

NIT No.: TPCODL/P&S/1000000650/2024-25

INFORMATION TO THE BIDDERS TO PARTICIPATE IN E-TENDER SYSTEM OF TPCODL

-: Steps for E-tender submission: -

Step 1:

The bidder can get primary information about the tender from the NEWSPAPER advertisement / TPCODL website (in case of open tender) / invitation through e-mail (in case of limited tenders)

Step 2:

First, the prospective Bidder who intends to participate in an open tender should deposit the requisite tender fee as mentioned in the tender document trough NEFT/ RTGS in the a/c of TPCODL as mentioned in the tender document. Deposit of the Tender fee should be made within the scheduled time for such deposit as indicated in the Tender document.

Step 3:

After deposit of the tender fee, the bidder should furnish the following information through email to the contact person indicated in the tender document.

SI No	Description	Bidder's Response
1	Tender Enquiry No.	
2	Description of materials / Works Tendered	
3	Name of the bidding company	
4	Place & Detail Address of the Company	
5	Postal Code (PIN Code)	
6	Name of the authorized contact person of the Bidder	
7	Contact No./Mobile No. authorized person	
8	E-mail Id of the contact person	
9	Tender Fee details (Bank Name / Amount / NEFT-RTGS UTR No / Date)	
10	GST No.	

Step 4:

After receipt of the above information through e-mail, Vendor will get an <u>invitation e-mail</u> from ARIBA System, which is the e-tendering platform of TPCODL. In this mail, there will be an online link as <u>Click Here</u> to participate in the tender.

Step 5:

Click "Click Here" to access this event.

Step 6:

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

Step 7:



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Click Continue. The simple one-page registration screen will open for first time user. **All** * **mark mandatory field to be filled in**.

Step 8:

You will be able to see the RFQ (i.e. Detail Tender document).

Step 9:

After review and downloading of all documents click on <u>"Accept Review Pre-requisites"</u>, i.e. acceptance of terms and conditions.

Step 10:

Review and accept "Bidder Agreement".

Step 11:

You can see attached tender document in PDF format 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.)

Step 13:

Uploading of Price Bid

- (a) Price schedule is attached in envelope.3.1 of ARIBA. 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 authorized person. PDF version of this price bid to be attached. For Price Bid put all the unit price, taxes, and duties in provided field. Put "0" (ZERO) in not applicable field.
- (b) In addition, the bidder has to upload the editable form of the price bid in EXCEL format in envelope 3.2 of ARIBA system.

Step 14:

After uploading successfully Techno commercial offer and price part then click on <u>"Submit Entire Response"</u>

Note: Once user ID and password created, bidder can also login to ARIBA site through the following URL:

https://service.ariba.com/Sourcing.aw/124997008/aw?awh=r&awssk=oxt0s1BN&dard=1



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OPEN TENDER NOTIFICATION

FOR

Rate contract for supply of Safety Materials (PPE) at TPCODL

Tender Enquiry No.: TPCODL/P&S/1000000650/2024-25

Due Date for Bid Submission: 10.05.2024 [17:00 Hrs.]

Tata Power Central Odisha Distribution Limited 1st Floor, Anuj Building, Satya Nagar, Bhubaneswar-751007



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1.0 Event Information

1.1 Scope of work

Open Tenders are invited in e-tender bidding process from interested Bidders for entering into a Purchase Order as defined below:

S. No.	Description	EMD Amount (Rs.)	Tender Fee (Rs.)
1	Rate Contract for supply of Safety Materials (PPE) at TPCODL	2,00,000	5,000

^{*} EMD is exempted for MSMEs registered in the State of Odisha.

For details of MSME norms, pls refer "Annexure VIIa"

Please note that corresponding details mentioned in this document will supersede any other details mentioned anywhere else in the Tender Document.

1.2 Availability of Tender Documents

Non-transferable tender documents may be downloaded by interested eligible bidders from tender section of our website https://www.tpcentralodisha.com. Same will also be sent to bidder through ARIBA e-procurement system after payment of tender fee as mentioned in "Process for bidding" in the tender above. Bidder can participate in the tender only through ARIBA e-procurement platform.

Bidders are requested to visit TPCODL website https://www.tpcentralodisha.com regularly for any modification/ clarification to the bid documents

Bidders are requested to visit TPCODL website https://www.tpcentralodisha.com regularly for any modification/ clarification to the bid documents.

1.3 Calendar of Events

(a)	Date of sale/ availability of tender documents from TPCODL Website	From 03.05.2024 to Onwards
(b)	Last date and time of Payment of Tender Fee	10.05.2024 up to 17:00 Hours
(c)	Date & Time of Pre-Bid Meeting (If any)	Not applicable. Queries to be answered through email/TPCODL Tender Website
(d)	Last Date of receipt of pre-bid queries, (through mail), if any	13.05.2024 up to 17:00 Hours
(e)	Last Date of Posting Consolidated replies to all the pre-bid queries as received	15.05.2024 up to 17:00 Hours
(f)	Last date and time of receipt of Bids	18 .05.2024 up to 17:00 Hours
(g)	Date & Time of opening technical bids & EMD	Will be notified to the successful bidders through our website / mail as per relevant clause
(h)	Date & Time of opening of Price of qualified bids	Will be notified to the successful bidders through our website / mail as per relevant clause

^{**} MSMEs registered in the State of Odisha shall pay tender fee of Rs. 1,000/- including GST.



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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 Bidder / OEM must have service centre in Odisha.
- 1.4.4 Requisite Documents for compliance to Qualification Criteria mentioned in Clause 1.7.
- 1.4.5 Drawing, Type Test details along with a sample of each item as specified at Annexure I (as applicable)
- 1.4.6 Duly signed and stamped 'Schedule of Deviations' as per Annexure III on bidder's letter head.
- 1.4.7 Duly signed and stamped 'Schedule of Commercial Specifications' as per Annexure IV on bidder's letter head.
- 1.4.8 Proper authorization letter/ Power of Attorney to sign the tender on the behalf of bidder.
- 1.4.9 Copy of MSME, 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')

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 (If Applicable)
- 1.6.2 Tender fee of requisite value (If Applicable)
- 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

a) The average annual turnover of the bidder shall be a minimum of Rs. 2.0 Crs for last three financial years. (FY 20-21, FY 21-22 & FY 22-23) Copy of audited Balance Sheet and P&L Account to be submitted in this regard.



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- b) Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria.
- c) Bidder shall arrange for factory evaluation/ pre-dispatch inspection/ routine and acceptance tests at their works, as per requirement.
- d) Bidder should have at least the Purchase order single / Multiple copy of experience in supply of similar item (in Govt. Org/Discoms/Utilities/Industries/PSU) with performance certificate.
- e) Bidder should have a valid Manufacturing license /MSME issued by concerned state/India Govt. for carrying out these works in Copy of license required.
- f) The bidder should have supplied similar type of PPE for minimum 50% of the quantity tendered in the immediate past three financial years.
- g) The bidder must have all statutory compliance like valid PAN no, GSTN etc. The bidder must submit the copy of all these registrations.

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 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 the **overall all-inclusive lowest cost** for the complete tender BOQ as calculated in Schedule of Items [Annexure I]. TPCODL however, reserves right to split the order line item wise and/or quantity wise among more than one Bidder. Hence all bidders are advised to quote their most competitive rates against each line item.
- Bidder has to mandatorily quote against each item of Schedule of Items [Annexure 1].
 Failing to do so, TPCODL may reject the bids.
- Bidder to submit the sample of each items on or before bid submission date on nonreturnable basis. The same shall be required during technical evaluation. And the delivery shall be made according to the approved sample only.



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NOTE: In case of a new bidder not registered, factory inspection and evaluation may be carried out to ascertain bidder's manufacturing capability and quality procedures. How-ever 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. TPCODL shall respond to the clarification raised by various bidders and the replies will be sent to all participating bidders through e-mail.

