available with Tata Power for the said contract between the Business Associate and Tata Power.
For all other contracts retention amount is applicable as per table given above.
4. The retention amount against non-safety performance saved and Penalty will go to a separate Safety Improvement Fund.
5. For the contract value of more than Rs 1 Cr or contract duration more than 12 months, the retention amount shall be released half yearly based on safety performance. For all remaining contracts, the retention amount will be released with the final bill.
6. Safety performance bonus 1% (limiting to 50 lakhs) of the invoice value will be considered at the end of the job if the contractual safety performance score is 100%.

Appendix 1: CSM F1 - Process Flow Chart for Vendor Registration



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Appendix 2: CSM F2 - Safety Terms and Conditions

(Attached as a separate document under the title CSM F2 – Safety Terms and Conditions)

Appendix 3: CSM F3 - Safety Category Qualification form

1. **“Safety Category Qualification Form”** is part of vendor registration form. It needs to be filled by the Business Associate at the time of Registration and should be submitted to Requester / Order Manager with all relevant documents.
2. The same will be evaluated by Safety Concurrence Group of the Division (SCG).
3. Information provided by Business Associate will be verified during site visit.

Safety Category Qualification Form

Please consider my application for

Category A Vendor: Vendor eligible to carry out Very High- and High-risk O&M/Project jobs

Category B Vendor: Vendors eligible to carry out technical jobs, classified as Medium / low risk

Category C Vendor: Vendors eligible for to carry out low or very low risk administrative and office job

Category D vendor: All Consultants, Medical Practitioners or vendors taking job from Tata Power and working from their own premises.

Name of the Vendor:							
#	Safety Information	Yes / No	Remarks				
1	Certified for i. ISO 45001, ii. ISO: 14001 iii. ISO: 9001 (ISO certificates to be issued from reputed accreditation agencies specified by Tata Power)	i. Y/ N ii. Y/ N iii. Y/ N	If Yes, Attach copy of the certification. If No, mention plan to get the certification.				
2	Safety Statistics for current and Last Three (3) Years - LTIFR	Yes/No		Current Year	Year 1(Last FY)	Year 2	Year 3

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Name of the Vendor:																		
	- LTISR		<table border="1"> <tr> <td>LTIF R</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>LTIS R</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	LTIF R					LTIS R									
LTIF R																		
LTIS R																		
3	Any Compensation paid due to accidents during current and last three years?	Yes/No	<table border="1"> <tr> <td></td> <td>Amount (INR)</td> <td>Man-hour</td> </tr> <tr> <td>Current Year</td> <td></td> <td></td> </tr> <tr> <td>Y1 (Last FY)</td> <td></td> <td></td> </tr> <tr> <td>Y2</td> <td></td> <td></td> </tr> <tr> <td>Y3</td> <td></td> <td></td> </tr> </table>		Amount (INR)	Man-hour	Current Year			Y1 (Last FY)			Y2			Y3		
	Amount (INR)	Man-hour																
Current Year																		
Y1 (Last FY)																		
Y2																		
Y3																		
4	Any prosecution against you by statutory bodies/clients during last three years due to statutory violations, criminal negligence towards safety and dereliction of duty of care towards your employees? Is any case still pending against you?	Yes/No	If yes, give details. If no, give an undertaking that no case is pending against you and you have not been prosecuted by statutory bodies or clients.															
5	Do you have Safety Policy? Safety Principles? And Lifesaving Rules?	Yes/No	If yes, attach copy of the documents available.															
6	Do you have Safety training process?	Yes/No	If yes, attach safety training process and average training man-hour of your employees for the last three years.															
7	Do you have a system for recording, reporting, and investigating all incidents or near misses?	Yes / No	If yes, show the incident statistics of last three years and implementation of CAPA.															
8	Do you have a disciplinary action program against your employees for violation towards safety rules and procedures?	Yes/No	If yes, show the records of disciplinary action taken the last three years.															
9	Do you have a reward and recognition scheme for your employees who show exemplary safe	Yes/No	If yes, show the records of Reward and Recognition given during. the last three years.															

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Name of the Vendor:			
	behavior and contribute to overall safety improvement at site?		
10	Do you engage in safety promotional activities?	Yes/No	If Yes, Show the proof of engagement in safety promotional activities.
11	Have you been recognized or awarded or rewarded by government bodies of clients for showing excellence in safety management in your jobs during last three years?	Yes / No	If Yes, Show proof.
12	Do you provide adequate quality of PPEs to your workmen?	Yes/No	If yes, please provide details of PPE Matrix and if required, samples for inspection.
13	Do you have Safety organization structure e.g., Safety Officers and Safety Committees?	Yes/No	If yes, attach copy of the safety organization structure, details of safety committees and safety professionals.
14	Name and address of sites where work is in progress or worked earlier	Yes/No	Site details to be attached for inspection by Tata Power-Division /DISCOM Officials.

Note: If you respond NO to any of the above questions, you can mention your plan to get the required documents.

I hereby confirm that the information provided above are true. I give my consent to be penalized as deemed fit in case any information given above are found to be false.

I will abide the general safety guidelines mentioned in the purchase order / work order and will ensure to prepare and follow site specific safe operating practices in consultation with the site-in-charge and safety professional. I will abide by penalty scheme in case of non-compliance.

Signature :

Name and Designation:

Stamp of Organization :

Appendix 4: CSM F4 - Safety Potential Evaluation Criteria for Vendor Registration (R8)

At the time of vendor registration, vendor will be registered under 4 categories

- 1) **Category A-** Vendors eligible to carry out High risk Jobs
- 2) **Category B-** Vendors eligible to carry out technical jobs that are Medium/low risk

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3) **Category C-** Vendors eligible to carry out administrative and office jobs

4) **Category D-** Outsourced Jobs / Consultants /Medical Practitioners / Suppliers etc.

For vendors to be registered under **Category A/B**, a safety potential evaluation will be carried out based on following parameters. (Actual score is safety capability score)

Star rating criteria score: 5 Star- 90 to 100, 4 Star- 80 to 90, 3 Star- 70 to 80(R8)

Sr No	Description	Weight age (%)	Actual Score
1	Does the service provider have a valid 45001 Certification?	10	
2	<u>Performance Measure: Lead Indicator</u> <u>(Ref to Safety Performance evaluation report CSM F11 (A) Lead indicator score)(R8)</u>	<u>40</u>	
3	<u>Performance Measure: Laq Indicator</u> <u>(Ref to Safety Performance evaluation report CSM F11 (B) Laq indicator score)(R8)</u>	<u>20</u>	
4	Has there been any prosecution / conviction for any Contravention regarding safety and Health provision under the factories Act/Electricity Act / BOCW Act and Rules framed there under? If yes Give Zero otherwise 5 Marks.	5	
5	Check the Safety orientation & training process of Service provider- Records of Safety training provided to safety officer/supervisor /workmen during last 1 year as percentage (%) of total employed by service provider ✓ Safety Officer: >80% of employees: 5 Marks, 50 to 79% of employee: 2.5 Marks and <50%: Zero. ✓ Safety supervisor: >80% of employees: 5 Marks, 50 to 79% of employee: 2.5 Marks and <50%: Zero. ✓ Workmen: >80% of employees: 10 Marks, 50 to 79% of employee: 5 Marks and <50%: Zero	20	
6	Check the organizational structure for safety professionals & engineers / supervisors. ✓ Check Availability of number of Safety Supervisor from government recognized institute as per workforce strength. 1 in 50 employees than 5 Marks <u>otherwise Zero.</u> (R8)	<u>5</u>	
	Total	100	

Evaluation Criteria for Category C

Sr no	Description	Weight age (%)	Actual Score
1	Does the Business Associate have a valid ISO 9001 certification?	40	

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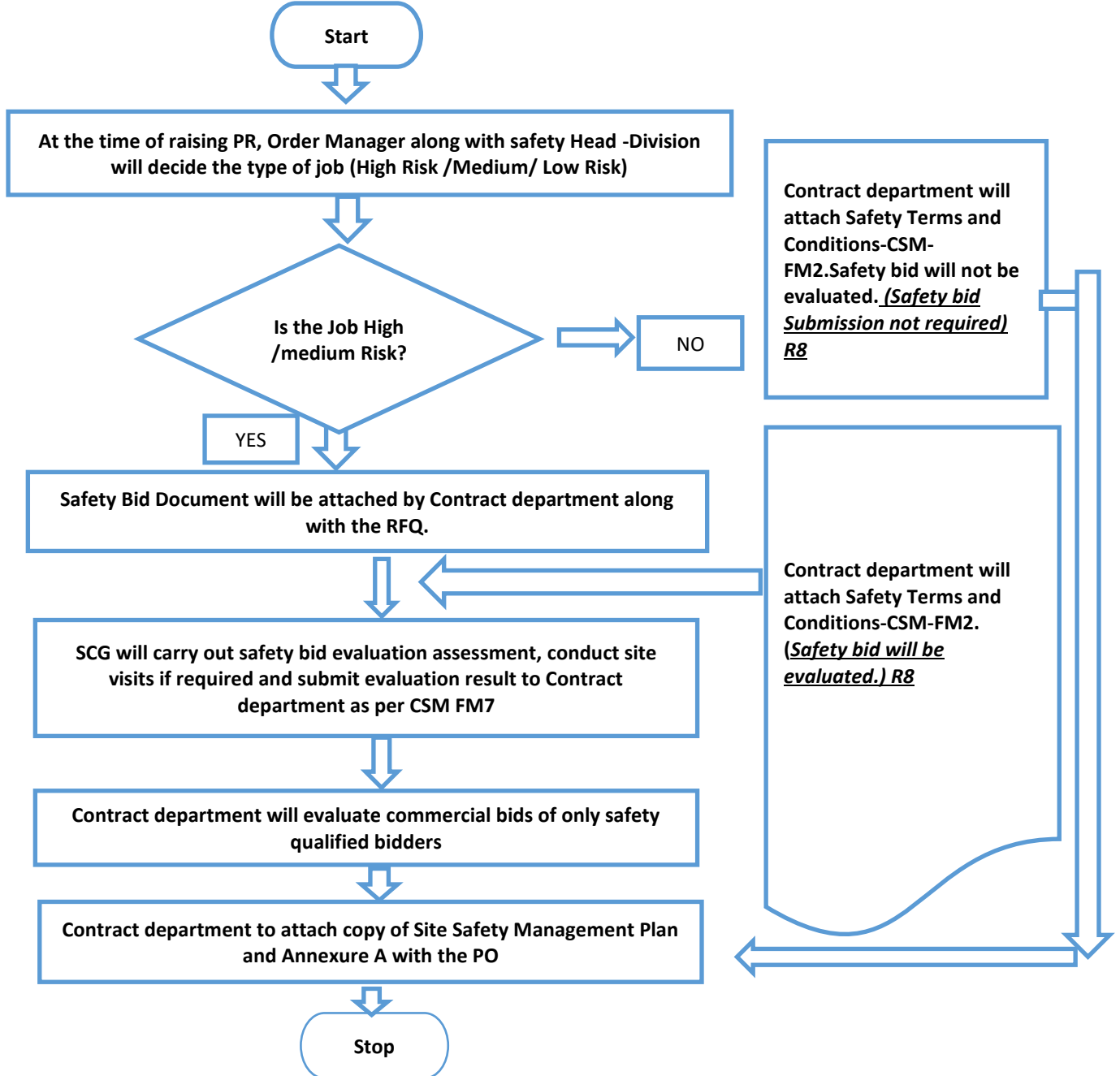
2	Check the Safety statistics of Service provider (If available than 10 otherwise Zero)	10	
3	Check the trend LTIFR/LTISR for last 3 years (If less than 0.2 than give 20 Marks if between 0.2 to 0.3 than give 10 marks and otherwise Zero)	20	
4	Has there been any prosecution / conviction for any Contravention regarding safety and Health provision under the factories Act/Electricity Act / BOCW Act and Rules framed there under? If yes Give Zero otherwise 10 Marks.	10	
5	Check the Safety orientation & training process of Service provider- Records of Safety training provided to safety officer/supervisor /workmen during last 1 year as percentage (%) of total employed by service provider ✓ Safety Officer: >80% of employees: 5 Marks, 50 to 79% of employee: 2.5 Marks and <50%: Zero. ✓ Safety supervisor: >80% of employees: 5 Marks, 50 to 79% of employee: 2.5 Marks and <50%: Zero. Workmen: >80% of employees: 10 Marks, 50 to 79% of employee: 5 Marks and <50%: Zero	20	
	Total	100	

Evaluation Criteria for Category D

Category D does not require any evaluation as it is for outsourced job outside the Tata Power company premise.

For vendor to be registered for any category, vendor's safety capability score should be $\geq 70\%$.

Appendix 5: CSM F5 - Flow Chart for Issuing RFQ and PO (R8)



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

Name of the Vendor/Bidder:

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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	
Project /AMC Manager						
Site In Charge						
Safety Manager						
Safety Officer						
Supervisors						
Technicians						
High Skilled workmen						
Skilled workmen						
Semiskilled workmen						
Lineman						
Helpers						
Drivers						
Unskilled						
Others						

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

Subcontracted – Red If sub Business Associate 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-Business Associate's follow the Tata Power Safety Procedure and agreed CSM F9 Site Safety Management Plan.

- Against each category, indicate minimum educational qualification and work experience
- Add rows to include other specialized manpower, if any.
- Extend columns to cover the entire duration of the proposed contract.
- 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: -

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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 Business Associate at Site. 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

Division/DISCOM Requirement	Bidders Response
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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

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

7. Crane Deployment: 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: 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,

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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:** 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.

Appendix 7: CSM F7 - Safety Bid Evaluation Criteria

The User must select whether the job is high /Medium Risk and long duration at time of raising the PR.

- 1) The decision whether job is “is high /Medium Risk “or not has to be made by order manager based on Risk involved (Risk Priority Number in HIRA) of the Jobs. An indicative list of high-risk jobs is attached as Appendix 13. The risk assessment will be done along with Division safety Head.
- 2) If a technical job is of low risk with estimated duration of the contract more than one year, the job should be treated as “**long duration**”.
- 3) All Safety bids will be evaluated by Safety Concurrence Group. Structure of SCG will be declared by contract department with the assistance of Division / Discom safety. Safety

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team will audit bid evaluation process of a few selected jobs and Quality of evaluated safety Bids.