Bids shall be submitted in 3 (three) parts:

FIRST PART: <u>"EMD"</u> as applicable shall be submitted. The EMD shall be <u>Valid for 210 days</u> from the due date of bid submission in the form of BG /Bank Draft/Bankers Pay Order/Online Payment (issued from a Scheduled Bank) favoring 'TP Central Odisha Distribution Limited'. The EMD 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

SECOND PART: "TECHNICAL BID" shall contain the following documents:

- a) Documentary evidence in support of qualifying criteria as per clause no. 1.7 above
- b) Technical literature/GTP/Type test report etc. (if applicable)
- c) Qualified manpower 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 scanned copy of the same is to be uploaded in ARIBA e-procurement platform.

THIRD PART: "PRICE BID" shall contain only the price details and strictly in format as mentioned in Annexure I along 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



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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.

The EMD in the form of BG/Demand Draft/Pay Order shall be submitted in original hard copy and then placed in sealed envelope which shall be clearly marked as below:

EMD

"Rate contract for supply of Safety Materials (PPE) at TPCODL"

Online payment details of EMD has to be uploaded in ARIBA e-procurement platform, during submission of online bid, by printing the same in bidder's letter head with company seal and signature.

Bids have to be mandatorily online through ARIBA. No other form of bid submission will be accepted. Please mention our Enquiry Number:- TPCODL/P&S/1000000650/2024-25 in your bid and bid should be addressed to:

Chief (Procurement & Stores)

Tata Power Central Odisha Distribution Limited

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

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.

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



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All the bidders are requested to send their pre-bid queries (if any) against this tender through e-mail within the stipulated timelines. The consolidated reply to all the queries received shall be posted on TPCODL website by the stipulated timelines as detailed in calendar of events.

Communication Details:

Package Owner

Name: Mr. Prashant Gupta,

Team Lead Procurement Contact No: 9634077589

E-Mail ID: prashant.gupta@tpcentralodisha.com

Escalation Matrix

Name: Mr. Sudhakar Behera, Designation: Sr GM-Procurement

Contact No: 9437282663

E-Mail ID: Sudhakar.Behera@tpcentralodisha.com

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/ SLA mentioned in the tender, shall be deemed to be included in prices quoted.

3.4 Bid Currencies

Prices shall be quoted in Indian Rupees Only.

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



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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 denominate 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

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

Bids will be opened at TPCODL Office, 1st Floor, Anuj Building, Plot No-29, Satya Nagar, Bhubaneswar-751007 as per the schedule time mentioned in 1.3. Calendar of Events in the presence of authorized representatives (having authorization letter for attending bid opening from competent authority of respective Organizations) of bidders who may choose to be present at the time of tender opening. Technical bid must not contain any cost information whatsoever, else bids shall be liable to be rejected.

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

Next, the technical bid of the bidders who have furnished the requisite EMD will be opened, one by one.

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



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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. After all techno commercial issues are clarified, price bids will be opened internally by TPCODL.

4.5 Clarification Of bids

To assist in the examination, evaluation and comparison of Bids, the TPCODL may, at its discretion, ask the Bidder for a clarification of its Bid. 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.

4.6 Price Bid Opening

Cases where RA shall not be conducted:- Price bids of qualified bidders shall be opened in the presence of qualified bidders.

Cases where RA shall be conducted: Price bids of qualified bidders shall be opened internally

For service contract (with large BOM, comprehensive BOQ, large no of line items etc.): Price bids of qualified bidders shall be internally opened.

4.7 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:



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No of bidders allowed to participate 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

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 3.1 above. The decision to place 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 (Annexure II)
- 5. Technical Specifications (Annexure II)
- 6. Inspection Test Plan (Annexure-II)
- 7. Acceptance Form for Participation in Reverse Auction (Annexure VI)
- 8. General Conditions of Contract (Annexure VII)
- 9. Environmental & Sustainable Policy (Annexure IX)
- 10. Tata Code of Conduct Policy (Annexure X)

7.0 Post Award Contract Administration



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7.1 Special Conditions of Contract

- Rate contract shall be valid for a period of one year from the placement of Contract. Release Order (RO) shall be placed as per the requirement of TPCODL. Rate shall remain FIRM till the validity of Rate Contract.
- TPCODL appreciates and welcomes the engagement/employment of persons from SC/ ST community or any other deprived section of society by their BAs.
- Performance Bank Guarantee amounting to 5% of the RC value/ 10% of the PO value shall be submitted by the BA within 15 days of issuance of RC as per GCC for a period equivalent to contract period plus three months.
- Any change in statutory taxes, duties and levies during the contract period shall be borne by TPCODL. However in case of delay in work execution owing to reasons not attributable to TPCODL, any increase in total liability shall be passed on the Bidder, whereas any benefits arising owing to such statutory variation in taxes and duties shall be passed on TPCODL.
- All the terms and conditions of TPCODL GCC shall be applicable.

7.2 Delivery Terms

Completion period: Delivery & installation to be completed within 6 weeks from the date of intimation/Date of issuance of PO whichever is later. Delivery will be accepted at TPCODL Technology Center in Bhubaneswar, Odisha, India.

7.3 Warranty Period

5 year from the date of installation

7.4 Payment Terms

Payment shall be released within 45 days of submission of error free Invoice duly certified by EIC/Site in charge.

7.5 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. Please refer attached Environmental Policy and sustainability Policy, Annexure-XI of Tata Power for more details.

7.6 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.
- 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



NIT No.: TPCODL/P&S/1000000650/2024-25

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 at Annexure IX for more information.

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

8.0 Specification and standards

As per Annexure II.

9.0 General Condition of Contract

Any condition not mentioned above shall be applicable as per GCC for Composite attached along with this tender at Annexure VII.

10.0 Safety

All jobs are this tender have to be executed strictly in compliance to the Safety terms and Conditions of TP Central Odisha Distribution Company Limited. Please visit https://www.tatapower.com/corporate/policies.aspx for detailed Safety terms and conditions, Annexure-VIII, for details. Violation of Safety norms will result in Penalty as mentioned in the above document. Safety Policy of TP Central Odisha Distribution Company Limited is also enclosed for reference.



NIT No.: TPCODL/P&S/1000000650/2024-25

ANNEXURE I Schedule for Items

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sr. No.	Description	Unit of Measurem ent	Quantity	HSN/S AC Code	Price (in Rs.)	GST (in Rs.)	Amount (in Rs.) (A+B)
1	SAFETY SHOES (all sizes)	PAA	12000				
2	SAFETY HARNESS (BELT)	EA	500				
3	SAFETY HELMET INDUSTRIAL TYPE	EA	1,000				
4	SAFETY HELMET WITH VOLT INDUCTION TESTER	EA	1,000				
5	GLOVES SOFT ELECT SAFETY 500V (CLASS 00)	PAA	2,000				
6	12 KV ELECTRICAL HAND GLOVE	PAA	2,000				
7	RUBBER HAND GLOVES 33 K.V.	PAA	1,000				
8	SAFETY REFLECTIVE JACKET-FLUROSENT GREEN	EA	2,000				
9	POLKA DOTTED COTTON HAND GLOVES	PAA	10,000				
10	SAFETY GUM BOOT WITH FIBRE TOE CAPS	PAA	2,000				



NIT No.: TPCODL/P&S/1000000650/2024-25

11	ARC FLASH PROTACTIVE FACE VISOR	EA	2,000		
	All Inclusive Value of Tend	er BOQ (Rs.)			

Signature & Seal of the Bidder

NOTE:

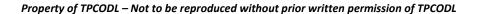
- The bidders are advised to quote prices strictly in the above format only. Failing to do so, bids are liable for rejection.
- The bidder must fill each column of the above format. Mentioning "extra/inclusive" in any of the column may lead for rejection of the price bid.
- No cutting/ overwriting in the prices is permissible.
- The unit price to be indicated in col. No. 6 should be exclusive of taxes & duties, which are to be indicated in separate columns meant for the purpose.
- Services shall be delivered to TPCODL office location in Odisha (location will be shared with the successful bidder).
- The prices shall be applicable for TPCODL offices at Odisha.
- HSN/SAC codes for respective line item must be mandatorily provided wherever
- Bidders to quote all items as per Annexure-I falling which bids will not be evaluated.



NIT No.: TPCODL/P&S/1000000650/2024-25

ANNEXURE II

Technical Specs attached





NIT No.: TPCODL/P&S/1000000650/2024-25

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 <u>specifically</u> 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



NIT No.: TPCODL/P&S/1000000650/2024-25

Remarks

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.)

Particulars

S. No.

1.	Prices firm or subject to variation	Firm / Variable
	(If variable indicate the price variation	
	clause with the ceiling if applicable)	
1a.	If variable price variation on clause given	Yes / No
1b.	Ceiling	%
1c.	Inclusive of Excise Duty	Yes / No (If Yes, indicate % rate)
1d.	Sales tax applicable at concessional rate	Yes / No (If Yes, indicate % rate)
1e.	Octroi payable extra	Yes / No (If Yes, indicate % rate)
1f.	Inclusive of transit insurance	Yes / No
2.	Delivery	Weeks / months
3.	Guarantee clause acceptable	Yes / No
4.	Terms of payment acceptable	Yes / No
5.	Performance Bank Guarantee acceptable	Yes / No
6.	Liquidated damages clause acceptable	Yes / No
7.	Validity (180 days)	Yes / No
	(From the date of opening of technical bid)	
8.	Inspection during stage of manufacture	Yes / No
9.	Rebate for increased quantity	Yes / No (If Yes, indicate value)
10.	Change in price for reduced quantity	Yes / No (If Yes, indicate value)
11.	Covered under Small Scale and Ancillary	Yes / No
	Industrial Undertaking Act 1992	(If Yes, indicate, SSI Reg'n No.)



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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/organ gram	
4	Signed copy of this RFQ as an unconditional acceptance	
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	



NIT No.: TPCODL/P&S/1000000650/2024-25

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 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 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



NIT No.: TPCODL/P&S/1000000650/2024-25

ANNEXURE-VII

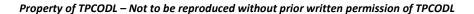
(GENERAL CONDITIONS OF THE CONTRACT)



1st Floor, Anuj Building, Plot No.29, Satya Nagar, Bhubaneswar, Odisha 751007 NIT No.: TPCODL/P&S/1000000650/2024-25

ANNEXURE-VIII

(SAFETY POLICY AND SAFETY TERMS AND CONDITIONS)





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Annexure VIIa

Preferential norms for procurement from MSMEs registered in the State of Odisha

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.



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ANNEXURE IX

ENVIRONMENT & SUSTAINABILITY POLICY



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

TATA POWER
Lighting up Lives!

Date: 15th June, 2018



NIT No.: TPCODL/P&S/1000000650/2023-24

ANNEXURE X

Quality, Safety, Occupational Health & Environment





Integrated Manager System Policy

Quality, Safety, Occupational Health, Environme

We at TP Central Odisha Distribution Limited are committed to deliver wo and reliable power through an energised workforce leading to ever increas of its customers, environmental protection and safe and healthy working c

This will be achieved by:

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



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ANNEXURE XI 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 Centralized Contract Group e-mail ID: pradip.sil@tpcentralodisha.com



1st Floor, Anuj Building, Plot No.29, Satya Nagar, Bhubaneswar, Odisha 751007 NIT No.: TPCODL/P&S/1000000650/2024-25

ANNEXURE XII

Authorization Letter Format

(To be presented by the authorized person at the time of opening of Bid on the letter head of Bidder and should be signed by an Authorized Signatory with Name and Seal of the Company)

Tender Date:	No:
Chief - Central Contracts Group Tata Power Odisha DISCOMs Plot-29 Anuj Building Satya Nagar Bhubaneshwar	
Dear Sir,	
SUB:	Tender for
Ref: Your Tender No dated	
This has reference to your above Tende	
Mr. /Miss/Mrsattend the bid opening of the above Teorganization.	is hereby authorized to ender on on behalf of our
The specimen signature is attested belo	w:
Specimen Signature of Representative	
Signature of Authorizing Authority	
Name & Designation of Authorizing Auth	ority

NOTE: This Authorization letter is to be carried in person at the time of Bid

Opening

TPC DL TP CENTRAL ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TATA POWER CENTRAL ODISHA DISTRIBUTION COMPANY LIMITED, BHUBANESHWAR				
(A late Fower and Outside Government Joint Venture)	TECHNICAL SPECIFICATION				
Document Title	STANDARD TECHNICAL PARTICULARS FOR ELECTRICAL SAFETY SHOES				
Document No.	Safety/PPE/SS Eff. Date: 26.11.2020				
Revision No.	01	Page 1 of 04			

1.0	SCOPE	The ar	ono of	this technical decument	is to give design & sanstructional facture	oo for	
1.0		The scope of this technical document is to give design & constructional features for protective foot wear (Safety Shoes) to be used by operating personnel working in such areas where there are chances of foot injuries due to electric shock, falling or rolling objects on the site or any object/particles piercing the sole of the shoe. The safety shoes shall be fitted with toecaps, designed to give protection against impact when tested at an energy level of at least 200 J and against compression when tested at a compression load of at least 15 kN.					
2.0	APPLICABLE STANDARD	IS 1529	8 (Part-	-2) : 2011			
3.0	CLIMATE 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,					
				equipment and accessorion of 0.1 g	es shall be suitable to withstand seismic	forces	
4.0	GENERAL		S.No	Description	Requirements		
	TECHNICAL REQUIREMNTS		1	Upper/outsole bond strength	When footwear, other than with a stitched sole, is tested, the bond strength shall be not less than 4,0 N/mm, unless there is tearing of the sole,in which case the bond strength shall be not less than 3,0 N/mm. Scuff resistant coverings for the toe region shall be not less than 1 mm in thickness		
			2	Toe Protection	Toecaps shall be incorporated in the footwear in such a manner that they cannot be removed without Damaging the footwear.		

Initiator	Approval	

TPC DL TP CENTRAL ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TATA POWER CENTRAL ODISHA DIST LIMITED, BHUBANESH TECHNICAL SPECIFICA	WAR				
Document Title	STANDARD TECHNICAL PARTICULARS FOR ELECTRICAL SAFETY SHOES					
Document No.	Safety/PPE/SS	Eff. Date: 26.11.2020				
Revision No.	01	Page 2 of 04				