- 4) Records of jobs sent by for Safety Bid evaluation shall be maintained by Contract team in existing tracing sheet along with other jobs.
- 5) Safety bid evolution will be done by SCG within one working week.
- 6) Contracts / Division shall provide a list of regular Business Associates participating in multiple tenders during the year for a one-time umbrella Safety Evaluation of Bidder (as against the specific Bid evaluation) by indicating the nature of the type of jobs / works which the BA usually participates in bidding. SCG shall evaluate such bidders for the requested works and on satisfying the evaluation criteria may be granted a Safety Pre-Approved status for the specific types of work (e.g., O&M of Boiler, Turbine, CHP, AHP, Turnkey EPC, Switchyard, Distribution Electrical Contract etc.) which shall be initially valid for a period of 1-year and shall thereon be extended further against revalidation / re-evaluation as required.
- 7) Business Associates having such Safety Pre-Approved status for the type / category of jobs shall be exempted from submission of Safety Evaluation Bid against each tender provided that their Safety Pre-Approved status is valid for the subject work / tender.
- 8) A suitable system shall be developed by Contracts to track the validity of such Safety Pre-Approved status of Bidder for timely renewal failing which the Safety Pre-Approved status shall cease and Bidder will thereon have to provide Safety Bids with each tender until such one-time approval is renewed.

Safety Bid Evaluation will be based on following parameters.

Evaluation Criteria

S. No.	Description	Max Marks	Criteria for evaluation
1.	Qualification and Experience of manpower	15	As per Clause No. 1 <u>CSM F6 – Safety Competency Assessment Form (R8)</u>
2.	Tools and Tackles to be provided by bidder	15	To be evaluated as per approved tool list of concerned departments.
3	PPE Requirements	5	To be evaluated as per approved PPEs standard and PPE Matrix specified in <u>CSM F8 – PPE Requirements (R8)</u>
4	Job Safety Plan/ Method	15	To be evaluated as per as per SOP/WI/HIRA
5	Vehicle Deployment	5	<u>Weightage will be given for CNG/Electrical Vehicles with endorsement of CNG kit on RC (R8)</u>
6	Crane and Mechanized heavy equipment Deployment	15	<u>Date of manufacturing or running hours or stipulated in laws.(R8)</u>
7	Training Records	5	Training records to be evaluated with evidence and scoring to be done as per availability of records
8	Certificate Accreditation	5	ISO 9001-2.5 Marks ISO 45001- 2.5 Marks ISO14001- 2.5 Marks. Total Max 5 Marks for all Three

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9	Safety Initiative for learnings implemented in accidents in organization and work force (Fatal / Non-Fatal)	15	Maximum 15 marks will be awarded for visible evidence in terms of safety initiative deployed based on learning of accident in organization and workforce in case of accident
10	Rewards and Recognition Process	5	Maximum 5 marks will be awarded for R&R process evidence
Total		100	

Safety Records (Lag Parameter)

1.	Fatal Accident	(-) 10 Marks for each case with max of 15 marks	For any fatality in Tata power /Other company in Current and last three years 10 marks will be deducted with maximum up to 15 marks. For new entrant BA, these marks will be deducted for Past safety records. If and BA found hiding such facts, then contract will be terminated immediately during the execution stage.
2	LWDC (Non-fatal)	(-) 5 Marks for each case with max of 10 marks	For each LWDC (Non-Fatal) case in Tata power /Other company in Current and last years, 5 marks will be deducted with maximum up to 10 marks. For new entrant BA, these marks will be deducted for past safety records. If and BA found hiding such facts, then contract will be terminated immediately during the execution stage.

The Tata Power Ltd	Company		Minimum Requirement	Weightage	Score Obtained
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Manpower	Safety Officer (1 per 500 workers) or as per requirement		Qualification - Safety Officer shall possess recognized degree in any branch of engineering with practical experience in similar industries of Min 2 years and Advance Diploma In Industrial Safety by State technical board. (Each state government prescribes the qualification of safety officer.). Require knowledge of Local language. Experience - Minimum 2-year experience in relevant field as mentioned in the job in PR.	5	
	Safety Supervisor (1 per work site up to max. 50 workers). <u>(For any specific & specialized work, site safety supervisor will be decided by SCG)(R8)</u>		Qualification - Supervisor shall possess ITI/ Diploma in relevant field. PDIS is desirable, but not mandatory. Require knowledge of Local language. Experience - Minimum 5-year experience in relevant field as mentioned in the job in PR. Training – Trained and certified by Tata power Skill development Institute or equivalent institute in relevant safety procedures. Note: On request of the Business Associate /Users -TPDSI should vet & certify the skilled & experienced Technician if Technical Qualification is not adequate.	5	
	Qualified Technician (Skilled workers as electrician, rigger, fitter, welder, cable jointer, line men etc.)		Experience - Minimum 2-year experience (or experience prescribed by state government) in relevant field as mentioned in the job in PR. Training – Trained and certified by TPSDI or equivalent institute in relevant safety procedures.	5	
Tools & Tackles	Equipment / Machines/ Tools & Tackles (lifting and shifting tools)		The list of Equipment /Machines / Tools and tackles to be used for job to be submitted by the Business Associate. Evaluation of the list will be carried out based on 1) Suitability as per the relevant job	15	

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		2) Make and age of the tools from authorized agencies defined by the user. 3) Certification by the competent authority of respective state.		
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Final Qualifying Criteria

S. No.	Description	Max Marks	Criteria for evaluation
1.	Qualified Bidders	More than 70 marks	Marks Obtained. 60 Marks for New business-like Odisha Discom for one year from CSMC implementation date.

Appendix 8: CSM F8 - PPE requirements

The Business Associate 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 2 CFM 2 in detail.

PPE Requirement

1	All Business Associate '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 with correct voltage rating and expiry date normally one year from Manufacturing date& 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

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

Pictorial View of PPEs for reference purpose

Sl. No.	Name of PPE	IS / EN Standard	Picture
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298(Part-2) and with test report of electrical resistance.	
02	HDPE Safety helmet with chin strap and ratchet type for adjustment for Nonelectrical work and electrical work	IS:2925-1984/ EN 397/2012	
03	Full body harness (Safety belt) The straps at shoulder and thigh shall have full pad for comfort. The back shall be so designed that harness straps do not tangle with each other.	EN 361:2002 EN 358 : 2000 IS: 3521:1991/2002	
04	Electrical Safety Gloves – Composite type Soft electrical gloves as per size of individual.	EN: 60903 CE marked	
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	

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06	Fireproof jacket for chest protection		
08	Reflective jacket to each workman	As per Tata Power standard	

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: -	

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Detail of Sub Business Associate s involved: -		
Method Statement Prepared By: - Designation: - (e.g., Site Manager)	<u>Signature</u>	<u>Date</u>

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 subBusiness Associate s' staff, Project Manager/Site Manager of principal Business Associate , Sub Business Associate Site Manager, Project Engineer, Safety officer, Competent Supervisory Staff etc.)*

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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

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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, Business Associate s. Details of plant, tools, and equipment to be used for the work, including the availability of relevant statutory documents, checks or inspections etc. Details of fencing, barriers, cones, chains, dangers notices, warning signs etc.*

Tools required for work:

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

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

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

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

8.0 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,*

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firefighting, and first aid arrangements, nearest onsite/offsite emergency response also to be considered during emergency planning.

9.0 "5S issues" / Waste Disposal/ Housekeeping and Environmental issues: *Details waste disposal processes and or housekeeping activities, Details of environmental impacts and control measures.*

--

10.0 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>	

11.0 First Aid facilities and Nearby Hospitals Details

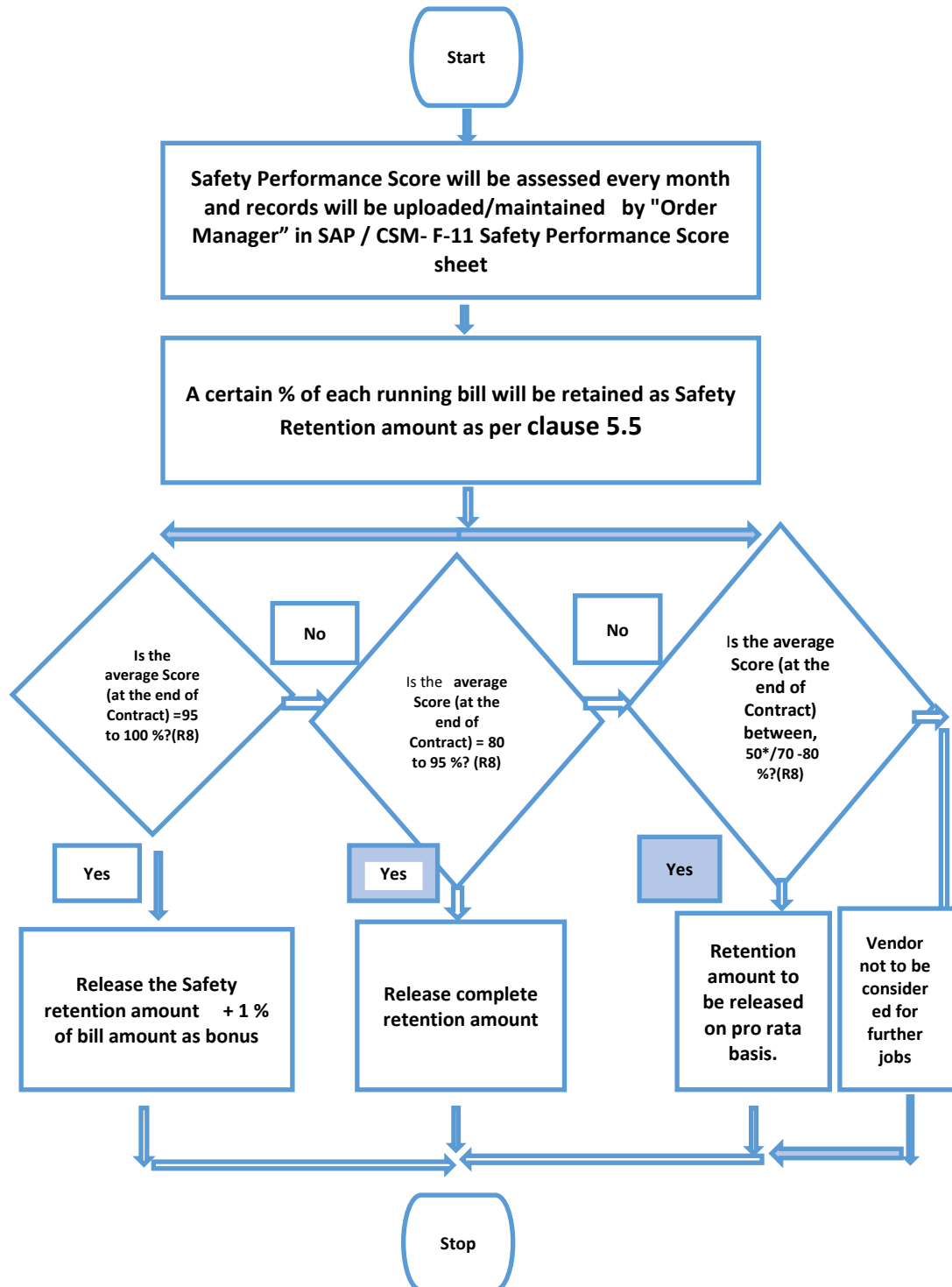
- Name of On Site First Aider
- First Aid Box Location
- Location of nearest hospital

12.0 Occupational Health, Fitness and COVID-19 related Preparedness:

- | |
|---|
| <ul style="list-style-type: none"> • Please give a brief write-up / 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. |
|---|

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Appendix 10 – CSM F10 – Process Flow Chart for Safety Performance Evaluation (R8)



*** For New Business such as Odisha Discoms**

Appendix 11 CSM F11 - Safety Performance Evaluation Criteria (R8)

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Safety Performance Evaluation Report- CSM F11

BA field safety audit (Safety Performance Evaluation for BA).							
Division		Function					
Name of BA		Month					
Nature of Work		PO					
	A. Lead Indicators		100 (for star rating score will dividend scale of 2.5)				
	-	UOM	Target		Actual score for the month		
1	% of employees certified in Skill development institute/ authorized agency/Card issued.	% Workforce covered	100 %	51% to 99%	50%	<50 %	
	Score		10	Pro-rata	5	0	
2	Monthly inspection and replacement of damaged Personal Protective equipment -PPE by BA (Safety shoes, Induction helmet, full body safety harness with work positioning lanyard, rubber insulated gloves, reflective jacket etc.as per Job requirement)	% of total workforce	100 %	99% to 50%	<50%		
	Score		10	5	0		
3	Monthly inspection and replacement of damaged Critical Equipment, lifting Tools & Tackles and hand tools used at site by BA (Neon Tester, Discharge rod, ladders Vehicle, Tools & tackles carried out and defective equipment replaced as required.	% Total T&T	100 %	99% to 50%	<50%		
	Score		10	7	0		

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4	Unsafe Conditions/Acts (Potential Hazards), near miss(Close calls), minor injury(First aid cases and MTC) cases reported	Observation / Nos of workforce	0.50	0.25	<0.25		
	Score		10	7	0		
5	Monthly R&R for workforce along with Tata power reparative monthly	% of total workforce	10%	5%	0		
	Score		10	5	0		
6	Nos of workforce covered under program under Jivan Ki Aur/Ghar se Ghar tak/Surkhshit Pariwar ki aur	% of total workforce	10%	5%-10%			
	Score		10	0			
7	Safe (designated way) Disposal of Waste generated, Records of waste (Hazardous Waste – Oily cotton waste – E-waste etc.) generation. No effluents to drain/discharges to ground		YES	NO			
	Score		15	0			
8	<u>Daily Tool box talk and Weekly Mass communications covering 100 % workforce and records maintained or not(R8).</u>	% of total workforce	100 %	50-100%	<50%		
	Score		10	5	0		
09	<u>Check for housekeeping at site(R8)</u>	At least 3S.	YES	NO			
	Score		15	0			
	B. Lag Indicators		50 (for star rating score will dividend scale of 2.5)				
			Target				