	ı			1		
					safety toecap footwear component	
					built into the footwear designed to	
					protect the toes of the wearer from	
					impacts up to an energy level of at	
					least 200 J and compression at a load	
					of at least 15 KN	
					Non-metallic toecaps used in safety	
				footwear shall comply with the		
				requirements of EN 12568:199		
					Shoes to be used for electrical	
					applications shall have nonmetallic	
					(composite) toe cap with an edge	
			а	Electrical Application	covering extended from the back edge	
			а	Liectrical Application	to at least 5 mm beneath it and 10 mm	
					in opposite direction. Class of	
					electrical insulated shoes shall be O	
					or OO.	
			3	Internal Toe Cap Length	As per table -5 of IS according to size	
			4	Impact & compression Resistance	As per table -6 of IS according to size	
			5 Leak proof ness		There shall be no leakage of air.	
					Electrical resistant, Nonskid, antistatic,	
					oil resistance (preferably acid, Alkali	
			6	Sole	resistance) PU single density sole	
					(manufacturer certificates to be	
					attached)	
			7	Upper Material of Shoe	Genuine Leather	
			8	Inner Lining	Best quality soft leather lining for	
				miner Eming	maximum comfort	
					Shoe offered must be of Buff	
					Barton water resistant leather	
			9	Shoe Construction	with padded collar	
			J		Shoe construction shall be	
					nail less and shall have	
					protection against penetration	
			10	Sole Fixing	Direct injection molding process	
			11	Shoe Colour	Black	
5.0	GENERAL	1)		ing shall be marked perma	nently on each shoe-	
	CONSTRUCTIONS		,) Shoe size		
			b)	'		
			c)	c) Manufacturing year and at least quarter		
			d)	d) Applicable IS standard No.		
			e)	e) Symbol		
		2)	•	ne electrical safety shoes shall be tested at reputed labs – FDDI/CPRI or other		
		-/			•	
		NABL accredited laboratories for following and test report to be submitted				

TPCÓDL TP CENTRAL ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TATA POWER CENTRAL ODISHA DISTRIBUTION COMPANY LIMITED, BHUBANESHWAR TECHNICAL SPECIFICATION					
Document Title	STANDARD TECHNICAL PARTICULARS FOR ELECTRICAL SAFETY SHOES					
Document No.	Safety/PPE/SS	Eff. Date: 26.11.2020				
Revision No.	01	Page 3 of 04				

		4) Si 5) E; 6) C cc pi 7) Si 8) M 9) Ti 10) F 11) Ti id 12) Si	a) Quality assurance b) Strength test c) High voltage test across the sole up to 15 KV AC. 15 KV AC voltage shall be applied across the sole for 1 minute duration (Electrical test) Shoe with low ankle, good grip and comfortable to wear shall be accepted. Shoe lace shall be of flat good quality with breaking strength 40-50 Kg. Eye lids shall be non metallic Composite toe caps of footwear having rubber soles/molded soles may be coated with suitable rust preventives subject to agreement between the purchaser and the supplier. Shoe must be wear & tear resistant and should withstand rough usage. Manufacturer certificate(s) to be submitted The pair of shoes shall be packed individually in box. Packing should bear suitable code number to identify date of manufacture The packing shall have separate identification for composite toe for easy identification. Shoe shall be ISI marked.				
6.0	WARRANTY	Warranty of the product shall be 1 year from the date of purchase. If any defects found on product within warranty period the vendor is liable to replace the product free of cost.					
7.0	GUARANTEED TECHNICAL PARTICULARS		S. No	Description	To be Submitted by the Bidder		
			1	Applicable Standards			
			2	Toe Protection material			
			а	Electrical Application			
			b	Non Electrical Application			
			3	Internal Toe Cap Length			
			4	Upper material of Shoe			
			5	Sole material			
			6	Compression Resistance			
			7	Compact Resistance			

TPC DL TP CENTRAL ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TATA POWER CENTRAL ODISHA DISTRIBUTION COMPANY LIMITED, BHUBANESHWAR				
	TECHNICAL SPECIFICATION				
Document Title	STANDARD TECHNICAL PARTICULARS FOR ELECTRICAL SAFETY SHOES				
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				8	Inner Lining material	
				9	Protection against penetration(Yes/No)	
				10	Shoe color	
				11	Shoe marking as per Cl.no-5(Yes/no)	г
				12	2 ISI marking(Yes/no)	
				13	Type test report(Yes/no)	
				14	Packing details	
				15	Warranty	
8.0	SCHEDULE	OF			(TO B	BE ENCLOSED WITH THE BID)
	DEVIATIONS					
			All	deviatio	ns from this specification	n shall be set out by the Bidders, clause by
						ecifically mentioned in this Schedule, the
			ten	der shal	I be deemed to confirm	the purchaser's specifications:
				S.No.	Clause No.	Details of deviation with justifications
			Wed	confirm t	hat there are no deviation	ons apart from those detailed above
			Weo	confirm t	hat there are no deviation	ons apart from those detailed above.

TPCODL TP CENTRAL ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TATA POWER CENTRAL ODISHA DISTRIBUTION COMPANY LIMITED, BHUBANESHWAR					
(A late rower and outside dovernment Joint venture)	TECHNICAL SPECIFICATION					
Document Title	STANDARD TECHNICAL PARTICULARS FOR ELECTRICAL SAFETY SHOES					
Document No.	Safety/PPE/SS	Eff. Date: 26.11.2020				
Revision No.	01	Page 5 of 04				

Signature
Designation

TPCØDL	TP CENTRAL ODISHA DISTRIBUTION LIMITED, BHUBANESHWAR						
IFCODE	TECHNICAL SPECIFICATION						
Document Title	Standard Technical Particular: Electrical Insulated Hand Gloves						
Document No.	TPCODL/PPE/EIHG/23/01		Eff. Date: 25.07.2023				
Revision No.	01	Page 1 of 10					
Prepared By:	Prepared By: Santosh Balasaheb Dange	Approved By: Amiya Kumar Bisoi	Issued By : Pradip Kumar Sahoo				

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- 3.0 CLIMATIC CONDITIONS OF THE INSTALLATION
- 4.0 GENERAL TECHNICAL REQUIREMENTS
- 5.0 GENERAL CONSTRUCTIONS
- 6.0 NAME PLATE AND MARKING
- 7.0 TESTS
- 8.0 TYPE TEST CERTIFICATES
- 9.0 PRE-DESPATCH INSPECTION
- 10.0 INSPECTION AFTER RECEIPT AT STORE
- 11.0 GUARANTEE
- 12.0 PACKING
- 13.0 TENDER SAMPLE
- 14.0 TRAINING
- 15.0 DRAWING AND DOCUMENTS
- 16.0 GURANTEED TECHNICAL PARTICULARS
- 17.0 SCHEDULE OF DEVIATIONS
 - + Annexure-1: Inspection Test Plan

			Eli. Date.	
TPCODL	TP CENTRAL ODISHA DISTRIBUTION LTD, BHUBANESHWAR			
IFCODE	TECHNICAL SPECIFICATION			
Document Title	Standard Technical Particular: Electrical Insulating Hand Gloves			
Document No.	TPCODL/PPE/EIG/23/01		Eff. Date: 25.07.2023	
Revision No.	R1		Page 2 of 10	
Prepared By: Santosh Balasaheb Dange	Reviewed By: Amiya kumar Bisoi	Approved By: Pradip Kumar Sahoo	Issued By : Corporate Safety Cell	

1.0	SCOPE	This specification covers the technical requirements of design, manufacturing, testing at manufacturer's works, packing, forwarding, supply and unloading of 'Electrical Insulating gloves' at site/stores of following three category 1) Electrical Insulated Gloves- 500V – Class 00 2) Electrical Insulated Gloves- 11kV – Class 2 3) Electrical Insulated Gloves- 33kV – Class 4 Electrical insulating Gloves' shall be suitable for use by linemen for working on LT, 11kV & 33kV voltage.		
2.0	APPLICABLE STANDARDS	The Insulated gloves shall be designed, manufactured tested in accordance with the latest editions of the following Indian, International standards and shall conform to the regulations of the local statutory authorities. IEC/EN 60002:2014 Live working Flostrical Insulating Gloves		
		IEC/EN 60903:2014 Live working-Electrical Insulating Gloves		
3.0	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		
		The design of equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.1 g.		

4.0	GENERAL TECHNICAL REQUIREMENTS		
S No.	Parameter	Requirement	
1	Average Tensile Strength	As per IEC/EN 61482-1-2/ IEC/EN 60903:2014	
2	Average % Elongation at break		

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3	Puncture Resistance
4	Tension Set
5	AC Proof voltage
6	Withstand voltage
7	Maximum Operating Voltage
8	Thickness
9	Tear Strength

		Parameter	Electrical Insulating gloves
		Material	Good quality natural rubber
5.0	.0 GENERAL CONSTRUCTION	Requirement	Electrical insulation protection
		General construction	The gloves shall be seamless construction and should have smooth finish (inside & outside). Gloves shall be free from cavity, voids, cuts, discoloring, patches, and other visual defects.
		Shape of the glove	Shall comply to IEC 60903:2014
		Shelf life	3 years

			Eli. Date.	
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			Clas	s	Opera	nting Voltage	
	By Class		00		•	500 V	
			0			1000 V	
			1			7500 V	
			2		1	L7000 V	
			3				
CLASSIFICATION			4			36000 V	
			Categoi	γ A			
		•	1				
	pro	perties					
						· · · · · · · · · · · · · · · · · · ·	-
			Catego	ry F	Resistant t	o leakage curre	ent
	1.		-	standard	length as per I	EC/EN 60903	cl.4.3.2 and
	Class	Length Available	Max. Operating Voltage	insulatii gloves	gloves (Without arc flash) Thickness	Composite gloves (With arc flash) Thickness (mm)	Required Sizes
	00	28/36 cm	500	0.5	1.8		
	0	28/46 cm	1000	1.0	2.3	As por IEC	
	1	36/46cm	7500	1.5	2.8	-	
SIZES	2	36/46 cm	17000	2.3	3.3	IEC	9 & 10
	3	36/46 cm	26500	2.9	3.6	00303.2014	
	4	41/46 cm	36000	3.6	4.2		
	2. 3. 4.	The minimum dielectric to The maximum	um thickness ests. num thicknes	shall be s on the	determined only	y by the ability a glove (no rik	to pass the bbed area if
		CLASSIFICATION By pro 1. Class 00 0 1 2 3 4 2. 3.	By special properties	By Class	CLASSIFICATION By Class CLASSIFICATION By special properties Category A Category B Category C Category F Category C Category F Category F Category F Category B Category C Category F Category C Category C Category F Category C Category F Category C Category F Category C Category C Category C Category F Category C Category C Category F Category C Catego	CLASSIFICATION By Class CLASSIFICATION By Special properties Category A Resist Category B Resistant to w Category F Re	By Class

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		178 mm (siz	e 7), 191 mm (size 7.5),	203 mm (size 8), 216 r	mm (size 8.5), 229 mm (size		
		9), 241 mm (size 9.5), 254 mm (size 10), 267 mm (size 10.5), and 279 mm (size 11)					
		.The tolerance in size shall be ± 13 mm.					
5.3	SPECIAL	Gloves sha	ll withstand dielectric	stress, mechanical,	arc flash, climatic and		
5.5	PROPERTIES	environmen	tal stresses as per as pe	r) Cl.4.4.			
		All gloves sh	All gloves shall pass the proof and withstand voltage tests:				
		Class	Max Operating Voltage(Volts)	Proof test voltage(Volt)	Withstand Voltage (Volts)		
		00	500	2500	5000		
5.4	ELECTRICAL	0	1000	5000	10000		
	REQUIREMENTS	1	7500	10000	20000		
		2	17000	20000	30000		
		3	26500	30000	40000		
		4	36000	40000	50000		
5.6	WORKSHIP AND FINISH	 irregularities that can be detected by thorough test and inspection. Harmful physical irregularities shall be defined as any feature that disrupts the uniform, smooth surface contour, such as pinholes, cracks, blisters, cuts, conductive embedded foreign matter, creases, pinch marks, voids (entrapped air), prominent ripples and prominent mould marks. Non-Harmful physical irregularities shall be defined as per IEC 60903/EN: 2014 Cl.4.3.4. The working area is defined as all fingers and thumb forks, the palm and the palm side of the fingers and thumb as per IEC/EN 60903:2014 Cl.4.3.4. Palm and finger surfaces designed to improve the grip shall not be considered as irregularities. 					
5.7		 The manufacturer shall provide written instructions for use with each packaging of gloves/ MSDS (Material Safety Data Sheet). The instructions for use shall include information on storage, handling, disposal, periodic inspection, periodic testing and reference to the standard with its date of publication. 					

			2 24.6.		
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	T					
		secured aga	nall be provided with durable and legible p inst removal. The gloves are marked indeli g information:			
		1 Symbol	Double triangle – suitable for live working			
		-	ite gloves shall also be identified with a n	nechanical symbol (hammer)		
		•	nt to the double triangle	nechanical symbol (naminel),		
		aujacei	(it to the double thangle			
			J			
		-	< [⋆] →			
	NAME PLATE AND					
6.0	MARKING		t IEC standard with year of publication			
			rademark and Identification of manufactur	rer		
		5. Size				
			laximum rated working potential in volts			
		7. Categor				
		8. Month and Year of manufacture				
		9. Lot number				
		Outside of t	he package shall be marked with			
		Name of manufacture with trade mark.				
			and Year of manufacture.			
		3. Materi	al name with item code			
		4. Size, Cl	ass and category of gloves/ Maximum rate	d working potential in volts.		
			acceptance & type tests shall be carried			
		relevant IS/I	EC.			
		All accepta	nce tests shall be witnessed by TPCL	, Bhubaneshwar authorized		
7.0	TESTS	representat	ive.			
			nponents and fittings shall also be type	tested as per the relevant		
		standards.				
		Fallandar +		una mandianad in nalawant		
		standards:	pe test shall be carried out as per procedu	ure mentioned in relevant		
		S. No.	Test	Reference Standard		
		1.	Visual and Dimensional Inspection	IEC/EN 60903 cl. 5.2		
	T VD5			IEC/EN 60903		
7.1	TYPE TEST	2.	Tensile Strength	cl. 5.5.2		
		3.	Tension test	IEC/EN 60903		
		J.	rension test	cl. 5.5.4		
		4.	Puncture Resistance Test	IEC/EN 60903		
			. diletal e ricolotario e rest	cl. 5.5.3		