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1	Number of Fatalities	0	>0			
	Score	30	0			
2	No of LWDC - Reportable	0	>0			
	Score	10 / 20*	0			
3	Major Fire	0	>0			
	Score	10 / 0*	0			
	Total score	150				0
	* Odisha					% 0

Appendix 12: CSM F12 - Safety Violation Penalty Criteria

Major Violations and Escalation matrix

Consequence of safety violation observed not related to incidents or accidents		Violations				
Sl. No.	<u>Safety Violation</u>	1st	2nd	3rd	4th	<u>Subsequent violation</u>
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
B	Memo to BA and Levy of Penalty	Order manager / EIC	10000	

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C	Memo to BA and Levy of Penalty	Order manager / EIC	25000	cumulative during the FY and deduction will be done from the monthly bills.(R8) the contract period, not on a monthly basis
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	

***Blacklisted Business Associates shall eligible for New Bid after one year subjected to Star Rating Performance evaluation (R8).**

Other Violations and Penalty

Penalty shall be imposed on the Business Associate's 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

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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
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 sub Business Associate 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 <i>TPSMS/GSP/GHK/022</i> • 1st Instant • 2nd instant • 3rd instant • 4th instant • Subsequent instants	2	• 1000 • 2000 • 5000 • 10000 • 10000
28	Violations related to vehicles with respect to <i>TPSMS/CSP/RSP/015</i> . • 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	5	2000 per each violation

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	• Cylinder trolley not available • Cylinders are transported by manual rolling		
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 • 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	5	2000 per each violation
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

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	Required
2	Major Injury (Bone injury or burn or hospitalization >48 hrs.) Non-	G	G	H		Intolerable

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	Fatal (Two or more non-Fatal in one event)					
3	Single fatality in one event	G	H			
4	Multiple fatalities (Two or more fatalities in one event). Anywhere in Tata power.	H				
Legend	Action to be taken	Responsibility		Penalty (INR)	The no. of violations shall be calculated cumulative during FY and deduction will be done just after Consequence of incident / Accident(R8)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: Indicative List of High-Risk Jobs (R8)-

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

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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
19	Work at height
20	Electrical Work
21	Excavation work >3 ft.
22	Line breaking - Fuel
23	Line breaking - Power
24	Line breaking - Gas
25	Hot work - Welding, Brazing , Gas cutting , Grinding and any process which generates heat and Spark
26	DG Maintenance
27	Gas line - Cylinder change over
28	Gas line - Any part replacement, Flushing, working with high pressure (Not applicable for General check or any other Alarm reset etc.)
29	Chemical drum change over
30	Effluent handling - Loading to tanker, Pump or any other part replacement
31	Chemical and Effluent handling - Pump, Valve replacement, and any work which exposes chemical or effluent (Not applicable for General check or any other Alarm reset etc.)
32	Working on Robots - General check using check list, alarm reset etc.
33	Working on Robots - Replacement of Faulty devices, sensors etc.
34	Working Inside ASRS- General check using check list, alarm reset etc.
35	Working Inside ASRS - Replacement of Faulty devices, sensors etc.
36	Lifting activity
37	Working in Elevator / Lift
38	Canopy work
39	Panel & equipment Testing.
40	String Connection & VOC Testing
41	Commissioning activities.
42	Transformer Testing.

The Tata Power Company Ltd		<i>Business Associate's Safety Code of Conduct</i>
<i>Document no TPSMS/GSP/ CSM/015/REV 08</i>		<i>Date of Issue: 01/04/2024</i>

43	HIPO Test.
44	Battery Bank Installation & testing.

Appendix 14: Sub-vendor Engagement Request Form (R8)

(This form is to be used by Prime / Main Vendor's organisation in their letter head)

Form

Ref No.....

Date:

The Chief Procurement Officer / Chief Commercial (Division.....) Tata Power
Location:

Sub: Approval Request for Engagement of Sub-vendor against Work Order
No.....dated [High risk job/Medium risk job/Low risk job]

Through: Representative of user department (Signature)-

Dear Sir,

This is to bring to your kind attention that Tata Power/.....has placed a Work Order on us: No:
..... date:.....for execution of the following job
.....

We seek your approval for the engagement of Sub-vendor/ Vendors (registered as per BASCC) for execution of the job as detailed below.

Tick option A or B as applicable:

A) M/s Vendor code (3-Star qualified) will be
deployed as

B) Sub-vendor for executing the job under their own supervision.

M/s

.....Vendor code will be deployed as Sub-vendor
under Prime / Main Vendor supervision (Star-rating is not mandatory).

We hereby declare that we shall be solely responsible for compliance of all the terms and conditions of the said order as well as with various statutory provisions as applicable for the execution of the job through the said sub-vendor to be engaged by us.

Thanking you

The Tata Power Company Ltd		<i>Business Associate's Safety Code of Conduct</i>
<i>Document no TPSMS/GSP/CSM/015/REV 08</i>		<i>Date of Issue: 01/04/2024</i>

Yours sincerely
(Prime Vendor with office seal)

Name of the prime vendor's representative:..... Designation..... Vendor

Name:..... Vendor Code:.....

For Official Use only

Approval Granted/ Not Granted:
Order Manager/Contract Administrator -

Appendix 15: CSM F 15: BA Competency Skill Matrix

Generation Cluster

SI No.	Department	Designation	Qualification	Experience	Mandatory Requirement	L0	L1	L2	L2 Trainings	L3
1	O&M	Helper	Preferably 10th Pass				Mandatory			
		Electrician	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance as per voltage category	License is required		Mandatory	Mandatory	LT/HT/WAH	
		Heavy Equipment Operator (EOT/Crane/ Heavy vehicles)		Mini. 2Yr Exp.	License is required as per state statutory requirement		Mandatory	Mandatory	Road/Vehicle Safety/ Lifting Operation	
		IBR Welder/ Welder/gas cutter/Grinder		Mini. 2Yr Exp.			Mandatory	Mandatory	HOT Work/WAH/CS	
		Rigger		Mini. 2Yr Exp.			Mandatory	Mandatory	Lifting /WAH/	
		Foreman		Mini. 5 Yr Exp.			Mandatory	Mandatory	Lifting /WAH/CS	
		Fire Man		Mini. 2Yr Exp.			Mandatory		Fire Fighting	
		Masson		Mini. 2Yr Exp.			Mandatory			
		Carpenter		Mini. 2Yr Exp.			Mandatory			
		fitter		Mini. 2Yr Exp.			Mandatory			
		Garden Maintenance/ Security/ Pantry Staff / Pest Controller		Mini. 2Yr Exp.		Mandatory	Mandatory			
		Assit. Chemist	Bsc Chemical	Mini. 2Yr Exp.			Mandatory	Mandatory		
		Chemist	Bsc Chemical	Mini. 2Yr Exp.			Mandatory	Mandatory		
		Scaffolder		Mini. 2Yr Exp.			Mandatory	Mandatory	Scaffolding / WAH/CS	
		Supervisor	Degree/Diploma in Engg.	Mini. 5Yr Exp.			Mandatory			Mandatory

		BA Engineer	Degree/Diploma in Engg.	Mini. 2Yr Exp.			Mandatory			Mandatory
2	Projects	Helper	Preferably 10th Pass				Mandatory			
		Electrician	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance as per voltage category	License is required		Mandatory	Mandatory	LT/HT/WAH	
		Operator		Mini. 2Yr Exp.			Mandatory	Mandatory	Road/Vehicle Safety/ Lifting Operation	
		Welder		Mini. 2Yr Exp.			Mandatory	Mandatory	HOT Work/WAH/CS	
		Rigger		Mini. 2Yr Exp.			Mandatory	Mandatory	Lifting /WAH/	
		Foreman		Mini. 5 Yr Exp.			Mandatory	Mandatory	Lifting /WAH/CS	
		Scaffolder		Mini. 2Yr Exp.			Mandatory	Mandatory	Scaffolding / WAH/CS	
		Supervisor	Degree/Diploma in Engg.	Mini. 5Yr Exp.			Mandatory	Mandatory		
		BA Engineer	Degree/Diploma in Engg.	Mini. 2Yr Exp.			Mandatory			Mandatory

Competency Framework -

Competency Assessment criteria consists of	-	<u>Criteria for competency assessment of Lineman/helper Bronze/Silver/Gold Category</u>
1. CV Selection before imparting training L1/L2 2. One to one interaction with CFT. (CFT comprises of more then 2 member team in which a safety/SDI official, and a functional Manager from the same department or cross functional department.)	-	<u>For Skilled - L1(30) + L2/L3(30) + Interview (40 Marks)</u>
Gold - 91% - 95%, Silver - 81% -90%, Bronze - 71% - 80%, Fail - 70% & Below		
Notes: All trade to be assessed for Technical competency even before imparting L1/L2/L3 training. 1. Fail: To be removed from work. 2. Bronze: Work for assisting Silver and Gold. 3. Silver: Work under competent supervisors. 4. Gold: Work independently. This is only for BA workforce		

T&D Cluster

SI No.	Department	Designation	Qualification	Experience	Mandatory Requirement	L1	L2	L2 Trainings	L3
1	O&M	Helper	Preferably 10th Pass	Mini. 2 Yr working Exp. in power distribution, ability to read, write emphasis on safety.		Mandatory			
		Lineman/ Fitter	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance as per voltage category	license is required	Mandatory	Mandatory	LT/HT	
		Cable Joiner				Mandatory	Mandatory	LT/HT	
		Supervisor	Degree/Diploma in Electrical Engg.	2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory
		BA Safety Officer / Supervisor	Degree/Diploma in Engg. & Diploma in industrial safety From Recognised institute	Mini. 3 Yr Post qualification exp. In the field of Electrical safety		Mandatory			Mandatory
2	Projects	Helper	Preferably 10th Pass	Mini. 2 Yr working Exp. in power distribution, ability to read, write emphasis on safety.		Mandatory			
		Lineman/ Fitter	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance as per voltage category	Minimum MV license is required	Mandatory	Mandatory	LT/HT	
		Supervisor	Degree/Diploma in Electrical Engg.	2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory
		BA Safety Officer / Supervisor	Degree/Diploma in Engg. & Diploma in industrial safety From Recognised institute	Mini. 3 Yr Post qualification exp. In the field of Electrical safety		Mandatory			Mandatory
3	Civil	Helper	Preferably 10th Pass	Ability to read, write emphasis on safety		Mandatory			
		Masson		Mini. 2Yr Exp.		Mandatory	Mandatory	Excavation Safety	
		Supervisor	Degree/Diploma in Electrical Engg./Civil Engg.	2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory
4	MMG	Helper/MI	Preferably 10th Pass	Minimum 2 Yr working Exp. in power distribution, ability to read, write emphasis on safety.		Mandatory			
		Lineman	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance as per voltage category	Minimum MV license is required	Mandatory	Mandatory	LT/HT	
		Supervisor	Degree/Diploma in Electrical Engg.	2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory

		BA Safety Officer / Supervisor	Degree/Diploma in Engg. & Diploma in industrial safety From Recognised institute	Mini. 3 Yr Post qualification exp. In the field of Electrical safety		Mandatory			Mandatory
5	EHV	Helper	Preferably 10th Pass	Minimum 2 Yr working Experience in power distribution, ability to read, write emphasis on safety.		Mandatory			
		Lineman	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance as per voltage category	Minimum MV license is required	Mandatory	Mandatory	LT/HT	
		Supervisor		2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory
		BA Safety Engineer	Degree/Diploma in Electrical Engg.	2 Yr. Post Qualification Exp. with valid supervisory license		Mandatory			Mandatory
		BA Safety Officer / Supervisor	Degree/Diploma in Engg. & Diploma in industrial safety From Recognised institute	Mini. 3 Yr Post qualification exp. In the field of Electrical safety		Mandatory			Mandatory
6	Admin	Helper	Preferably 10th Pass	Ability to read, write emphasis on safety		Mandatory			
		Driver	Preferably 10th Pass	With Valid driving Licence		Mandatory	Mandatory	Road/ Vehicle Safety	
		Supervisor				Mandatory			Mandatory

Competency Framework -

Competency Assessment criteria consists of	-	<u>Criteria for competency assessment of Lineman/helper Bronze/Silver/Gold Category</u>
1. CV Selection before imparting training L1/L2 2. One to one interaction with CFT. (CFT comprises of more then 2 member team in which a safety/SDI official, and a functional Manager from the same department or cross functional department.)	-	For Lineman/Supervisor - SDI Assessment(30) + L1(20) + L2/L3(20) + Interview (30 Marks)
Gold - 91% - 95%, Silver - 81% -90%, Bronze - 71% - 80%, Fail - 70% & Below		
Notes: All trade to be assessed for Technical competency even before imparting L1/L2/L3 training. 1. Fail: To be removed from work. 2. Bronze: Work for assisting Silver and Gold. 3. Silver: Work under competent supervisors. 4. Gold: Work independently. This is only for BA workforce		