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		1			
		5.	Elongation at break Test	IEC/EN 60903	
			-	cl. 5.5.2	
		6.	Dielectric test	IEC/EN 60903 cl. 5.6	
		7.	Aging test	IEC/EN 60903 cl. 5.7	
		8.	Flame retardancy test	IEC 60903/EN cl. 5.8.2	
		9.	Test on gloves with special properti	ies IEC/EN 60903 cl. 5.9	
		10.	Cutting resistance	IEC/EN 60903 cl. 5.10.2	
		11.	Abrasion resistance	IEC/EN 60903 cl. 5.10.1	
		12.	Tear resistance	IEC 60903/EN cl. 5.10.3	
		13.	Leakage current resistance	IEC/EN 60903 cl. 5.9.5	
		S.No.	Test	Reference Standard	
		5.1101	Visual (free from cavity, voids,	IEC 60903/EN cl. 5.2 and	
		1.	cuts, discoloring, patches, and	Specification	
			other visual defects)	ENG-GEN-4015	
7.2	ROUTINE TEST		,	IEC 60903/EN cl. 5.2 and	
		2.	Dimensional Inspection	Specification	
				ENG-GEN-4015	
		S.No.	Test	ENG-GEN-4015 Reference Standard	
		S.No.		Reference Standard	
		S.No.	Visual (free from cavity, voids,		
				Reference Standard IEC 60903/EN cl. 5.2 and	
7.3	ACCEPTANCE TEST		Visual (free from cavity, voids, cuts, discoloring, patches, and	Reference Standard IEC 60903/EN cl. 5.2 and Specification	
7.3	ACCEPTANCE TEST		Visual (free from cavity, voids, cuts, discoloring, patches, and	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015	
7.3	ACCEPTANCE TEST	1.	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects)	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and	
7.3	ACCEPTANCE TEST	2.	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of	
7.3	ACCEPTANCE TEST	1.	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects)	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015	
7.3	ACCEPTANCE TEST	1. 2. 3.	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015	
7.3	ACCEPTANCE TEST	1. 2. 3. 1. Th	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015	
7.3	ACCEPTANCE TEST	1. 2. 3. 1. Th	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test cert	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per	
7.3	ACCEPTANCE TEST	1. 2. 3. 1. The the 2. All	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test certe corresponding standards.	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per	
	ACCEPTANCE TEST TYPE TEST	1. 2. 3. 1. Th the 2. All 3. An	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test certe corresponding standards. the tests shall be conducted at SATRA	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per	
7.3		1. 2. 3. 1. The the 2. All 3. An ap	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test certe corresponding standards. the tests shall be conducted at SATRA by other international accredition body	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per	
	TYPE TEST	1. 2. 3. 1. The the 2. All 3. An ap 4. Ty	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test certe corresponding standards. the tests shall be conducted at SATRA by other international accredition body proval from TPCODL, Bhubaneshwar co	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per / DGUV accredited lab. shall be considered only after duly ompetent authority. Test laboratories during the period	
	TYPE TEST	1. 2. 3. 1. The the 2. All 3. An ap 4. Ty no	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test certe corresponding standards. the tests shall be conducted at SATRA by other international accredition body proval from TPCODL, Bhubaneshwar cope tests must be conducted in certified t exceeding 5 years from the date of o	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per DGUV accredited lab. Shall be considered only after duly ompetent authority. Test laboratories during the period pening the bid.	
	TYPE TEST	1. 2. 3. 1. The thick 2. All 3. And ap 4. Ty no 5. In	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test certe corresponding standards. the tests shall be conducted at SATRA by other international accredition body proval from TPCODL, Bhubaneshwar of pe tests must be conducted in certified t exceeding 5 years from the date of o the event of any discrepancy in the tests.	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per DGUV accredited lab. Shall be considered only after duly ompetent authority. Test laboratories during the period pening the bid. est reports, i.e. any test report not	
	TYPE TEST	1. 2. 3. 1. The the 2. All 3. An ap 4. Ty no 5. In accordance and the second se	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test certe corresponding standards. the tests shall be conducted at SATRA by other international accredition body proval from TPCODL, Bhubaneshwar cope tests must be conducted in certified t exceeding 5 years from the date of o	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per DGUV accredited lab. Shall be considered only after duly ompetent authority. Test laboratories during the period pening the bid. est reports, i.e. any test report not	
8.0	TYPE TEST CERTIFICATES	1. 2. 3. 1. The the 2. All 3. An ap 4. Ty no 5. In acc Bh	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test cert e corresponding standards. the tests shall be conducted at SATRA by other international accredition body proval from TPCODL, Bhubaneshwar cope tests must be conducted in certified t exceeding 5 years from the date of othe event of any discrepancy in the teceptable same shall be carried out witubaneshwar.	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per / DGUV accredited lab. shall be considered only after duly ompetent authority. I Test laboratories during the period pening the bid. est reports, i.e. any test report not thout any cost implication to TPCL,	
	TYPE TEST	1. 2. 3. 1. The the 2. All 3. An ap 4. Ty no 5. In acc Bh	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects) Dimensional Inspection Marking and Packing check e bidder shall furnish the type test certe corresponding standards. the tests shall be conducted at SATRA by other international accredition body proval from TPCODL, Bhubaneshwar cope tests must be conducted in certified t exceeding 5 years from the date of othe event of any discrepancy in the teceptable same shall be carried out with	Reference Standard IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 IEC 60903/EN cl. 5.2 and Specification ENG-GEN-4015 Clause 6.0 of ENG-GEN-4015 tificates as mentioned above as per Application of the considered only after duly competent authority. Test laboratories during the period pening the bid. Pest reports, i.e. any test report not thout any cost implication to TPCL, ection by a duly authorized	

			Ell. Date:	
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		 Inspection may be made at any stage of manufacture at the option of TPCL, Bhubaneshwar 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 TPCL, Bhubaneshwar or authorized representatives shall not relieve the supplier 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, Bhubaneshwar. Following documents shall be sent along with material: a) Test report b) MDCC issued by TPCL, Bhubaneshwar c) Invoice in duplicate d) Packing list e) Guarantee / Warrantee card f) Delivery Challan g) MSDS (material safety data sheet) h) Other Documents (as applicable) 		
10.0	INSPECTION AFTER RECEIPT AT STORE	The material received at TPCL, Bhubaneshwar store shall be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Engineering department. The gloves received at Stores should not exceed 3 months from the date of		
11.0	GUARANTEE:	 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. If any defect is found up to a period of 36 months from the date of manufacturing, supplier shall be liable to replace the gloves at their own costs. Property of gloves shall not be degraded within specified shelf life, else bidder will have to replace the glove at their own cost. 		
12.0	PACKING	 Each Pair of gloves shall be packed in individual package of sufficient strength to protect the gloves from damage. 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. The material should be packed in individual box in such a way that the shape of Gloves does not get deformed or damaged during transportation and storage. User instructions shall be provided with each glove in English language. Note: Single use plastic not to be used for packing of the material. 		

			Lii. Date.	
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13.0	TENDER SAMPLE	One pair of Sample to be submitted free of cost during technical bid submission.	
14.0	TRAINING	NA	
15.0	DRAWINGS AND DOCUMENTS	Following drawings and documents shall be prepared based on TPCL specifications and statutory requirements and shall be submitted with the bid: a. Completely filled in Technical Particulars and compliance to each clause of the specification. b. Type test certificates. Drawings / documents to be submitted after the award of the contract are as under: 1. Technical Parameters as asked in Specification. 2. Instructions for use 3. Quality Assurance plan. 4. MSDS (material safety data sheet) All the documents shall be in English language.	
16.0	GUARANTEED TECHNICAL	Bidder shall comply with this specification clause by clause.	
	PARTICULARS		
17.0	SCHEDULE OF DEVIATIONS		

(TO BE ENCLOSED WITH THE 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 TPCL's specification:

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

We	confirm	that the	ere are no	deviations	s apart from	those	detailed	above.
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Seal of the Company:

Signature

Designation

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ANNEXURE-I

INSPECTION TEST PLAN

S No.	Tests	Specified Value	Reference documents	Test Results	Pass/Fail
1	Visual (free from cavity, voids, cuts, discoloring, patches, and other visual defects)	As per Approved GTP/TPCL Specification and IEC/EN 60903.	As per IEC/EN 60903 cl. 5.2. Specification ENG-GEN-4015		
2	Dimensional Inspection	As per Approved GTP/TPCL Specification and IEC/EN 60903.	As per IEC/EN 60903 cl. 5.2. Specification ENG-GEN-4015		
3	Marking, Packing and manufacturing date	As per TPCODL Specification	Specification ENG-GEN-4015 Clause 6.0		

TPCL's OFFICER

BIDDER'S REPRESENTATIVE

DATE OF INSPECTION

1.0 SCOPE:

This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at store/site and performance of Full Body safety Harness/belts. Harness is to be worn by the person who is working at height (at or above 1.8 meter) or vertical operations which has risk of falling. They are designed as per EN 361:2002 and IS: 3521 which is a latest standard for this category

2.0 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.

1) IS: 3521:1991/2002 : Industrial safety Belts and Harness

2) BS EN 361:2002 : Industrial safety belts

3) EN 358:2000 : Webbing work positioning lanyard

3.0 GENERAL TECHNICAL REQUIREMNTS:

This data sheet covers supply of full body harness with front chest adjustable webbing with buckle used for high level protection against falling from heights and multiple hazards which may be encountered while working at construction work site and or extreme heights. The harness shall have facility of work positioning while working on height / electrical pole.

3.1 GENERAL FEATURES AND SPECIFICATIONS

The salient features and specifications are as follow:

All full body harnesses shall be classified as class A-Fall arresting

Class A - Fall Arresting

Class A - harnesses are designed to have support the body during and after the arrest of fall.

Class A harnesses shall have one D-ring for fall arrest attachment affixed to both shoulder straps at the back or at the front.

DESIGN AND CONSTRUCTION:

Webbing and thread elements shall be made from synthetic fibers, having characteristics consistent with those of polyamide and polyester.

Sewing threads shall be physically compatible with and of a comparable quality to that of the webbing, but shall be of a different color from that of the webbing in order to facilitate visual inspection.

A full body harness shall comprise of straps or similar elements which are placed in the thigh area and on the shoulders. The full body harness shall fit the wearer. Means of adjustment may also be provided. Each full body harness shall come with twin legged Double lanyard.

One End of lanyard should terminate with steel carabineer and steel scaffold hooks at the other ends.



The lanyard shall contain shock absorber.

The straps shall not migrate from their positions and shall not loosen by themselves. 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.

The harness shall contain the body and shall distribute suitably the dynamic fall arrest forces and post-fall arrest suspension forces over the body. The harness shall not create any supplementary risk and shall offer an acceptable degree of comfort.

3.2 WIDTH AND STRENGTH OF THE STRAPS

The minimum width and thickness of webbing for waist straps shall be 40mm and 3 mm respectively.

The waist belts shoulder straps, hoisting straps, sole straps and all types of belts and harnesses shall not break under a minimum tensile load of 19.6kN(2000kg)

4.0 MATERIALS

4.1 Webbing

All belts and harnesses shall be made from nylon or other synthetic materials, such as polyester. The material shall have a uniform thickness and uniform width. The waist belt, shoulder straps, hoisting straps, pole straps and all types of safety belts and harnesses shall be made from nylon/polyester webbing. All the material used in the production of webbing and rope shall pass the flammability test as mentioned in IS 3521.

4.2 Threads for Sewing

Threads for sewing the load bearing components shall have similar physical and chemical properties to that of the materials being sewn. Number of stitches shall be not less than 3 per cm and the type of thread shall be synthetic fiber such as nylon, polyester etc. The threading shall be of different color from that of the webbing in order to facilitate visual inspection.

4.3 Rivets and Washers

All rivets and washers if used for joining the various sections shall be made from copper.

4.4 <u>Life Line / Safety Line</u>

Only nylon, polyester or synthetic fiber shall be used. The breaking load shall be a minimum of 19.6 kN (or approximately 2000 kg) when tested in accordance with test method reference.

5.2.4.1 Working at height

GENERAL TESCHNICAL REQUIREMENTS

- 1. Each full body harness shall come with twin legged Double lanyard.
- 2. One end of lanyard should terminate with steel carabiner and steel scaffold hooks at the other ends.
- 3. The lanyard shall contain shock absorber.



S.NO	PROPERTIES		Description
1	PHYSICAL PARAMETERS	GENERAL	 One Dorsal D-Ring Attachment for fall arrest Adjustable leg straps Adjustable Sit Traps Front chest adjustable webbing with buckle
		WEIGHT	• 800g±10%
		COLOUR	•
		SIZE	Universal
2	TEXTILE COMPONENT	A) WEBBING	 Material-Polyester Width-40 mm Breaking Strength-25kN (Min) (approximately 2600 kg)
		B) STITCHING THREAD	Material-High TenacityPolyamideColor-White
3		C) METAL COMPONENTS	 Material: Steel Plating: Electro deposited Nickel chrome Finish: Deburredad Polished Weight:1300 gm without lanyard
4		D) VITAL TEST COMPLIANCE	Static strength:15kN
5		E) 1. LANYARD / ROPE(ISI MARKED)	For Anchorage Material: Polypropylene (PP) Rope Dia:12 mm Dia Rope Length: Max 2.0m (preferable 1.5m) Breaking Strength:20kN Thimble Material: Polyamide Sleeve Material: LDPE
		E) 2. WEBBING WORK POSITIONING LANYARD	 For Work Positioning. Made of 35 (±2) mm wide polyester webbing. Manual ring type adjuster for forged alloy steel. Easy to connect steel nap hooks Maximum length of 2.0 m.

			Conforms to EN 358:2000
6	ANCHORAGE HOOK (CE MARKED)	• DESIGN	 Auto Closing & auto locking type steel snap hook
		• MATERIAL	 Made of high strength alloy steel Nickel chrome plated for better finish & corrosion protection
		STRENGTH	• 20 kN
		WEIGHT	• 200 gm
7	REQUIREMENTS	STRENGTH ATTACHMENT MEANS PERFORMANCE TESTS STATIC LOAD DYNAMIC LOAD	Shall be complied as per IS 3521
		2.13.111.227.10	• Harness-As per EN 361:20002
8	TESTING STANDARD		Rope-As per EN 364Webbing As per EN 358Hook-As per EN 362.

5.0 NAME PLATE AND MARKING:

The equipment shall be provided with durable and legible name plate, effectively secured against removal. The harness is legibly and indelibly marked with the following information:

- > The type of harness/belt
- > The name, trade mark or other means of identification of the manufacturer who is responsible for acting on behalf of the manufacturer for claiming compliance with this standard.
- Identification of the Manufacturer
- > Type or product code
- Batch/Lot No.
- > Year of manufacture
- Material

	TATA	TATA POWER COMPANY LIMITED, BHUBANESHWAR			
		TECHNICAL SPECIFICATION			
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Prepared By:	Reviewed By:	Approved By:	Issued By:		

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1.0 SCOPE:

This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at store/site and performance of Electrical safety helmet both ac and dc installations with the system voltage up to 33kV AC and 48V DC.

Helmet is one of the most important items of personal protective equipment used by workers for protection against head injuries caused due to falling objects and electrical hazards.

2.0 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) ANSI Z89.1-2009: Class E: Standard for Electrical Safety Helmets.
- b) IS 2925: Standard for Industrial safety helmets

3.0 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

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

4.0 GENERAL TECHNICAL REQUIREMNTS:

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This technical sheet covers supply of Electrical safety helmets specially engineered to provide high head protection from electrical shocks due live line wires and working in stringent electrical work areas.

The salient features and specifications of Electrical safety Helmets are as below:

S. No	Properties	Description	
1	Material	HDPE	
2	Standard	IS 2925:1984	
3	Suspension	8 Point Textile suspension made out of good Nylon material	
4	Weight	435 gms (Approx)	
5	Size	500-640 mm	
6	Sweat Band	Foam with vinyl for comfort, black	
7	Chin strap	19mm Width Adjustable or elastic strap	
8	Chin Cup	Hard plastic of good quality	
9	Head Cushion	A small head cushion should be provided on the inner side of the helmet, for	
9	rieau cusiiioii	comfort.	
10	Design	Distinctive Aerodynamic Design	
		The position of ventilation holes shall be such that the central axis of the holes	
	Ventilation	is almost horizontal when the helmet is in normal wearing position. The	
11		diameter of any hole shall not exceed 6 mm nor the edges of adjacent holes	
		closer than 15 mm. The minimum number of holes on each side shall be not	
		less than 3 and total aggregate area of holes shall not exceed 300 mm2.	
12	Short Strap	Offers Unobstructed wide angle vision for greater user safety	
13	Nape Strap	Lower Extension to prevent dislodging	
14	Colors	Milky White	
15	Headband	Pin lock/ratchet Type	
16	Printed Logo	TPCODL logo should be printed in Pantone 2727C color, on the front side of	
10	Printed Logo	the helmet. The same will be finalized after signing the contract.	
		i) Each helmet (shell and harness) shall be legibly and indelibly markings.	
		ii) As per clause 10.1, 10.1.1 of IS 2925: 1984 (Latest amended), Helmet (shell	
		and harness) shall have markings of Manufacturers name or trade mark, range	
17	Marking	/ size of helmet.	
17	Marking	iii) Helmet also marked with the ISI certification mark.	
		iv) The month and year of manufacture should also be marked on the helmet	
		shell.	
		Marking shall be decided after the contract is signed.	