Renewable Cluster

SI No.	Department	Designation	Qualification	Experience	Mandatory Requirement	L0	L1	L2	L2 Training (Specific)	L3
1	EPC Project (Large/Solar/ Wind/Roof Top Solar)	Helper	Preferably 10th Pass				Mandatory			
		Electrician	ITI(Electrician /Wireman trade) with wireman license from Respective state electrical licensing board for voltage level	Mini. 2Yr exp. in Industry	Possession of Valid Electrician/ Wireman License		Mandatory	Mandatory	LT	
		Heavy Equipment (Farahana/JCB/ Excavator etc.)		Mini. 2Yr Exp.	Possession of appropriate Driving license approved by RTO		Mandatory			
		Crane Operator		Mini. 2Yr Exp.	Possession of appropriate Driving License approved by RTO		Mandatory	Mandatory	Road/Vehicl e Safety	
		Carpenter		Mini. 2Yr Exp.			Mandatory			
		Fitter		Mini. 2Yr Exp.			Mandatory			
		Masson		Mini. 2Yr Exp.			Mandatory			
		Welder/Gas cutter/ Grinder		Mini. 2Yr Exp.			Mandatory			
		Supervisor	Preferably 10th/ITI/Diploma Pass	Mini. 5Yr Exp.			Mandatory			Mandatory
		Engr.	Degree/Diploma in Engg.	Mini. 2Yr Exp.			Mandatory			Mandatory
2	Manufacturin g/4GW	Helper/Security/ Canteen Staff/ HK Staff/Waste Mang. Handler	Preferably 10th Pass	Experience In similar working profile.		Mandatory				
		Electrician	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp.	License is required		Mandatory	Mandatory	LT/HT	
		Electrician (Working below 11KV)	ITI (Electrical/wire man trade)	Mini. 2Yr Post qualification exp.	NA		Mandatory	Mandatory	LT	
		Forklift Operator/Stacker/ BOPT	Preferably 10th Pass	Mini. 2Yr Exp.	License is required as per state statutory Req. (If not define in		Mandatory			

					that case LMV is must)					
		Operator/Trainee	ITI (Mech./Electrical/other trades)	NA			Mandatory			
		Operator/Trainee (Non-Technical)	Minimum 10th	NA			Mandatory			
		Carpenter	Preferably 10th Pass	NA			Mandatory			
		Welder	ITI welder trade	Min 2 Yr Exp.			Mandatory			
		Supervisor	Degree/Diploma	0 TO 2 Yr Exp.			Mandatory			Mandatory
		BA Safety Officer/ Supervisor	Degree/Diploma in Engg.	Mini. 2 Yr Exp.	Qualification as per State Factory Rule		Mandatory			Mandatory
		BA Engg.	Degree/Diploma in Engg.	Mini. 2Yr Exp.			Mandatory			Mandatory
3	Wind O&M	Technician Electrical	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance as per voltage category			Mandatory	Mandatory	LT/WAH/CS	
		Technician Mech.	ITI (Mach/fitter)	Mini. 2Yr Exp.			Mandatory	Mandatory	LT/WAH/CS	
		Supervisor	Degree/Diploma in Engg.	Mini. 5Yr Exp.			Mandatory			Mandatory
		BA Engr./Site In charge	Degree/Diploma in Engg.	Mini. 2Yr Exp.			Mandatory			Mandatory
4	Solar O&M	Helper	Preferably 10th Pass	Preferably exp. In similar working profile.			Mandatory			
		Electrician	ITI(Electrician /Wireman trade) with wireman license from Respective state electrical licensing board for voltage level	Mini. 2Yr Post qualification exp. in Project/maintenance as per voltage category	License ie required		Mandatory	Mandatory	LT/HT/WAH	

		Grass Cutter	Preferably 10th Pass	Mini. 2Yr Exp.			Mandatory			
		Module Cleaner	Preferably 10th Pass	Experience In similar working profile.			Mandatory			
		Technician		Mini. 2Yr Exp.			Mandatory	Mandatory	Lifting/LT	
		Supervisor		Mini. 5Yr Exp.			Mandatory			Mandatory
		BA Engg.		Mini. 2Yr Exp.			Mandatory			Mandatory

Competency Framework -

Competency Assessment criteria consists of	-	<u>Criteria for competency assessment of Lineman/helper Bronze/Silver/Gold Category</u>
1. CV Selection before imparting training L1/L2 2. One to one interaction with CFT. (CFT comprises of more then 2 member team in which a safety/SDI official, and a functional Manager from the same department or cross functional department.)	-	For Skilled - L1(30) + L2/L3(30) + Interview (40 Marks)
Gold - 91% - 95%, Silver - 81% -90%, Bronze - 71% - 80%, Fail - 70% & Below		
Notes: All trade to be assessed for Technical competency even before imparting L1/L2/L3 training. 1. Fail: To be removed from work. 2. Bronze: Work for assisting Silver and Gold. 3. Silver: Work under competent supervisors. 4. Gold: Work independently. This is only for BA workforce		

Odisha Discom Cluster

SI No.	Department	Designation	Qualification	Experience	Mandatory Requirement	L1	L2	L2 Trainings (Specific)	L3
1	O&M (33 KV, 11KV and below)	Helper	Preferably 10th Pass	Having basic knowledge of working in power distribution, ability to read, write emphasis on safety		Mandatory			
		Lineman/ Fitter	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance of 33/11/0.415KV as per voltage category	Minimum MV license is required	Mandatory	Mandatory	LT/HT	
		Cable Joiner				Mandatory	Mandatory	LT/HT	
		Supervisor	Degree/Diploma in Electrical Engg.	2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory
		BA Safety Officer / Supervisor	Degree/Diploma in Engg. & Diploma in industrial safety From Recognised institute	Mini. 3 Yr Post qualification exp. In the field of Electrical safety		Mandatory			Mandatory
2	Projects	Helper	Preferably 10th Pass	Having basic knowledge of working in power distribution, ability to read, write emphasis on safety		Mandatory			
		Lineman/ Fitter	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance of 33/11/0.415KV as per voltage category	Minimum MV license is required	Mandatory	Mandatory	LT/HT	
		Supervisor	Degree/Diploma in Electrical Engg.	2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory
		BA Safety Officer / Supervisor	Degree/Diploma in Engg. & Diploma in industrial safety From Recognised institute	Mini. 3 Yr Post qualification exp. In the field of Electrical safety /Construction Safety		Mandatory			Mandatory
3	Civil	Helper	Preferably 10th Pass	Having basic knowledge of working in power distribution,		Mandatory			
		Masson				Mandatory	Mandatory	Excavation Safety/WAH	
		Supervisor	Degree/Diploma in Electrical Engg.	2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory
		BA Safety Officer / Supervisor	Degree/Diploma in Engg. & Diploma in industrial safety From Recognised institute	Mini. 3 Yr. Post qualification exp. In the field of Construction Safety		Mandatory			Mandatory
4	MMG	Helper/MI	Preferably 10th Pass	Having basic knowledge of working in power distribution, ability to read, write emphasis on safety		Mandatory			

		Lineman	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance of 33/11/0.415KV as per voltage category	Minimum MV license is required	Mandatory	Mandatory	LT/HT	
		Supervisor	Degree/Diploma in Electrical Engg.	2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory
		BA Safety Officer / Supervisor	Degree/Diploma in Engg. & Diploma in industrial safety From Recognised institute	Mini. 3 Yr Post qualification exp. In the field of Electrical safety		Mandatory			Mandatory
5	Enforcement	Helper	Preferably 10th Pass	Having basic knowledge of working in power distribution,		Mandatory			
		Lineman	ITI(Electrical trade) Or shall as per CEA Regulation chapter 2 clause 7.2 [Electrical Licence as per voltage]	Mini. 2Yr Post qualification exp. in Project/maintenance of 33/11/0.415KV as per voltage category	Minimum MV license is required	Mandatory	Mandatory	LT/HT	
		Supervisor	Degree/Diploma in Electrical Engg.	2 Exp. as per voltage category and valid supervisory licence		Mandatory			Mandatory
6	Admin	Helper/ Plumber/ Gardner/ AC Mechanic	Preferably 10th Pass	Ability to read, write emphasis on safety		Mandatory			
		Driver	Preferably 10th Pass	With Valid driving Licence		Mandatory	Mandatory	Road/Vehicle Safety	
		Supervisor	Preferably 12th Pass	2 Yr. Relevant Experience		Mandatory			Mandatory

Competency Framework -

Competency Assessment criteria consists of	-	<u>Criteria for competency assessment of Lineman/helper Bronze/Silver/Gold Category</u>
1. CV Selection before imparting training L1/L2 2. One to one interaction with CFT. (CFT comprises of more then 2 member team in which a safety/SDI official, and a functional Manager from the same department or cross functional department.)	-	For Lineman/Supervisor - SDI Assessment(30) + L1(20) + L2/L3(20) + Interview (30 Marks)
Gold - 91% - 95%, Silver - 81% -90%, Bronze - 71% - 80%, Fail - 70% & Below		
Notes: All trade to be assessed for Technical competency even before imparting L1/L2/L3 training. 1. Fail: To be removed from work. 2. Bronze: Work for assisting Silver and Gold. 3. Silver: Work under competent supervisors. 4. Gold: Work independently. This is only for BA workforce		

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	WORK INSTRUCTION /OPERATING GUIDELINES	
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1.0 ORGANIZATIONAL VALUES

The Tata Group has always been a value driven organization. These values continue to direct the Group's growth and businesses. The six core Tata Values underpinning the way we do business are:

Integrity - We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.

Understanding - We must be caring, respectful, compassionate and humanitarian towards our colleagues and customers around the world and always work for the benefit of India.

Excellence - We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of goods and services we provide.

Unity - We must work cohesively with our colleagues across the group and with our customers and partners around the world to build strong relationships based on tolerance, understanding and mutual co-operation.

Responsibility - We must continue to be responsible and sensitive to the countries, communities and environments in which we work, always ensuring that what comes from the people goes back to the people many times over.

Agility - We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 ETHICS

In our effort towards Excellence and in Management of Business Ethics at TPCODL, an Ethics Management Team is constituted.

The main objective of the Ethics Management Team is to:

1. Record, address and allay the issues and concerns on ethics raised by different stakeholders like employees, consumers, vendors, Associates etc. by initiating immediate corrective actions.
2. Ensure proper communication of the ethics policies and guidelines through prominent displays at all offices of TPCODL and through printed declarations in all concerned documents where external stakeholders are involved.
3. Ensure proper framework of policies as preventive measures against any ethics violation recorded by them.
4. Prepare and submit MIS of all issues and concerns, corrective and preventive actions on monthly basis to the top management for their information.

All Associates and Stakeholders are requested to register any grievance on ethics violation on our website www.tpccentralodisha.com.

3.0 CONTRACT PARAMETERS

3.1 Issue/Award of Contract

TPCODL awards the contract to the Associate in writing in the form of Purchase Order (PO) or Rate Contract (RC), hereafter referred as Contract, through in any or all of following modes physical handover / post / e-mail / web document / fax with all the attachments/enclosures which shall be part of the contract document.

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On receipt of the contract, the associate shall return to TPCODL copy of the contract document duly signed by legally authorized representative of associate, within two days of Effective Date of Contract for contracts having contract execution time less than 30 days and within five days for all other contracts.

3.2 Contract Commencement Date

The date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

3.3 Contract Completion Date

The date of expiry of Guarantee Period shall be deemed as the Contract Completion Date.

3.4 Contract Period/Time

The period from Contract Commencement Date to Contract Completion Date shall be deemed as the Contract Period/Time.

3.5 Contract Execution Completion Date

The stipulated date for completing the supply as per schedule of quantities shall be deemed as the Contract Execution Completion Date.

3.6 Contract Price /Value

The total all inclusive price/value mentioned in the PO/RC is the Contract Price/Value and is based on the quantity, unit rates and prices quoted and awarded and shall be subject to adjustment based on actual quantities supplied and accepted and certified by the authorized representative of the company unless otherwise specified in schedule of quantities or in contract documents.

3.7 Contract Document

The Contract Document shall mean and include but not limited to the following:

- NIT/Tender Enquiry, QR, Instruction to Bidders, Special Condition of Contract (SCC) of tender, GCC, Technical & Commercial Specifications including relevant annexure and attachments).
- Bids & Proposals Received from Associate including relevant annexure/attachments.
- RC/PO with agreed deviations from the tender/bid documents.
- All the Inspection and Test reports, Detailed Engineering Drawings.
- Material Dispatch Clearance Certificate (MDCC).
- Minutes of Meeting (MoM)

3.8 Contract Language

All documents, instructions, catalogues, brochures, pamphlets, design data, norms and calculations, drawings, operation, maintenance and safety manuals, reports, labels, on deliveries and any other data shall be in English Language.

The Contract documents and all correspondence between the TPCODL, Third Parties associated with the contract, and the Associate shall be in English language.

However, all signboards required indicating "Danger" and/or security at site and otherwise statutory required shall be in English, Hindi, and local languages.

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3.9 Reverse Auction

TPCODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products / services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached in Annexure F.

4.0 SCOPE OF WORK

All the activities that are to be undertaken by the Associate to realize the contractual deliverables in completeness form Scope of Work. Following clauses list, but not limited to, major requirements of the scope of work.

The associate shall satisfy himself and undertake fully the technical/commercial requirements of items to be supplied as listed in the Schedule of Quantities together with the tests to be performed /test reports to be furnished before dispatch, arrangement of stage and final inspections during manufacturing as per terms and conditions of contract, technical parameters & delivery terms and conditions including transit insurance to be met in order to fully meet TPCODL's requirements.

Completeness: Any supplies and services which might have not been specifically mentioned in the Contract but are necessary for the scope mentioned in Special Terms & Conditions and/or completeness of the works at the highest possible level, including any royalties, license fees & compensation to be paid, whether incurred by the associates or by a third party for the work covered in the scope, regardless of when incurred, shall be supplied/provided by the associate without any extra cost and within the time schedule for efficient , smooth and satisfactory operation and maintenance of the works at the highest possible level under Indian conditions (but according to international standards for facility of this type), unless expressly excluded from the scope of supplies and services in this Contract.

TPCODL have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by submitting a request in writing to the Associate. The Associate shall, within fifteen days of receipt of such request from the TPCODL, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TPCODL requests a change, the Contract price and time shall be adjusted upwards or downwards, as the case may be and shall be mutually agreed to. The associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes as requested till adjustment of contract price and time schedule where so applicable in terms of or otherwise directed by the TPCODL.

5.0 PRICES/RATES/TAXES

Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPCODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPCODL store/site & unloading & delivery at TPCODL stores/TPCODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.

The Prices/Rates are inclusive of all taxes, levies, cess and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

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The prices/rates shall remain firm till actual completion of entire supply of goods/material/equipment as per contract is achieved and shall remain valid till the completion of the contract.

The prices shall remain unchanged irrespective of TPCODL making changes in quantum in all or any of the schedules of items of contract.

5.1 Changes in Statutory Tax Structure

If rate of any or all of the statutory taxes and duties applicable to the contract changes, such changes shall be incorporated by default if the changes occur within the contract execution time and shall be applicable if the contract is executed by the Associate within the Contract Execution Time.

For execution of contracts beyond contract execution time, where the delay is not attributable to TPCODL no upward revision in tax /duties shall be considered irrespective of changes in the statutory tax structure either within the contract execution time or beyond. However, in such cases, benefits due to any downward revisions in statutory tax rates shall be passed on to TPCODL.

6.0 TERMS OF PAYMENT

On delivery of the materials in good condition and certification of acceptance by TPCODL official, Associate shall submit the Bills/Invoices in original in the name of "TP Central Odisha Distribution Limited" to invoice desk, complete with all required documents as under:

- Test Reports (4 sets).
- MDCC issued by TPCODL.
- Packing List.
- Drawing and Catalogue.
- Guarantee/Warrantee Card.
- Delivery Challan.
- O&M Manual.
- Copy of Order.
- Minutes of Meeting.

Bills/ invoices shall mention Supplier's GST Number. TPCODL will make 100% payment within 30 days of submission of the Bill/Invoice complete in all respects and along with all the requisite documents mentioned above, subject to condition that Associate has furnished the requisite Security-cum-Performance Guarantee as stipulated in the contract.

6.1 Quantity Variation

Payment will be made on the basis of actual quantity of supplies/actual measurement of works accepted by TPCODL and not on the basis of contract quantity.

6.2 Full and Final Payment

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Full & Final Payment in all contracts shall be made subject to the associate submitting “No Demand Certificate” in the format as per Annexure-C.

7.0 MODE OF PAYMENT

Payment shall be made through crossed Cheque or RTGS whichever of the two modes chosen by the Associate, in favour of Associate's Bank Account on TPCODL records, on whose name Contract has been issued. Those Associates opting for the RTGS mode shall submit the details of Bank Account and other details as per annexure G. Further, for any payments made, TPCODL is not responsible for any consequences/disputes Associate have among the owners channel partners, sub-Associates and all such dispute/concerns shall be settled solely by the Associate.

8.0 SECURITY CUM PERFORMANCE DEPOSIT

Associates shall submit within 15 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPCODL for:

- (a) 5% of the PO value if purchase order value is more than Rs 5 Crores.
- (b) 10% of the PO value if purchase order value is less than Rs 5 Crores.

This shall remain valid till the end of the Guarantee Period of contract, plus one month.

- (c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.
 - For PO/RC values less than Rs. 5 lacs, Associate may request for deduction of amount equivalent to SPBG value from their first invoice. Such amount shall be withheld by TPCODL while processing the invoice and shall be released after completion of Guarantee Period plus one month.
 - For PO/RC values less than Rs. 3 lacs, the clause (8.0) for Security cum Performance Bank Guarantee (SPBG) shall not be applicable.
 - In case of RC (Rate Contract) after the expiry of RC validity, Associate shall have to submit SPBG. However, the Associate has the option to re-submit the SPBG as per actual RO (Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of the new SPBG to TPCODL. Alternatively, Associate may extend the validity of original SPBG only till the requisite period, i.e. Guarantee Period plus one month.

9.0 STATUTORY COMPLIANCE

9.1 Compliance to Various Acts

Associate should ensure adherence to all applicable laws, rules and regulation applicable under this contract from time to time. In case of violation any risk, costs etc shall be in associates account and keep TDPPL indemnified always till completion of contracts.

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9.2 SA 8000

TPCODL expects its Associates to follow guidelines of SA 8000:2014 on the following aspects

1. Child Labour
2. Forced or Compulsory Labour
3. Health & Safety
4. Freedom of Association & Right to Collective Bargaining
5. Discrimination
6. Disciplinary Practices
7. Working Hours
8. Remuneration
9. Management System

9.3 Affirmative Action

TPCODL appreciate and welcome the engagement/employment of persons from SC/ST community or any other deprived section of society by their business associates.

Relaxation in Contract Clauses under Affirmative Action for SC/ ST Business Associates**

TPCODL believes that inclusive growth is the key to sustainable development, and to promote the same Policy on Affirmative Action for Scheduled Caste & Scheduled Tribe Communities has been adopted across the company.

Under the same pre-text, and to promote entrepreneurship among SC/ST community TPCODL has taken initiative by proposing relaxations in contract clauses as per below:

S. No	Initiative	for SC/ ST BA's	Guideline Document
1	Tender Fees	100% waiver for SC/ST community	All Open Tenders
2	Earnest Money Deposit	50 % relaxation of estimated EMD value	All limited and Open Tenders
3	Performance Bank Guarantee	50% relaxation in PBG for order value above 50 lacs else 25% relaxation	All limited and Open tenders
4	Turnover	25% relaxation in company turnover under qualifying requirement criteria	All Open Tenders

**Classification of BAs under SC/ST shall be governed under following guidelines:

- Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community. Governing document shall be duly audited balance Sheet for the last FY bearing the name of proprietor.
- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed and audited balance sheet/ ITR for last FY.
- Private limited company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

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Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Note: Certification from SC/ST commission shall be required for deciding upon SC/ST status of a person.

10.0 QUALITY

10.1 Knowledge of Requirements

The Associate shall be deemed to have carefully examined and to have knowledge of the equipment, the general and other conditions, specifications, schedules, drawings, etc. forming part of the Contract and also to have satisfied himself as to the nature and character of the work to be executed and the type of the equipment and duties required including wherever necessary of the site conditions and relevant matters and details. Any information thus procured or otherwise obtained from TPCODL/Consultants shall not in any way relieve the Associate from his responsibility and executing the works in accordance with the terms of contract.

10.2 Material/Equipment/Works Quality

The items / works under the scope of the Associate shall be of the best quality and workmanship according to the latest engineering practice and shall be manufactured from materials of best quality considering strength and durability for their best performance and, in any case, in accordance with the specifications set forth in this Contract. All material shall be new. Substitution of specified material or variation from the process of fabrication/ construction/ manufacture may be permitted but only with the prior written approval of the TPCODL.

10.3 Adherence to Rules & Regulations

The Associate shall procure and/or fabricate/erect all materials and equipment in accordance with all requirements of Central and State enactment, rules and regulations governing such work in India and at site. This shall not be construed as relieving the Associate from complying with any requirement of TPCODL as enumerated in the Contract which may be more rigid than and not contrary to the above mentioned rules, nor providing such construction as may be required by the above mentioned rules and regulations. In case of variance of the Technical Specification from the laws, ordinance, rules and regulations governing the work, the Associate shall immediately notify the same to the TPCODL. It is the sole responsibility of the Associate, however, to determine that such variance exists. Wherever required by rules and regulations, the Associate shall also obtain the statutory authorities' approval for the plant, machinery and equipment to be supplied by the Associate.

10.4 Specifications and Standards

The Associate shall follow all codes and standards referred in the Contract Document. Codes and standards of other may be followed by the Associate with the prior written approval of TPCODL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

Brand names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Associate shall not change the brand name and qualities of the bought out items without the prior written approval of the TPCODL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TPCODL. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

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11.0 INSPECTION/PARTICIPATION

11.1 Right to Carry Out Inspection

TPCODL reserves the right to send its representatives for inspection or participation at various stages of contract execution listed below, applicable as per contract construction.

- During basic design and detail engineering of material/ Equipment carried out by Associate /Outsourced Agencies.
- During manufacturing stages of the product at Associate's/Associate's Outsourced Agency's Plant/Facility.
- During Pre-dispatch Inspection and Testing of finished/manufactured product at Associate's/Associate's outsourced Agency's Plant/Facility.
- During Installation & Commissioning Activities/Stages.
- Prior to Clearing of the completed installation for commissioning.
- Any other stage as find appropriate by TPCODL during contract execution time.

All inspections and participations shall be carried out by TPCODL giving written intimation to the Associate or receiving appropriate advance written inspection call from the Associate, unless otherwise specified elsewhere in the contract document.

11.2 Facilitating Inspection

The Associate shall provide all opportunities and information to TPCODL's engineers to get acquainted with the technical know-how and the methods and practices adopted by the Associate in basic and detail engineering. The Associate shall provide documents, drawings, calculations etc. as may be required by TPCODL's Engineers.

The Associate shall provide free of charge office accommodation, office facilities, secretarial services, communication facilities, general and drawing office stationary, etc. as may be reasonably required by the TPCODL's engineers. Similarly, facilities shall also be provided by Associate's outsource agencies/partners/authorized dealers (collectively termed as sub associates) if such basic and detail engineering activities are carried out in the design offices of sub-Associates.

The Associate shall be responsible for the safety of employees of TPCODL/Third Party Agency when they are at the Associate's /Associate's outsource agency's plant or facility for carrying out/witnessing inspection/testing. All statutory safety precautions as applicable shall be followed by the Associate during Inspection Testing. If TPCODL inspectors are not satisfied with the safety arrangements at the plant, TPCODL have the right to call off inspection till such time corrective action is taken by the Associate.

Before raising the call for pre-dispatch final inspection and testing, the Associate shall conduct all the tests—type tests, routine tests etc-as specified in the contract document and submit copies of the test certificates to TPCODL along with the inspection call, for scrutiny of TPCODL.

The Associate and TPCODL shall jointly document all the observations, comments and action points after completion of inspection and it shall be binding on the Associate to provide compliance on all the points requiring compliance and furnish the compliance report to the designated authority of TPCODL for receiving clearance for dispatch of materials

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11.3 Third Party Nomination

TPCODL also may nominate a third party for the purpose of carrying out the inspection and such an agency shall be entitled to all the rights and privileges of TPCODL as far as conducting the inspection.

11.4 Waiver of Inspections

TPCODL on its own discretion shall chose to waive off any inspection and ask the Associate to submit all the test reports as applicable as per contract specifications, related to inspection and testing of the goods ordered for scrutiny and clearance for dispatch.

11.5 Incorrect Inspection Call

In case it is observed that the material offered for inspection is not ready at the time of TPCODL inspection visit rendering it as futile, all costs towards such inspection shall be recovered from the BA. Taxes as applicable on such recoveries shall be borne by the BA.

12.0 MDCC & DELIVERY OF MATERIALS

12.1 Material Dispatch Clearance Certificate

Associate shall deliver material/goods/equipment against Supply Contracts or Supply Part of Composite/Service Contracts only after receiving Material Dispatch Clearance Certificate (hereafter termed as MDCC) issued by designated authority of TPCODL. Material delivered at TPCODL stores or at project site without a valid MDCC issued by the designated official of TPCODL shall be rejected. MDCC shall be issued to associate furnishing compliance report on the action points documented during pre-dispatch inspection and testing at Associate's/ Sub Associate's plant/ facility. In case Pre-dispatch inspection is waived at the discretion of TPCODL, then, MDCC shall be issued on receiving all the test reports-routine& type-from the Associate and finding them in order.

The associate shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling and transport by air, sea, rail and road or any other means.

All such packing shall allow to the extent possible for easy removal and checking at Site. The associate shall take special precautions to prevent rusting of steel and iron parts during transit by sea. Gas seals or other materials shall be utilized by the associate for protection against moisture during transit of all Plant and Equipment.

Each Equipment or parts of Equipment shall be tagged with reference to the assembly drawings and corresponding part numbers. Each bale or package shall contain a packing note quoting specifically the name of the associate, item description, quantity, item / package identification.

All packing cases, containers, packing and other similar materials shall be new and supplied free by the associate and it shall not be required to be returned to the associate.

Notwithstanding anything stated in this clause, the associate shall be entirely responsible for loss, damage or depreciation or deterioration to the materials and supplies due to faulty and/or insecure packing or otherwise during transportation to the Site until otherwise provided herein.

In case of the consignments dispatched by road, the associate shall ensure that it or its subcontractors:

- i) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.

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- ii) Take such actions as may be necessary to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

Timelines for inspection and MDCC is as below:

S. No.	Inspection	MDCC issuance time including Inspection time (max.)
1	Outside Bhubaneswar	12 days
2	Within Bhubaneswar	5 days
3	Waiver*	3 working days

* Associate is expected to raise the inspection call assuming that Inspection shall be carried out by TPCODL. The decision for waiver of inspection shall be on sole discretion of TPCODL.

12.2 Right to Rejection on Receipt

Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from TPCODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPCODL.

If delivery of the material is beyond the agreed time, Liquidated damage clause, mentioned in this GCC separately shall be applicable; but the period for levy of LD shall be considered as per the original delivery schedule and not from the agreed timelines for material rectification.

12.3 Consignee

Unless otherwise specified in the Contract Document, Materials/Goods/Equipment shall be consigned to "Stores-In-Charge", TPCODL, Bhubaneswar.

12.4 Submission of mandatory documents on Delivery

Following documents shall be mandatorily submitted by BA along with supply of material to TPCODL stores/site:

S. No.	Documents	Requisite
1	Invoice copy in original	With all consignments
2	LR copy	Wherever required
3	Packing list	With all consignments
4	MDCC	With all consignments
5	Purchase order / Release order	Signed copy
6	Test certificates	With all consignments
7	Inspection/JVR report	In case pre-dispatch inspection is conducted
8	Device data in CD as per template for metering items	Wherever applicable

12.5 Dispatch and Delivery Instructions

S. No.	Instructions
1	Purchase order/ Release order no. shall be mentioned on invoice and on material

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2	TPCODL material code and material description shall be mentioned in invoice and on material.
3	“Property of TPCODL” shall be embossed on material.
4	The material shall be properly sealed and packed in standard packing as per purchase order terms & conditions.
5	The weight and quantity of material shall be mentioned wherever applicable
6	The material supplied shall be co-related with the packing list.
7	The name plate detail on equipment shall include Material code, Material description, specification detail of material [as applicable], Serial No. Year of manufacturing, PO/RO no. and date, “ PROPERTY OF TPCODL, Bhubaneswar ”, Guarantee period and Associate’s name.
8	In case of manual unloading, supplier / transporter shall deploy sufficient Labour for unloading the material at TPCODL central store. For heavy item(s), crane will be provided by TPCODL [unloading cost will be recovered from the associate].
9	The driver should have valid License and one helper in truck. All the documents of truck like registration papers, PUC etc. should be available in Truck.
10	BA representative should accompany the material and get it unloaded / stacked in his presence wherever possible.

13.0 GUARANTEE

13.1 Guarantee of Performance

Associates shall stand guarantee that the equipment and material supplied under the contract is free from design, manufacturing, material, construction, erection & installation and workmanship & quality defects and is capable of its due, rated and intended quality performance, as an integrated product delivered under the contract, for a specific period termed as Guarantee Period(as elaborated elsewhere in this clause). The Associate should also guarantee that the equipment/material is new and unused except for the usage required for the tests and checks required as part of quality assurance.

13.2 Guarantee Period

The Guarantee Period will be equipment/service/work specific and shall be as specified in the Standard Specifications of TPCODL for the equipment/material/service/work and where standard specifications are not part of contract documents or guarantee period is not specified in the standard specifications,, the guarantee period shall be as per the Special Terms and Conditions of the Contract. In case of no mention of the guarantee period in standard specifications or SCC Guarantee Period will be 12 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.

13.3 Failure in Guarantee Period (GP)

If the equipment and material supplied under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied within time frame specified in the SCC or elsewhere in the contract documents at associate’s cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied rendered under the contract, failed in Guarantee Period, TPCODL will be at liberty to get the same done at Associate’s risks and costs and recover all such expenses plus the TPCODL’s own

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charges (@ 20% of expenses incurred), from the Associate or from the “Security cum Performance Deposit” as the case may be.

If during the Warranty/ Guarantee period some parts of the supplies are replaced owing to the defects/ damages under the Warranty, the Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.

Any repairs during the Guarantee Period shall be carried out by the Associate within 30 days of reporting the issue to Associate by TPCODL. However, if replacement of the Equipment is required, Associate shall notify the same to TPCODL within 7 days of reporting the issue by TPCODL. Thereafter, the total time for supply of new equipment/ material shall be equal to the original delivery period of that equipment/ material as specified in the Contract. In case the Associate is not able to rectify/ replace the faulty equipment/ material within the stipulated timelines as mentioned above, penalty shall be levied as per the Liquidated Damages clause mentioned in this document. The penalty amount shall be recovered from the payment due to the vendor or by encashment of the SPBG as the case may be.

13.4 Cost of repairs on failure in GP

The cost of repairs/rectification/replacement, required transportation, site inspection /mobilization/dismantling and re-installation costs as applicable, to be borne by Associate. The Associate has to ensure that the interruption in the usage of intended purpose of the equipment is minimized to the maximum extent In lieu of the time taken for repairs/rectification/replacement.

13.5 Guarantee period for Goods Outsourced

If the Associate outsources partly equipment/materials/services from third party as mutually agreed upon at the pre award stage of contract, TPCODL shall have the benefit of any additional guarantee period if provided by the third party for the part supplied/executed by them.

13.6 Latent Defect

Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects. Associates 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 the Company.

13.7 Support beyond the Guarantee Period

The Associate shall ensure availability of spares and necessary support for a period of atleast 10 years post completion of guarantee period of equipment supplied against the contract.

14.0 LIQUIDATED DAMAGES

- a) For supplies which are of standalone use, multiple in quantities and having a single final delivery schedule, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TPCODL, as described below:

For delay of each week and part thereof from the delivery schedule specified in the contract, 1% of contract value corresponding to undelivered quantity, provided full quantity is supplied within 130% of the original contract time. If full contractual quantity is not delivered within 130% of contract time for delivery, TPCODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value.

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- b) For Supplies having phased delivery schedule as per contract terms, standalone use and multiple in quantities, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TPCODL, as described below:

For the purpose of calculating and applying LD, each delivery lot shall be considered separately. For delay of each week and part thereof, from the delivery schedule specified for the lot, 1% of the contract value corresponding to the undelivered quantity of the lot subject to a maximum of 10% of the total contract value of the subject lot. However, if full contractual quantity is not delivered within 130% of contract time for delivery, TPCODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value. Deduction of LD shall be on landed cost i.e contract value inclusive of taxes and in pursuant statutory compliance GST would be applicable at the stipulated rate and the same shall be borne by Business Associate. In case of LD deduction, a GST invoice shall be issued by TPCODL as a proof of deduction/recovery.

14.1 LD Waiver Request

Any request of LD waiver shall be submitted within thirty (30) days of deducting LD. Request submitted beyond the timeline shall not be entertained.

15.0 UNLAWFUL ACTIVITIES

The Associate shall have to ensure that none of its employees are engaged in any unlawful activities (whether covered under the scope of the present GCC or not) subversive of the TPCODL's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the TPCODL, in accordance with the terms of the present GCC.

16.0 CONFIDENTIALITY

Associate and its employees or representatives thereof shall strictly maintain the confidentiality of various information they come across while executing the contract as detailed below.

16.1 Documents

All maps, plans, drawings, specifications, schemes and other documents or information related to the Contract/Project and the subject matter contained therein and all other information given to the Associate by the TPCODL in connection with the performance of the contract shall be held confidential by the Associate and shall remain the property of the TPCODL and shall not be used or disclosed to third parties by the Associate for any purpose other than for which they have been supplied or prepared. The Associate may disclose to third parties, upon execution of confidentiality agreements, such part of the drawings, specifications or information if such disclosure is necessary for the performance of the Work provided such third parties agree in writing to keep such information confidential to the same extent and degree as provided herein, for the benefit of the TPCODL.

16.2 Geographical Data

Maps, layouts and photographs of the unit/plant including its surrounding regions showing vital installation for national security of country or those of TPCODL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the TPCODL and upon execution of confidentiality agreements satisfactory to the TPCODL with such third parties prior to disclosure.

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16.3 Associate's Processes

Title to secret processes if any developed by the Associate on an exclusive basis and employed in the design of the equipment shall remain with the Associate. TPCODL shall hold in confidence such processes and shall not disclose such processes to the third parties without prior approval of the Associate and execution by such third parties of secrecy agreements satisfactory to the Associate prior to disclosure. Upon completion of contract, such processes shall become the property of the TPCODL. Title to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPCODL under the Contract shall be passed on to the TPCODL. The TPCODL shall have the right to use these for construction, erection, start-up, Trial Run, operation, maintenance, modifications and/or expansion of the works including for the manufacture of spare parts.

16.4 Exclusions

The provision of Clauses 16.1 to 16.3 shall not apply to information:

- Which at the time of disclosure are in the public domain which later on become part of public domain through no fault of the party concerned, or
- Which were in the possession of the party concerned prior to disclosure to him by the other party, or
- Which were received by the party concerned after the time of disclosure without restriction on disclosure or use, from a third party who did not acquire such information directly or indirectly from the other party or has no obligation of confidentiality for such information.

16.5 Violation

In case of violation of this clause, the Associate is liable to pay compensation and damages as may be determined by the competent authority of TPCODL.

17.0 INTELLECTUAL PROPERTY RIGHTS

If, in the course of performance of its functions and duties as envisaged by the scope of the present GCC, the Associate acquires or develops, any unique knowledge or information which would be covered, or, is likely to be covered within the definition of a trademark, copyright, patent, business secret, geographical indication or any other form of intellectual property right, it shall be obliged, under the terms of this present GCC, to share such knowledge or information with the TPCODL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TPCODL.

Moreover, the Associate undertakes not to breach any intellectual property right vesting in a third party/parties, whether by breach of statutory provision, passing off, or otherwise. In the event of any such breach, the Associate shall be wholly liable to compensate, indemnify or make good any loss suffered by such third party/parties, or any compensation/damages arising from any legal proceeding/s, or otherwise. No liability of TPCODL shall arise in this respect, and any costs, damages, expenses, compensation payable by TPCODL in this regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Associate.

18.0 INDEMNITY

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPCODL and its officers, directors, employees, affiliates, agents, successors and assigns against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any

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infringement of patent, trade mark, registered design, copy rights and/or industrial property rights by manufacture, sale or use of the equipment supplied by the Associate whether or not the TPCODL is held liable for by any court judgement. In this connection, the TPCODL shall pass on all claims made against him to the Associate for settlement.

The Associate assumes responsibility for and shall indemnify and save harmless the TPCODL from all liability, claims, costs, expenses, taxes and assessments including penalties, punitive damages, attorney's fees and court costs which are or may be required to be paid by the TPCODL and its officers, directors, employees, affiliates, agents, successors and assigns arising from any breach of the Associate's obligations under the Contract or for which the Associate has assumed responsibilities under the Contract including those imposed under any local or national law or laws, or in respect to all salaries, wages or other compensation for all persons employed by the Associate or his Sub-Associates or suppliers in connection with the performance of any work covered by the Contract. The Associate shall execute, deliver and shall cause his Sub-Associate and suppliers to execute and deliver, such other further instruments and to comply with all the requirements of such laws and regulation as may be necessary there under to conform and effectuate the Contract and to protect the TPCODL.

The TPCODL shall not be held responsible for any accident or damages incurred or claims arising, due to the Associate's error there from prior to completion of work. The Associate shall be liable for such accidents and after completion of work for such accidents as the case may be due to negligence on his part to carry out Work in accordance with Indian laws and regulations and the specifications set forth herein.

19.0 LIABILITY & LIMITATIONS

19.1 Liability

Except for any specific liability which may be identified in the Contract and which may be payable hereunder, Associate shall not be liable for any special, incidental, indirect, or consequential Damages or any loss of business Contracts, revenues or other financial loss (or equivalents thereof no matter how claimed, computed or characterized) arising out of or in connection with the Performance of the Work or supply of Goods ***unless caused by Associate's negligence, willful misconduct or breach of contract.***

If the Associate is a joint venture or consortium, all concerned parties shall be jointly and severally bound to the TPCODL for the fulfillment of the provisions of the Contract. The consortium or the joint venture shall designate one party as their leader, who will be the coordinator between the parties and TPCODL. The constituents & leader of the consortium or joint venture shall not be changed without the prior consent of TPCODL.

TPCODL shall have no liability or any special, incidental, indirect or consequential Damages for any loss of Business Contracts, revenues or other financial loss arising out of this Contract.

19.2 Limitation of Liability

The total liability of Associate against any contract shall be limited to the Total All Inclusive Contract Value.

20.0 FORCE MAJEURE

Force Majeure applies if the performance by either Party ("the Affected Party") of its obligations under Contract is materially and adversely affected.

"Force Majeure" shall mean any event or circumstance or combination of events or circumstances referred below and their consequences that wholly or partly prevents or unavoidably delays any

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Party in the performance of its obligations under this Agreement, but only and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided even if the Affected Party had taken reasonable care:

- Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, embargo, blockade, revolution, riot, bombs, religious strife or civil commotion, etc. ▪ Politically motivated sabotage, or terrorism, etc.
- Action or Act of Government or Governmental agency for which remedy is beyond the control of the affected parties. ▪ Any act of God.

Note: Causes like power breakdown/ shortages/fire/strikes, accidents etc do not fall under Force Majeure.

Time being the essence of the Contract, if either party is prevented from the performance of its obligations in whole or in part due to an event of Force Majeure, then provided Notice of happening of any event by the Affected Party is given to the other party within seven (7) days from the date of occurrence of such event, which DIRECTLY has impact on works and submitted details and quantum of resulting effect, but at the same time had made all possible efforts to mitigate and overcome effects thereof, the Affected Party's performance under this Contract shall be suspended until such event ceases and the Scheduled Completion shall be delayed accordingly.

If Force Majeure event(s) continue for a period of more than three months, the parties shall hold consultation to discuss the further course of action.

Neither party shall be considered to be in default or in breach of its obligation under the Contract to the extent that performance of such obligation by either party is prevented by any circumstances of Force Majeure which arise after effective date of Contract.

Neither party can claim any compensation from the other party on account of Force Majeure.

21.0 SUSPENSION OF CONTRACT

21.1 Suspension for Convenience

TPCODL may, at any time and at its sole option, suspend execution of all or any portions of the schedule of items of contract to be supplied/work to be executed by Associate under the contract by providing to the Associate at least two business days written notice for contracts having contract completion period less than sixty days and at least seven business days' notice for all other contracts.

Upon receipt of any such notice, the Associate shall respond as follows as applicable as per contract construction.

- Immediately discontinue further supply of material/goods specified in the suspension notice for supply contracts
- Immediately discontinue further service/work and supply of materials of those services/materials/work specified in the suspension notice for service /composite contract
- Promptly make every reasonable effort to obtain suspension, upon terms satisfactory to TPCODL, of all orders, outsourcing arrangements, and rental Contracts to the extent that they relate to performance of the portion of Work suspended by the notice.

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- Protect and maintain the portion of the service/Work already completed, including the portion of the Work suspended hereunder, unless otherwise specifically stated in the notice.
- Continue delivering/carrying out the supply/service/work items as per contract conditions, which do not fall under purview of the suspension notice.

On receipt of resumption notice from TPCODL, the Associate shall resume execution of contract as specified in the resumption notice, within the time frame specified in the resumption notice.

21.2 Suspension for Breach of Contract conditions.

TPCODL shall suspend execution of whole/or part thereof the contract till such time Associate complies with the conditions stipulated under section clause 22.1 for breach/default of contract conditions.

21.3 Compensation in lieu of Suspension

If the suspension of the contract in whole or in part is for convenience of TPCODL and not due to any breach of contract conditions by the associate, TPCODL at its discretion shall consider compensating all reasonable additional costs incurred by Associate in lieu of suspension of whole or part of contract, on representation of the Associate providing justified estimates of such additional costs and such estimates are found acceptable and approved by competent authority of TPCODL.

If the suspension of contract in whole or part thereof is due to breach of contract conditions (refer clause 22.1) by the Associate, Associate shall not be entitled for any compensation for any cost incurred in lieu of suspension of whole or part of contract and also shall be liable for compensating all the losses arising to TPCODL in lieu of suspension of contract. Resumption notice shall be subject to the Associate taking corrective action for the breach of contract conditions within the time frame and as per the terms specified in the suspension notice.

22 TERMINATION OF CONTRACT

22.1 Termination for Default/Breach of Contract

The contract / PO /RC shall be subject to termination by TPCODL in case of breach of the contract by the Associate which shall include but not be limited to the following:

- a. Withdrawal or intimation by the Associate of its intent to withdraw or surrender the execution / completion of the contracted work /PO or failure in ensuring adherence to any delivery schedules, in deviation of the contract/PO.
- b. Refusal or neglect on the part of the Associate to supply material/equipment of quantity or quality as specified by TPCODL and within the timeframe as specified in the contract document or refusal or neglect to execute the services/work in terms of the agreed standards of quantity or quality and/or within the timeframe specified in the contract/PO.
- c. Failure in any respect to perform any portion of the Work contracted with promptness, diligence, or in accordance with the terms of the contract.
- d. Failure to furnish guarantees as specified and /or failure to comply with the terms thereof.
- e. Failure to furnish such relevant documents or information within the time specified which may be necessary for due execution / completion of the works and documentation.

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- f. Liquidation, bankruptcy either voluntary or involuntary OR entering into any composition or compromise with its creditors, or Insolvency.
- g. In case any reasonable information has been received by TPCODL that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.
- h. Failure to comply with applicable statutory provisions as contained in the contract or failure to comply with the applicable laws.
- i. Failure to comply with safety regulations/clauses stipulated in the contract or as may be generally instructed by TPCODL.

If the default or breach as specified under clause 22 (except sub clause g thereof) be committed by the associate for the first time, TPCODL shall issue, along the with notice of default or breach, a warning notice instructing the associate to take remedial/corrective action within the time frame stipulated in the warning notice and not to repeat the same in future. The timeframe for corrective action by the associate shall be specific to the nature of breach of contract and the same shall not be objected to by the Associate. If the Associate fails to comply with the instructions in the warning notice or in taking corrective action to the satisfaction of TPCODL then TPCODL may terminate the entire or part of contract at its discretion by issuing termination notice without incurring any liability on this ground.

In case the contract is terminated for any breach of the nature specified in clause 22 g stated above, TPCODL shall have the right to terminate all the contracts TPCODL is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TPCODL available to it under law.

Without prejudice to its right to terminate for breach of contract, TPCODL may, without assigning any reason, terminate the Contract in whole or in part at any time at its discretion while the contract is in force by serving a written notice of two weeks to the Associate.

In the event of TPCODL having proceeded with termination of the contract the associate shall comply and proceed further in the following manner:

- a) Associate shall discontinue the supply, on the expiry of the said period of two weeks.
- b) Associate shall ensure that no further steps are being taken towards discharge of the obligations, terms and conditions as contained in the contract/PO. This shall include initiation of actions not limited to discontinuation of other allied and associated arrangements which the associate might have entered into with third parties for due discharge of its obligations under the contract with TPCODL.
- c) The Associate shall perform thereafter such tasks as may be necessary to preserve and protect the terminated portion of the material/service/work in progress and the materials and equipment at TPCODL sites or in transit thereto. However the associate shall continue to fulfill its contractual obligations with regard to the part of contract not terminated.
- d) It shall be open for TPCODL to conduct a joint assessment with the associate of the material, supplies, equipment ,works or in general as to the subject matter of the contract in regard to which the associate claims having completed its obligations before or during such termination.

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- e) It shall be open to TPCODL to seek invocation of the performance bank guarantee or any other guarantee or other security deposit by whatever name called submitted by the associate, which shall not be objected to or protested against by the associate.

In case of termination of the contract the parties agree to be governed inter alia by the following:

- a) In case TPCODL exercises its right of termination as stated above the associate shall not dispute or object to the same.
- b) The Associate shall be entitled to receive and claim only such payments OR sums of money from TPCODL as may be found payable to it in regard to works executed by it under the terms of the contract and no other claim of any nature whatsoever shall be made by the Associate.
- c) All such provisions which the parties have agreed to survive and prevail even after termination of the contract shall remain effective despite the termination.

In the event of such termination, TPCODL may finish the Work by whatever method it may deem expedient, including the hiring of services and /or purchase of material equipment from such third parties as TPCODL may deem fit or may itself provide any labor or materials and perform any part of the Work. The associate undertakes to bear the incremental costs if any paid by TPCODL in such a case attributable to failure on the part of the associate. The Associate in such a case shall not be entitled to receive any further payments and any sums found payable to it may be adjusted by TPCODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPCODL under law against the associate. Upon the termination of any of the contract due to occurrence of any circumstances provided in clauses stated above and constituting repeated breach or misconduct, TPCODL shall be entitled to bar the associates its agents, affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TPCODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPCODL.

22.2 Termination for Convenience of Associate

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TPCODL has full right to accept, reject or partially accept such request. However, associate shall continue its supply as per contract till final approval is given to associates for such termination.

22.3 Termination for Convenience of TPCODL

TPCODL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. TPCODL shall pay the Associate for all the supplies/ services rendered till the actual date of contract termination against submission of invoice by the Associate to that effect.

23.0 DISPUTE RESOLUTION & ARBITRATION

In case of any dispute or difference the parties shall endeavour to resolve the same through conciliatory and amicable measures within 15 Days failing which the matter may be referred by either party for resolution by the sole arbitrator to be appointed mutually by both the parties. The arbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996 and the place of arbitration shall be Bhubaneswar. The language to be used at proceedings shall be English and the award of the arbitrator shall be final and binding on the parties. The parties shall bear their respective costs of arbitration. The associate shall continue to discharge its obligations towards due performance of the works as per the terms of the contract during the

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arbitration proceedings unless otherwise directed in writing by TPCODL or suspended by the arbitrator. Further, TPCODL shall continue making such payments as may be found due and payable to the associate for such works.

23.1 Governing Laws and Jurisdiction

The parties shall be subject to the jurisdiction of the courts of law in Bhubaneswar and any matter arising here from shall be subject to applicable law in force in India.

24.0 ATTRIBUTES OF GCC

24.1 Cancellation

The Company reserves the right to cancel, add, delete at its sole discretion, all or any terms of this GCC or any contract, order or terms agreed between the parties in pursuance without assigning any reasons and without any compensation to the Associates.

24.2 Severability

If any portion of this GCC is held to be void, invalid, or otherwise unenforceable, in whole or part, the remaining portions of this GCC shall remain in effect.

24.3 Order of Priority

In case of any discrepancies between the stipulations in General Conditions of the Contract (GCC) and Special Conditions of Contract (SCC), the GCC shall stand superseded by the SCC to the extent stipulated hereinabove while balance portion of respective clauses of GCC shall continue to be applicable.

25.0 ERRORS AND OMISSIONS

The Associate shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the TPCODL or not. However any error in design/drawing arising out of any incorrect data/written information from TPCODL will not be considered as error and omissions on part of the Associate.

26.0 TRANSFER OF TITLES

The title of ownership and property to all equipment, materials, drawings & documents shall pass to the TPCODL on acceptance of material by store/site after Inspection.

However, such passing of title of ownership and property to the TPCODL shall not in any way absolve, dilute or diminish the responsibility and obligations of the Associate under this Contract including loss or damages and all risks, which shall vest with the Associate.

27.0 INSURANCE

The Contractor shall take out the Insurance Policies which shall cover all risks including the following, as applicable:-

- a) The value of the policy shall cover the total value of all the items till they are handed over to TPCODL.
- b) TPCODL shall be the principal holder of the policy. The Associate shall be the loss payee under the policy. Associate / Sub-contractor of the Associate shall not be holders or beneficiaries in the policy nor shall they be named in the policy. TPCODL reserves the exclusive right to assign the policy.

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- c) While the payment of premium may be phased in agreement with the insurance company, at no time shall goods and services required to be provided by the associate shall remain uninsured in accordance with (a) above.
- d) A copy of the Insurance policy shall be made available to TPCODL prior to first dispatch lot of any Equipment and policy shall be kept alive and valid at all times up to the stage of final acceptance.
- e) TPCODL reserves the right to take out whatever policy that is deemed necessary by him if the associate fails to keep the said policy alive and valid at all times and/or causes lapses in payment of premium thereby jeopardizing the said policy. The cost of such policy(s) shall be recovered / deducted from the amount payable to the associate.
- f) The policy shall ensure that the TPCODL's decision regarding replacement of goods damaged, lost or rendered unusable shall be final.

In all cases, the associate shall lodge the claims with the underwriters and also settle the claims and shall also notify TPCODL of any filed claims. However, the associate shall proceed with the repairs and/or replacement of the equipment/components without waiting for the settlement of the claims. In case of seizure of materials by concerned authorities, the associate shall arrange prompt release against bond, security or cash as required. TPCODL, upon request by the associate, will extend all reasonable assistance to the associate in such a case.

All the insurance claims shall be processed and settled by the associate and the missing/damaged items shall be replaced/repared by them without any extra cost to TPCODL and without affecting the completion time.

28.0 SUGGESTIONS & FEEDBACK

We welcome all our Business Associates to write to us about their experience with TPCODL; be it our Company, our services or our people. Each and every concern, issue, query and suggestion from you will help us to become a better company to work with and shall help us develop a strong bonding of trust and a long term relationship with you.

You may send your feedback by filling up our Business Associate Feedback Form enclosed herewith as *Annexure-E*. You can also log on to our website www.tpcentralodisha.com to provide your feedback.

- Suggestions for us
- Feedback form
- Knowledge Sharing/ Experience with TPCODL
- Any issues with TPCODL.

Submission of feedback form is mandatory before the release of final payment to the BA.

29.0 CONTACT POINTS

In case Business Associate needs information with respect to payments or has any grievances, same may be lodged by log on to our website www.tpcentralodisha.com

30.0 LIST OF ANNEXURES

S. No.	Subject	Annexure
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1.	Performa for Bid Security Bank Guarantee	A
2.	Performa for Performance Bank Guarantee (CP cum EP)	B
3.	Performa for No Demand Certificate by Associate	C
4.	Performa For Application For Issuance of Consolidated TDS Certificate	D
5.	Business Associate Feedback Form	E
6.	Acceptance Form For Participation In Reverse Auction Event	F
7.	Form for RTGS Payment	G
8.	Vendor Appraisal Form	H
9.	Manufacturer Authorization Form	I

ANNEXURE-A

PROFORMA FOR BID SECURITY BANK GUARANTEE

**The TP Central Odisha Distribution Limited
Bhubaneswar**

WHEREAS, (Name of the Bidder) _____
(hereinafter called "the BIDDER") has submitted his bid dated _____ for the (Name
of Contract) _____ (hereinafter called "the BID").

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KNOW ALL men by these presents we (Name of the Bank) _____ of (Name of the Country) _____ having our registered office at _____ (hereinafter called "the BANK) are bound unto The TP Central Odisha Distribution Limited (TPCODL) in the sum of _____ for which payment well and truly to be made to the TPCODL the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20____.

The CONDITIONS of this obligation are:

- i) If the Bidder withdraws his Bid during the period of bid validity specified in the Proforma of Bid or
- ii) If the Bidder having been notified of the acceptance of his Bid by the TPCODL during the period of bid validity fails or refuses to furnish the Contract Performance Bank Guarantee, in accordance with the Instructions to Bidders.

We undertake to pay the TPCODL upto the above amount upon receipt of its first written demand, provided that in its demand the TPCODL will note that amount claimed by it is due to it owing to the occurrence of one or both conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force upto and including the date (No of days as mentioned in tender enquiry) days after the closing date of submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.

DATE **SIGNATURE OF THE BANK**

WITNESS **SEAL**

(Signature, Name & Address) (At least 2 witnesses)

	TP CENTRAL ODISHA DISTRIBUTION LIMITED	
	WORK INSTRUCTION /OPERATING GUIDELINES	
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ANNEXURE- B

PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

(On Rs.100/- Stamp Paper) Note:

- a) Format shall be followed in toto
- b) Claim period of one month must be kept up
- c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

The TP Central Odisha Distribution Limited

Bhubaneswar

CP cum EP BG No.....

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

1. You have entered into a Contract No _____ with M/s. _____
(hereinafter referred to as "the Vendor") for the supply cum erection / civil work of _____ (hereinafter referred to as "the said Equipment") for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of the said contract, "the Vendor" agreed to furnish you with an irrevocable, unconditional and acceptable bank guarantee for 10% of the value of contract and to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment performance". For this purpose you have agreed to accept the guarantee.
3. In consideration thereof, we, _____
hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of
Rs. _____ (Rupees _____ only) being _____ %
(_____ 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-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under the guarantee for a **further period of one month** from the date of expiry.
5. This guarantee shall not be revoked without 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 the same in you or any right which you may have against "the Vendor" and to exercise the same in 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

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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. 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. 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. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Bhubaneswar branch and claim will also be payable at Bhubaneswar Branch (to be confirmed by Bhubaneswar Branch by a letter to that effect in case BG is from the branch outside Bhubaneswar).
9. 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 _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within one months from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 20__

Bank's rubber stamp

1.

Banks full address

Designation of Signatory

2.

Bank official number

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ANNEXURE-C

PROFORMA FOR “NO DEMAND CERTIFICATE” BY ASSOCIATE

(On Company's Letter head or with Company Seal)

(To be submitted by the Associate to TPCODL Accounts Department at the time of receipt of full and final payment)

(Certificate No. CCP/002)

Name of the Project Order/

Contract No.

Dated

Name of the Associate Scheme

No. / Job No.

We, M/s. _____ (Associate) do hereby acknowledge and confirm that we have received the full and final payment due and payable to us from TPCODL, in respect of our aforesaid Order No _____ dated _____ including amendments, if any, issued by TPCODL to our entire satisfaction and we further confirm that we have no claim whatsoever pending with TPCODL under the said contract / W.O.

Notwithstanding any protest recorded by us in any correspondence, documents, measurement books and / or final bills etc., we waive all our rights to lodge any claim or protest in future under this contract.

We are issuing this “NO DEMAND CERTIFICATE” in favour of TPCODL, with full knowledge and with our free consent without any undue influence, misrepresentation, coercion etc.

Place

Name

(Company Seal)

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ANNEXURE-D

**PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS
CERTIFICATE**

To be printed on the letterhead

To,

The TP Central Odisha Distribution Limited,

Bhubaneswar

Sub: Application for issuance of Consolidated TDS Certificate for the FY _____

Dear Sir,

I / we hereby request / authorize you to issue me / us a consolidate TDS Certificate for the financial year _____ against tax deducted at source by you from my / our payments / bills during the said year from time to time under Chapter XVII – B of the Income Tax Act, 1961. For and on behalf of

Signature

Name

Address

Contact No. (Land Line)

(Mobile)

PAN #

Assessing authority

ATTACH THE COPY OF PAN CARD

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ANNEXURE-E

BUSINESS ASSOCIATE FEEDBACK FORM

With an objective to improve our internal processes and systems, and serve you better, we solicit your valuable feedback & suggestions. It is estimated that it will take about 10 minutes to complete this survey. We assure you that your feedback shall be kept confidential. Please send the duly filled feedback form in the "TPCODL addressed - attached envelop"

You are associated with us as

☐ OEMs ☐ Service Contractor ☐ Material Suppliers ☐ Material & Manpower Supplier

You are associated with us for

☐ Less than 1 year ☐ More than 1 year but less than 3 years ☐ More than 3 years

Your office is located at

☐ Bhubaneswar ☐ Within 200 kms from Bhubaneswar ☐ More than 200 kms from Bhubaneswar

Your nearly turnover with TPCODL

☐ Less than 25 Lacs ☐ 25 Lacs to 1 Crore ☐ More than 1 Cr.

Additional Information

Your Name	
Your Designation	
Your Organization	
Contact Nos.	
Email	

We once again thank you for your participation in this survey. Please spare 10 minutes to give your feedback on following pages (Section A to E)

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SECTION – A

(Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement).

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
1	You receive all relevant queries / tenders from us in timely manner.						
2	We provide you enough lead time to respond to our queries / tenders.						
3	We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements.						
4	All following elements of our contract / purchase order are rational :						
4.1	Scope of Work						
4.2	Delivery / Execution Schedule						
4.3	Payment Terms						
4.4	Liquidated Damages						
4.5	Performance Guarantee						
5	Our purchase orders / contracts are simple, specific & easy to understand						
6	TPCODL demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
8	TPCODL representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	TPCODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						
10	TPCODL Engineer-in-Charge timely certifies the jobs executed/ material supplied						
11	TPCODL Engineer-in-Charge efficiently supervises the job execution for timely completion of job						
12	BIRD (Bill Inward Receipt Desk) initiative has improved payment disbursement process						

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S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
13	Our approach for Inspection and Quality Assurance effective to expedite project completion?						
14	TPCODL never defaults on contractual terms						
15	In TPCODL Contracts closure is done within set time limit						
16	Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience						
17	Bank Guarantees are released in time bound manner						
18	Our processes related to payment / account settlement are effective.						
19	You get payments on time						
20	TPCODL Employees follow Ethical behaviour						

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SECTION – B

SECTION – B (Please rate the following parameters on a scale of 1 to 5, where 1 - Minimum; 5 - Maximum)

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
1	How do you rate courtesy/ empathy/ attitude level and warmth of TPCODL employees you interact with from following team?						
1.1	Project Engineering						
1.2	District / Zones						
1.3	Projects/HOG (TS &P)						
1.4	Inspection & Quality Assurance						
1.5	Stores						
1.6	Metering & Billing						
1.7	Accounts / Finance						
1.8	Administration						
1.9	IT & Automation						
2	How would you rate TPCODL in comparison to your other clients in terms of fairness of treatment and transparency with its Business Associates?						
3	How would you rate TPCODL in comparison to your other clients in terms of processes and systems to manage partnership with its Business Associates						
4	How would you rate TPCODL in comparison to your other clients in terms of building long term & mutually relationship with its Business Associates						

SECTION – C

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

S. No.	Parameters	Certainly No	Probably No	Certainly Yes	Probably Yes	Remarks/ Suggestion
1	Based on your experience with TPCODL, would you like to continue your relationship with TPCODL?					
2	If someone asks you about TPCODL, would you talk “positively” about					

	TPCODL?					
3	Would you refer TPCODL name to others in your community, fraternity and society as a professional & dynamic organization?					

SECTION - D

If we ask you to rate us on a scale of 1 to 10, how will you rate TPCODL, that truly represents your overall satisfaction with us (please tick appropriate box) -

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

SECTION - E

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

Please spare your thoughts for TPCODL's improvement in particular areas of weaknesses, particularly relating to some great practices, attitudes that you have seen elsewhere in Indian and International Organizations, which you recommend TPCODL to adopt. Please give your valuable salient recommendations.

Please spare your thoughts for TPCODL's improvement in particular areas of major concerns for you. We also welcome your suggestions to adopt any best practices, altitudes that you

Recommendation	<i>Please tick (✓) your top 5 expectations out of the following 10 points listed below -</i>	
(Please list down improvement you expect from TPCODL)	<i>Timely payment</i>	
1	<i>Flexibility in Contracts/PO</i>	
	<i>Clarity in PO,s & Contracts</i>	
2	<i>Timely response to quarries</i>	
	<i>Timely certification of works executed</i>	
3	<i>Clarity in Specs, drawings, other docs etc.</i>	
	<i>Adequate information provided on website for tender notification, parties qualified etc.</i>	
4	<i>Timely receipt of material at site for execution</i>	
	<i>Performance Guarantee/EMD released in time</i>	

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5	Inspection & quality assurance support for timely job completion
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We thank you for your time and courtesy!!

ANNEXURE-F

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process more fair and transparent, TPCODL intends to use the reverse auctions through SAP-SRM tool 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. TPCODL shall provide the user id and password to the authorized representative of the bidder. (Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).
2. TPCODL will make every effort to make the bid process transparent. However, the award decision by TPCODL would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPCODL, 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 TPCODL.
6. In case of intranet medium, TPCODL shall provide the infrastructure to bidders. Further, TPCODL 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 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 TPCODL.
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 TPCODL 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 TPCODL.
12. 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

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Name of the Authorized Signatory: _____ :

Contact Person's Name:

Official Correspondence Address:

We confirm that we will bear the charges, if any, levied by our bank for the credit of NEFT/RTGS amounts in our account. Any change in above furnished information shall be informed to TPCODL well in time at our own. Further, we kept TPCODL indemnified for any loss incurred due to wrong furnishing of above information.

Thanking you,

For _____

(Authorised Signatory)

(Signature with Rubber Stamp)

Certification from Bank:

We confirm that we are enabled for receiving NEFT/RTGS credits and we further confirm that the account number (specify Bank a/c no.) of (Please mention here name of the account holder), the signature of the authorised signatory and the MICR and IFSC Code of our branch mentioned above are correct.

This also is certified that the above information is correct as per Bank record

(Manager's/ Officers Signature under Bank Stamp)

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ANNEXURE-H
VENDOR APPRAISAL FORM

TO BE SUBMITTED BY VENDOR (To be filled as applicable)			
VENDOR:			
1.0	DETAILS OF THE FIRM		
	1.1	NAME (IN CAPITAL LETTERS)	:
	1.2	TYPE OF CONCERN (PROPRIETARY) Partnership, Pvt. Ltd., Public Ltd. etc.	:
	1.3	YEAR OF ESTABLISHMENT	:
	1.4	LOCATION OF OFFICE POSTAL ADDRESS TELEGRAPHIC ADDRESSES, TELEX NO. FAX NO.	:
	1.5	LOCATION OF MANUFACTURING UNITS	:
		i) UNITS 1	:
		ii) OTHER UNITS	:
2.0	PRODUCTS MANUFACTURED		:
3.0	TURNOVER DURING THE LAST 3 YEARS (TO BE VERIFIED WITH THE LATEST PROFIT & LOSS STATEMENT).		:
4.0	VALUE OF FIXED ASSETS		:
5.0	NAME & ADDRESS OF THE BANKERS		:
6.0	BANK GUARANTEE LIMIT		:
7.0	CREDIT LIMIT		:
8.0	TECHNICAL		
	8.1	NO. OF DESIGN ENGINEERS (INDICATE NO. OF YEARS EXPERIENCE IN RELATED FIELDS)	:
	8.2	NO. OF DRAUGHTS MEN	:
	8.3	COLLABORATION DETAILS (IF ANY)	:
		8.3.1 DATE OF COLLABORATION	:
		8.3.2 NAME OF COLLABORATOR	:
		8.3.3 RBI APPROVAL DETAILS	:
		8.3.4 EXPERIENCE LIST OF COLLABORATOR	:
		8.3.5 DURATION OF AGREEMENT	:
	8.4	AVAILABILITY OF STANDARDS / DESIGN PROCEDURES / COLLABORATOR'S /	:

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		DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT)	
	8.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	:
	8.6	QUALITY OF DRAWINGS	:
9.0	MANUFACTURE		
	9.1	SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC.	:
	9.2	POWER (KVA)	:
		MAINS INSTALLED	:
		UTILIZED	:
		STANDBY POWER SOURCE	:
	9.3	MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENT AS APPLICABLE)	:
		9.3.1 MATERIAL HANDLING	:
		9.3.2 MACHINING	:
		9.3.3 FABRICATION	:
		9.3.4 HEAT TREATMENT	:
		9.3.5 BALANCING FACILITY	:
		9.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC.	:
	9.4	SUPERVISORY STAFF	:
	9.5	ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.)	:
	9.6	NO. OF SHIFTS	:
	9.7	TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.)	:
	9.8	WORKMANSHIP	:
	9.9	MATERIAL IN STOCK AND VALUE	:
	9.10	TRANSPORT FACILITIES	:
	9.11	CARE IN HANDLING	:
10.0	INSPECTION / QC / QA / TESTING		
	10.1	NUMBER OF PERSONNEL (INDICATE NO. OF YEARS OF EXPERIENCE)	:
	10.2	INDEPENDENCE FROM PRODUCTION	:

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	10.3	AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN	:
	10.4	INCOMING MATERIAL CONTROL AND DOCUMENTATION	:
	10.5	RELIABILITY/REPUTATION OF SUPPLY SOURCES	:
	10.6	STAGE INSPECTION AND DOCUMENTATION	:
	10.7	SUB-ASSEMBLY & DOCUMENTATION	:
	10.8	FINAL INSPECTION AND DOCUMENTATION	:
	10.9	PREPARATION OF FINAL DOCUMENTATION PACKAGE	:
	10.10	TYPE TEST FACILITIES	:
	10.11	ACCEPTANCE TEST FACILITIES	:
	10.12	CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST)	:
	10.13	STATUTORY APPROVALS LIKE BIS, IBR, ETC.(AS APPLICABLE)	:
	10.14	SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL	:
	10.15	DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNIZED LABORATORIES	:
		i) FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED	:
		ii) CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	:
11.0		EXPERIENCE (INCLUDING CONSTRUCTION / ERECTION / COMMISSIONING) TO BE FURNISHED IN THE FORMAT INDICATED IN APPENDIX)	:
12.0		SALES, SERVICE AND SITE ORGANIZATIONAL DETAILS	:
13.0		CERTIFICATE FROM CUSTOMERS (ATTACH COPIES OF DOCUMENTS)	:
14.0		POWER SITUATION	:
15.0		LABOUR SITUATION	:
16.0 *		APPLICABILITY OF SC/ST RELAXATION (Y/N) IF YES, SUPPORTING DOCUMENTS TO BE ATTACHED	
17.0		ORGANIZATIONAL DETAILS 1. PF NO 2. ESI NO 3. INSURANCE FOR WORK MAN COMPENSATION ACT NO 4. ELECTRICAL CONTRACT LIC NO 5. ITCC / PAN NO 6. SALES TAX NO 7. WC TAX REG. NO	:
18.0		DOCUMENTS TO BE ENCLOSED:	

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	1. FACTORY LICENSE 2. ANNUAL REPORT FOR LAST THREE YEARS 3. TYPE TEST REPORT FOR THE ITEM 4. PAST EXPERIENCE REPORTS 5. ISO CERTIFICATE –QMS, EMS, OHAS, SA 6. REGISTRATION OF SALES TAX 7. COPY OF TIN NO. 8. COPY OF SERVICE TAX NO. 9. REGISTRATION OF CENTRAL EXCISE 10. COPY OF INCOME TAX CLEARANCE. 11. COPY OF PF REGISTRATION 12. COPY OF ESI REGISTRATION 13. COPY OF INSURANCE FOR WORK MAN COMPENSATION ACT NO 14. COPY OF ELECTRICAL CONTRACT LIC NO 15. COPY OF PAN NO 16. COPY OF WC TAX REGISTRATION 17. DOCUMENTS IN SUPPORT OF SC/ST RELAXATION AT S.NO.16.0 18. GSTN CERTIFICATE	
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*** Classification of BA s under SC/ST shall be governed under following guidelines:**

- **Proprietorship/ Single Ownership Firm:** Proprietor of the firm should be from SC/ST community. Governing document shall be Proprietorship Deed.
- **Partnership Firm:** Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed.
- **Private Limited Company:** Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

NOTE: Certification from SC/ST Commission shall be required for deciding upon SC/ST status of a person.

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ANNEXURE-I
MANUFACTURER AUTHORIZATION FORM

(To be submitted on OEM's Letter Head)

Date:

Tender Enquiry No.:

To,

Chief (Procurement & Stores)

The TP Central Odisha Distribution Limited,
Bhubaneswar

Sir,

WHEREAS M/s. [name of OEM], who are official manufacturers of having factories at [address of OEM] do hereby authorize M/s [name of bidder] to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us

.....and
to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the Special Conditions of Contract or as mentioned elsewhere in the Tender Document, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

We hereby confirm that in case, the channel partner fails to provide the necessary services as per the Tender Document referred above, M/s [name of OEM] shall provide standard warranty on the materials supplied against the contract. The warranty period and inclusion / exclusion of parts in the warranty shall remain same as defined in the contract issued to their channel partner against this tender enquiry.

Yours Sincerely,

For

Authorized Signatory