4.1 PERFORMANCE REQUIREMENTS

S. No	Properties	Values	Standard
1	Shock Absorption Resistance	5kN	IS 2925:1984
2	Penetration resistance test	10 mm	IS 2925:1984
3	Flammability Test	The material of the shell	
		shall not burn with the	
		emission of flame after as	

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		period of 5 seconds	IS 2925:1984
		following removal at flame	
4	Proof Voltage	20kV,50Hz for 3 min	IS 2925:1984
5	Breakdown Voltage	34kv,50Hz for 1 min	IS 2925:1984
6	Leakage current	Less than 3mA	IS 2925:1984
7	Heat resistance	93+/-5 deg. centigrade	IS 2925:1984
		Fluorescent Yellow-	
		Green=70%	
8	High visibility luminance factor	Fluorescent Orange-	
		Red=40%	IS 2925:1984
		Fluorescent Red=25%	

ACCESSORIES (Optional):

- 1) Ear Muffs
- 2) Face Shield

The above mentioned accessories to be provided along with the helmets

WORKMANSHIP AND FINISH:

1) Helmets shall be free from harmful physical irregularities that can be detected by through test and inspection.

Harmful physical irregularities shall be defined as any feature that disrupts the uniform, smooth surface contour, such as pinholes, cracks, blisters, cuts, conductive embedded foreign matter, creases, pinch marks, voids (entrapped air), and prominent ripples.

It should have provision for printing of Company's Logo on the front side.

6.0 NAME PLATE AND MARKING:

Each Electrical Safety helmet (Shell and Harness) is legibly and indelibly marked with following information:

- a) Manufacturer's name or trade mark
- b) Date of manufacturing and order details
- c) Applicable type and class designation
- d) American national standard designation
- e) Month and Year of manufacture

The exact marking shall be decided after the contract is signed.

7.0 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. Following tests shall be necessarily conducted on the insulating rubber mat in addition to others specified in IS/IEC standard.

7.1 Type test:

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- 1. Shock absorption resistance test
- 2. Penetration resistance test
- 3. Flammability resistance test
- 4. Proof Voltage test
- 5. Breakdown Voltage Test
- 6. Leakage current Test
- 7. Heat Resistance Test
- 8. High Visibility luminance Test.

7.2 Routine tests:

- 1 Penetration resistance Test
- 2 Breakdown Voltage Test
- 3 Heat Resistance Test
- 4 Flammability resistance test

7.3 Acceptance tests:

- 1. Marking
- 2. Visual Examination and Dimensions
- 3. Breakdown Voltage Test
- 4. Heat Resistance Test

8.0 Type Test Certificates:

The bidder shall furnish the type test certificates for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI/ERDA/NABL accredited labs as per the relevant standards. Type tests 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, same shall be carried out without any cost implication to the Purchaser.

9.0 PRE- DESPATCH INSPECTION:

The successful bidder shall submit two prototype samples for further testing and compliance as per specifications and getting approval before mass manufacturing.

Equipment shall be subject to inspection by a duly authorized representative of the Purchaser. Inspection may be made at any stage of manufacture at the option 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 the Purchaser's representatives at all times when the work is in progress. Inspection by the Purchaser or its authorized representatives shall not relieve the supplier 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 the Purchaser.

Following documents shall be sent along with material:

- a) Test reports
- b) MDCC issued by Purchaser
- c) Invoice in duplicate
- d) Packing list
- e) Drawings & catalogue
- f) Guarantee / Warrantee card

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- g) Delivery Challan
- h) Other Documents (as applicable)

10.0 INSPECTION AFTER RECEIPT AT STORE (TPCODL, BHUBANESHWAR):

The material received at the Purchaser store shall be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Project Engineering department of TPCODL, Bhubaneshwar.

The successful bidder shall submit two extra boxes (unpaid) per lot delivered, with serial nos. in continuation to the lot (lot size shall be 15,000 numbers or as defined in the order) to the Purchaser for further testing and confirmation in line with the specifications and the material shall be liable for rejection, if test results are found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Project Engineering department.

10.0 GUARANTEE:

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 Purchaser up to a period of 12 months from the date of commissioning or 18 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 his own costs. within mutually agreed timeframe, and to the entire satisfaction of the Purchaser, failing which the Purchaser will be at liberty to get it replaced/rectified at Bidder's risks and costs and recover all such expenses plus the Purchaser's own charges (@ 20% of expenses incurred), from the Bidder or from the "Security cum Performance Deposit" as the case may be. In case of box fails within the guarantee period the purchaser will immediately inform the bidder who shall take back the failed box within 15 days from the date of intimation at his own cost and replace / repair the box within forty five days of date of intimation with a roll over guarantee.

The outage period i.e. period from the date of failure till unit is repaired / replaced shall not be counted for arriving at the guarantee period.

Bidder shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Purchaser.

12.0 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. The material used for packing shall be environmentally friendly.

13.0 TENDER SAMPLE:

Bidders are required to one no. of the sample for safety helmets for the approval of the product before manufacturing of the Lot.

14.0 QUALITY CONTROL:

The bidder shall submit with the offer Quality assurance plan indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage

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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.

15.0 MINIMUM TESTING FACILITIES:

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

16.0 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.

17.0 **SPARES, ACCESSORIES AND TOOLS:**

Not applicable

18.0 **Drawing And Documents**:

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

- a) Completely filled in Technical Particulars
- b) General description of the equipment and all components including brochures.
- c) General arrangement for insulating rubber mat
- d) Experience List
- e) Type test certificates

After the award of the contract, four (4) copies of following drawings, drawn to scale, describing the equipment in detail shall be forwarded for approval.

Sr. No.	Description	For Approval	For Review Information	Final Submission
1	Technical Parameters	٧		٧
2	GA Drawing of insulating rubber mat	٧		٧
3	Installation Instruction			٧
4	Manual/Catalogues		٧	
5	QA & QC Plan	٧		٧
6	Test Certificates	٧	٧	٧

Bidder shall subsequently provide four (4) complete sets of final drawings,. Soft copy (Compact Disk CD) of all the drawing, GTP, Test certificates shall be submitted after the final approval of the same to purchaser.

All the documents & drawings shall be in English language.

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Instruction Manuals: Bidder shall furnish two softcopies (CD) and four (4) hard copies of nicely bound manuals (In English language) covering erection and maintenance instructions and all relevant information and drawings pertaining to the main equipment as well as auxiliary devices.

19.0 GUARANTEED TECHNICAL PARTICULARS:

S. No	Properties	Description
1	Material	
2	Standard	
3	Suspension	
4	Weight	
5	Size	
6	Sweat Band	
7	Chin strap	
8	Design	
9	Short Strap	Particulars to be provided by the bidder
10	Nape Strap	rarticulars to be provided by the bidder
11	Colors	
12	Shock Absorption	
	Resistance	
13	Penetration resistance	
	test	
14	Flammability Test	
15	Proof Voltage	
16	Breakdown Voltage	
17	Leakage current	
18	Heat resistance	
19	High visibility	
	luminance factor	

20.0 SCHEDULE OF DEVIATION:

The bidders shall set out all deviations from this specification, Clause by Clause in this schedule. Unless **specifically** mentioned in this schedule, the tender shall be deemed to confirm the purchaser's specifications.

(TO BE ENCLOSED WITH THE 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

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

Seal of the Company:

Signature:

Designation: