

(A Tata Power & Odisha Govt. joint venture)
2nd Floor, IDCO Tower, Janpath Bhubaneshwar, Odisha 751022

NIT No.: TPCODL/P&S/68/2020-21

OPEN TENDER NOTIFICATION

FOR

RATE CONTRACT FOR SUPPLY OF 11 KV RING MAIN UNITS

Tender Enquiry No.: TPCODL/P&S/68/2020-21

Due Date for Bid Submission: 25-Aug-2020 [15:00 Hrs.]

TP Central Odisha Distribution Limited
(A TATA Power and Odisha Government Joint Venture)
Procurement & Stores Department,
2nd Floor, IDCO Towers, Janpath, Bhubaneswar – 751022



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1.0 Event Information

1.1. Scope of work

Open Tenders are invited in through e-tender bidding process from interested Bidders for entering into a **Rate Contracts valid for a period of 1 Year** as defined below:

S. No.	Description	EMD Amount (Rs.)	Tender Fee* (Rs.)
1.	11 KV RMU Outdoor type 3 Way - Quantity 60 nos.	3,00,000	5,000
2.	11 KV RMU Outdoor type 4 Way - Quantity 20 nos.		

^{*}inclusive of GST

1.2. Availability of Tender Documents

Non-transferable tender documents may be purchased by interested eligible bidders from address given below, on submission of written application to the under mentioned and upon payment of non-refundable Tender Fee.

Chief (Procurement & Stores)

TP Central Odisha Distribution Limited 2nd Floor, IDCO Towers, Janpath, Bhubaneswar – 751022

Tender documents may be downloaded by interested eligible bidders from TPCODL website www.tpcentralodisha.com with effect from 31 July 2020. In the event of detailed tender documents are downloaded from TPCODL website, the Tender Fee shall be compulsorily submitted either online through NEFT/ RTGS or demand draft/ Banker's cheque drawn in favor of "TP Central Odisha Distribution Limited", payable at Bhubaneswar only. Any such bid submitted without this Fee shall be rejected.

Bidders are requested to visit TPCODL website <u>www.tpcentralodisha.com</u> 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	31.07.2020 1000 Hours
(b)	Last date and time of Payment of Tender Fee	14.08.2020 1500 Hours
(c)	Last Date of receipt of pre-bid queries, if any	17.08.2020 1000 Hours
(d)	Last Date of Posting Consolidated replies to all the pre-bid queries as received	20.08.2020 1800 Hours
(e)	Last date and time of receipt of Bids	25.08.2020 1500 Hours
(f)	Date & Time of opening technical bids and EMD (Envelope-1 & 2)	25.08.2020 1500 Hours



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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's office, the last date of submission of bids and date of opening of bids will be the day following working day at appointed times.

Participating Bidders will get intimatio1n from TPCODL E-Tender system (Ariba) when the Technical Bids are opened. Refer Section 4.2 for details

1.4 Mandatory documents required along with the Bid

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

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:

- i. EMD of requisite value and validity
- ii. Tender fee of requisite value
- iii. Price Bid as per the Price Schedule mentioned in Annexure I (BOQ)
- iv. Necessary documents against compliance to Qualification Requirements mentioned at Clause 1.7 of this Tender Document
- v. Filled in Schedule of Deviations as per Annexure III
- vi. Filled in Schedule of Commercial Specifications as per Annexure IV
- vii. 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 bidder should have an average annual turnover of Rs.50 Crores in last three financial years (FY 17-18, FY 18-19 and FY 19-20). Copy of audited Balance Sheet and P&L Account to be submitted in this regard.



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- b) The bidder should have own manufacturing facility to manufacture RMUs of same or higher voltage rating and in-house facilities for acceptance tests as per technical specifications. Bidder must submit undertaking in this regard.
- c) The bidder should have experience of having successfully completed supply orders for at least 100 nos. RMUs of same or higher voltage rating during last 3 years. Copy of work order / completion certificate to be submitted in this regard.
- d) The bidder should have performance certificates from at least 2 reputed companies for similar or higher rating of work. The work against these issued certificates should be completed in last seven years from the date of bid submission. In case the bidder has a previous association with TPCODL / CESU for similar products and services, the performance feedback for that bidder by TPCODL User Group shall only be considered irrespective of performance certificates issued by any third organization
- e) The bidder should have dedicated service team in TPCODL to attend issues within 24 hours or bidder shall develop dedicated service team in this area in the event of award of contract, before commencement of supplies. Bidder should submit the undertaking in this regard.
- f) The subsidiaries of global / Indian companies are also eligible to bid if the qualification requirements stated above are met independently or in combination with the parent/sister concern/group company. However, the bidder should have an establishment of permanent nature in India. Bidder should submit the undertaking with details of address in this regard

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 <u>overall lowest cost in Line Item Basis</u> as calculated in Schedule of Items [Annexure I]. TPCODL reserves the right to split the



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order line item wise and / or quantity wise, among more than one Bidder. Hence all bidders are advised to quote their most competitive rates.

Bidder has to mandatorily quote against each item of Schedule of Items [Annexure I].
 Failing to do so, TPCODL may reject the bids.

NOTE: In case a new bidder is not registered with TPCODL, factory inspection and evaluation shall be carried out to ascertain bidder's manufacturing capability and quality procedures. However, TPCODL reserves the right to carry out factory inspection and evaluation for any bidder prior to technical qualification.

In case a bidder is found as Disqualified in the factory evaluation, their bid shall not be evaluated any further and shall be summarily rejected. The decision of TPCODL shall be final and binding on the bidder in this regard.

- **2.1** Price Variation Clause: The prices shall remain firm during the entire contract period.
- 3.0 Submission of Bid Documents

3.1 Bid Submission

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

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

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

Bids shall be submitted in 3 (Three) parts:

FIRST PART: "EMD" as applicable shall be submitted. The EMD shall be valid for 210 days from the due date of bid submission in the form of Bank Guarantee / Bank Draft / Bankers Pay Order (issued from a Scheduled Bank) online NEFT/ RTGS transfer favoring 'TP Central Odisha Distribution Limited' payable at Bhubaneswar. The EMD has to be strictly in the format as mentioned in General Condition of Contract, failing which it shall not be accepted by TPCODL 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 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

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

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

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



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

Chief (Procurement & Stores)

TP Central Odisha Distribution Limited

2nd Floor, IDCO Towers, Janapath, Bhubaneswar- 751022

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

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

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

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 tender and the price bid submitted by the bidder, the item description as mentioned in the tender document (to the extent modified through Corrigendum issued if any) shall prevail.

Price Bid is to be submitted in soft copy through TPCODL E-Tendering system (Ariba) only. Hard copy of Price Bid not be submitted

The EMD in the form of Bank Draft / BG / Bankers 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 11 KV RING MAIN UNITS"

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



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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 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

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:

Handling Executive for this Tender:
Name: Vibhor Kumar Singh

Contact No.: 8130485135

E-Mail ID: vibhor.singh@tpcentralodisha.com / vibhor.singh@tatapower-ddl.com

Senior General Manager (Material Procurement):

Name: Mr. Deba Prasad Das

Contact No.: 9438297571

E-Mail ID: purchase@cescoorissa.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.

Applicable GST to be specified clearly

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.

RC Validity: - The validity of this rate contract shall be one year from the date of issuance.

3.6 Alternative Bids



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

3.7 Modifications and Withdrawal of Bids

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

3.8 Earnest Money Deposit (EMD)

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

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

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

The EMD shall be forfeited in case:

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

O

- b) The successful Bidder does not
 - a) accept the Purchase Order, or
 - b) furnish the required Performance Security Bank Guarantee

3.9 Type Tests (if applicable)

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

4 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 rejection of the Bidder's Bid.

4.2. Technical Bid Opening

Bids will be opened at TPCODL Office, Bhubaneswar. All tender bids shall be opened internally by TPCODL. Presence of any bidder will not be allowed during bid opening process. Technical bid must not contain any cost information whatsoever.

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



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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 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 may not subsequently be made responsive by the Bidder by correction of the non-conformity.

4.4. Techno Commercial Clarifications

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

4.5. Price Bid Opening

Price bids will be opened internally without the presence of any bidder representative. The EMD of the bidder withdrawing or substantially altering his offer at any stage after the technical bid opening will be forfeited at the sole discretion of TPCODL without any further correspondence in this regard.

4.6. Reverse Auctions

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

5 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 3.2 above. The decision to place purchase order/LOI solely depends on TPCODL on the cost



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competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that TPCODL may deem relevant.

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

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

6 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 VII)
- 5. Technical Specifications (Annexure II)
- 6. Inspection Test Plan (if anv)
- 7. Acceptance Form for Participation in Reverse Auction (Annexure VI)
- 8. General Conditions of Contract (Annexure VIII)

7 Post Award Contract Administration

7.1. Special Conditions of Contract

- Rate contract shall be valid for a period of 1 years 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.
- Business Associate (BA) shall submit applicable Performance Bank Guarantee as per GCC within 30 days of issuance of order. PBG applicable shall be 5% of Order Value. PBG submitted, shall be released after completion of applicable guarantee period plus one month
- BA shall submit GTP / Drawing within 2 weeks from issuance of rate contract. In case BA does not get necessary approvals for issuance of CAT-A within mentioned / mutually agreed timelines, then TPCODL reserve the right to cancel issued rate contract / release order and also reserve the right to forfeit EMD / PBG.
- 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.
- Statutory Variations: Any changes in existing taxes/ Duties and levies, Introduction of new taxes and duties etc. during the period of the contract shall be paid at actuals to BA subject to BA shall submit the tax break up in details, however, where BA has quoted the all-inclusive prices and not shown the tax break-up, this clause will not be applicable. The date of issue of MDCC shall be used for this purpose.
- Quotation in all BOM items is mandatory, and bid shall be rejected if any line of found blank in un price bid.



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- Delivery period shall be 60 days from date of receipt of release order / CAT-A issuance, whichever is later
- Guarantee applicable shall be as per technical specifications
- TPCODL shall short close the issued Release Order / Rate contract, in case of any quality issues
- All other terms and conditions of TPCODL General Conditions of Contract shall be applicable.

Terms of Payment:

On delivery of the materials in good condition and certification of acceptance by certified official, Associate shall submit the Bills/ Invoices in original in the name of Tata Power Company Limited to Invoice Desk. The payment shall be released within 60 days from the date of submission of certified bills/ invoices.

7.2 Drawing Submission and Approval

The relevant drawings and GTPs need to be submitted within two weeks of receipt of firm purchase order by the successful bidder to TPCODL for approval. In case, re-submission of drawings is required on request of TPCODL, same needs to be submitted back to TPCODL within 5 days of such request.

7.3 Delivery Timelines

The delivery of material shall be made as per special condition of contract mentioned in point 7.1.

7.4 Warranty Period

Guarantee Period of the supplied material shall be as per technical specification attached separately with this tender

7.5 Payment Terms

As per SCC

7.6 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 Environment Policy and Sustainability Policy, Annexure-XI for more details.

7.7 Ethics

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

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

- We shall select our suppliers and service providers fairly and transparently.
- We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.

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- Our suppliers and service providers shall represent our company only with duly authorized written permission from our company. They are expected to abide by the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.
- We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
- We respect our obligations on the use of third party intellectual property and data.

Bidder is advised to refer Tata Code of Conduct (TCOC) attached at Annexure X for more information.

Any ethical concerns with respect to this tender can be reported to the following e-mail ID:

purchase@cescoorissa.com / pkjain@tatapower.com

8 Specification and standards

As per Annexure II

9 General Condition of Contract

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

10 Safety

All jobs are this tender have to be executed strictly in compliance to the Safety terms and Conditions of TP Central Odisha Distribution Limited. Please refer attached Safety terms and conditions, Annexure-IX, for details. Violation of Safety norms will result in Penalty as mentioned in the above document.



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ANNEXURE I

Schedule for Items

S. No.	Item Description	Quantity	Unit	HSN /SAC Code	Unit Ex- Work Price (Rs./Unit)	GST (Rs/Unit)	Other Taxes and Duties (Rs/Unit)	Freight & Insurance Charges (Rs/Unit)	GST on Freight & Insurance Charges (Rs/Unit)	All Inclusive Unit Rate (Rs.)	Total All Inclusive Value (Rs.)
1	11 KV RMU 3 Way (Outdoor type)	60	EA								
2	11 KV RMU 4 Way (Outdoor type)	20	EA								
			Total All Inclusive Value (Rs.)								

Signature & Seal of the Bidder

NOTE:

- The bidders are advised to quote prices strictly in the format attached.
- The bidder must fill each and every column of the format attached. *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 <u>exclusive</u> of taxes & duties which are to be indicated in separate columns meant for the purpose.



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- The bids will be evaluated commercially on <u>overall lowest cost in Line Item Basis</u> as calculated in Schedule of Items [Annexure I]. TPCODL reserves the right to split the order line item wise and / or quantity wise, among more than one Bidder. Hence all bidders are advised to quote their most competitive rates
- The prices shall be FOR TPCODL Locations.



TP CENTRAL ODISHA DISTRIBUTION LIMITED (A Tata Power & Odisha Govt. joint venture) 2nd Floor, IDCO Tower, Janpath Bhubaneshwar, Odisha 751022

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ANNEXURE II

Technical Specifications

Attached: Technical Specification



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ANNEXURE III

Schedule of Deviations

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

Unless <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:	



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ANNEXURE IV

Schedule of Commercial Specifications

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

S. No.	Particulars	Remarks
1.	Prices firm or subject to variation	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 GST	Yes / No (If Yes, indicate % rate)
1d.	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 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.)
		Seal of the Bidder:
		Signature:
		Name:



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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 tender	
3	Signed copy of this tender 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	1.	
11	Order copies as a proof of quantity executed	
12	Details of Type Tests if applicable (duly mentioned on hidder letter	
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	

Seal of the Bidder:	-
Signature:	
Name	



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ANNEXURE VI

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder)

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

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

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

Signature & Seal of the Bidder

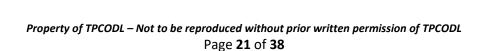


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ANNEXURE VII SCOPE OF WORK

1. Supply Item as per Annexure-1





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ANNEXURE VIII GENERAL CONDITIONS OF CONTRACT

Attached: General Conditions of Contract for Composite Orders



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ANNEXURE IX SAFETY POLICY AND SAFETY TERMS AND CONDITIONS

Definitions

Order Manager: Order Manager is the TPCODL representative, who has the ownership of the given job under the signed contract.

Service Provider/Contractor/Vendor: An individual or an organization that provides services to TPCODL under a signed contract.

Site Safety Management Plan: It is the safety plan agreed between Contractor / Service provider and TPCODL. It will contain the entire job specific safety requirement and will be signed by the service provider.

High Risk Job: Any job which has significant health and safety risk associated to it. The list of high risk jobs has been identified at TPCODL level.

Emergency: A serious, unexpected, business discontinuity and often dangerous situation resulting into loss of revenue / property and requiring immediate action.



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1. Safety Policy



HEALTH AND SAFETY POLICY

Tata Power is committed to provide safe and healthy working environment for the prevention of work related injuries and ill-health. Safety is one of our core values. We strive to be a leader in safety excellence in the global power and energy business. In pursuit of this, we are committed to the following:

- Maintain and continually improve our management systems to eliminate hazards and reduce health & safety risks to all our stakeholders.
- Incorporate appropriate health & safety criteria into business decisions for selection of plant and technology, performance appraisal of individuals and appointments in key positions.
- Comply and endeavour to exceed all applicable health & safety legal and other requirements
- Integrate health & safety procedures and best practices into every operational activity with assigned line-functional responsibilities at all levels.
- Involve our employees and business associates in maintaining a safe and healthy work environment through consultation and participation
- · Inculcate safety culture by visible leadership and empowerment.
- Ensure required competency to enable our employees and business associates for working safely.
- Promptly report incidents, investigate, share crucial learnings and prevent recurrences.
- Influence our business associates in enhancing their health and safety standards and align with Tata Power's health & safety codes and practices.
- Set safety & health metrics as indicators of excellence, monitor progress and continually improve health and safety performance.

We shall ensure the availability of appropriate resources at all times to fully implement and communicate this policy to all stakeholders by suitable means and periodically review its relevance in continuously changing business environment.

Date: 11th March, 2019

TATA POWER

Lighting up Lives!

(Praveer Sinha) CEO & Managing Director



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2. Safety Organization & Responsibilities

2.1 Contractor Site Management and Supervision

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

Each Contractor shall provide at least one competent full time safety supervisor for workforce of less than 100 numbers. When workforce ranges from 100 to 1000, the contractor has to provide at least one qualified safety officer and safety supervisors (reporting to the safety officer) in the ratio 1:100. For every 1000 addition in workforce, the contractor has to add 1 safety officer. The TPCODLProject Safety Manager will review and approve the appointment of all safety supervisors. Contractor/Subcontractor safety supervisors/officers will work with Tata Power Safety Managers and align themselves with Tata Power safety requirements.

Each Contractors'/Subcontractors' Site Manager is responsible, and will be held accountable, for the safety of their sub-contractors and workforce and for ensuring that all equipment, materials, tools and procedures remain in safety compliance at job site, including:

- Holding officer/supervisors accountable for safety and actively promote safe work performance.
- Participate in and cooperate with all safety program requirements to be implemented in order to meet Tata Power safety objectives.
- Ensure timely reporting of safety incidents, near misses, unsafe acts and conditions.
- Identify the training needs of its employees and maintain all safety training documents.
- Provide safety performance report at an agreed frequency.
- Stopping of unsafe work (acts and/or conditions) immediately, until corrective action be taken.

2.2 Contractor Supervisors and General Staff

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

Each site supervisor is responsible and will be held accountable for identifying, analyzing and eliminating or controlling all hazards through implementation of an aggressive, pro-active Health, Safety and Environmental Program from project inception through project completion. Each supervisor will proactively participate in the SHE program by observing, correcting unsafe acts, and recording these observations.



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2.3 Contractor Workforce

Contractor workforce must make safety a part of their job by following safety rules and regulations and by using all safeguards and safety equipment. They must take an active part in the Site Safety program to ensure their own safety and injury-free employment as well as being alert to unsafe practices of their fellow employees.

Every member of the workforce is expected to report for work without influence of any Drug/Alcohol. All employees are expected to report any hazardous conditions practices and behaviors in their work areas and correct where ever possible. Workforce is responsible for active participation in safety and health programs, suggestion systems, trainings and in immediate reporting of all injuries, any unsafe practices, conditions or incidents to their supervisors.

2.4 Vendor/Contractor

Vendors/Contractor shall at all times comply with, and ensure that their workforce comply with all site safety rules and regulations. Specifically, with applicable provisions of the Tata Power Site Safety Management Plan, and all statutory safety rules and regulations.

3. Site Safety Rules and Procedures

The work in the safest possible manner can only happen when it has been carefully planned and all applicable procedures are followed. The Tata Power Safety Procedures are derived from Tata Power best practices and the applicable Government acts regulations. In each case, the most stringent regulation is used.

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

3.1 Lock Out and Tag Out Procedure

This procedure is intended to be used for the protection of Personnel while servicing or performing maintenance on equipment / pipeline / vessel / process systems. This is a general procedure that shall be used as the minimum requirements for isolation of equipment, pipelines, machines, system from all possible sources of hazardous energy and / or material such as Steam, Hot Water, Compressed Air, any other process fluid / chemical energy/Mechanical energy or Electrical energy. For complete procedure kindly refer Procedure Document No. TPSMS/CSP/LOTO/001 REV 01 available on official website of Tata Power (www.tatapower.com)

3.2 Excavation Safety (Shoring and Sloping) Procedure

This procedure is developed to cover the safe practices required for shoring and sloping in excavation and trenching jobs. This procedure is developed to establish mandatory requirements for practices to protect personnel, property and equipment from hazards associated with above activities. For complete procedure kindly refer Procedure Document No TPSMS/CSP/EXS/002 REV 01 available on official website of Tata Power (www.tatapower.com)



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3.3 Confined Space Entry Procedure

This procedure outlines the steps required to perform the confined space entry and to protect personnel from the hazards of entering and conducting operations in confined spaces. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/CSE/003 REV 01 available on official website of Tata Power (www.tatapower.com)

3.4 Working at Height Procedure

This procedure describes the rules and procedures to protect employees from the hazards of working at heights.

This procedure is developed to cover the safe practices required for Working at Heights. This procedure is developed to establish mandatory requirements for practices to protect personnel from hazards associated in this area. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/WAH/004 REV 01 available on official website of Tata Power (www.tatapower.com)

3.5 Heavy Equipment Movement Safety Procedure

Heavy equipment lifting and movement is an activity involving loading, unloading, storage and movement from one place to another including lifting and erection or repairing of equipment with cranes or hoists. Material, machinery and equipment handling operations are being carried out by large capacity cranes and hoists, which make the job safer and faster. This procedure addresses the hazards and precautions associated with such equipment and their use. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/HEMS/005 REV 01 available on official website of Tata Power (www.tatapower.com)

3.6 Mobile Crane Safety Procedure

Mobile cranes are responsible for many incidents, injuries. Falling loads from mobile cranes pose a severe hazard to operators and nearby workers and property. Many types of cranes, hoists, and rigging devices are used for lifting and moving materials. To maintain safe, appropriate standards has to be adhered to and only qualified and licensed individuals shall operate these devices. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/MCS/006 REV 01.

3.7 Scaffold Safety Procedure

This procedure is developed to provide information on the safe erection, use, dismantling and maintenance of access scaffolding in the workplace. It is developed to establish mandatory requirements for practices to protect personnel from hazards associated with erection, use and dismantling of scaffolds. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/SCAF/007 REV 01 available on official website of Tata Power (www.tatapower.com)

3.8 Electrical Safety Procedure



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The objective of these standards is to specify minimum mandatory requirements and advisory guidance for identifying and controlling hazards to ensure 'Zero Harm' with regard to operation maintenance and testing of electrical equipment. For complete procedure kindly refer Procedure Document No-TPSMS/CSP/ELEC/010 REV 01 available on official website of Tata Power (www.tatapower.com)

3.9 Job Safety Analysis (JSA) Procedure

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

3.10 Fire Safety Management Procedure

Objective of This standard is to specify the minimum mandatory requirements and advisory guidelines to ensure prevention of fire related incidents and managing / controlling their impacts if they do occur. For complete procedure kindly refer Procedure Document No- TPSMS/CSP/FSM/011 REV 01

3.11 Permit To Work Procedure

Given the inherent hazards of the power generation and distribution industry, a significant number of TATA POWER operations and installations are critical. Work Permit (WP) System is an essential element in controlling the workplace risks in an effective manner. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/PTW/008 REV 01 available on official website of Tata Power (www.tatapower.com)

3.12 Lift (Elevator) Safety Procedure

To provide safe operating procedure for taking control of lift car before entering and existing the pit of OTIS make elevators. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/LIFT/001 REV 01 available on official website of Tata Power (www.tatapower.com)

3.13 Working on conveyor belt Procedure

This procedure is developed to cover the safe practices required for Working on live equipment and to protect personnel from hazards associated with it. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/CONV/002 REV 01 available on official website of Tata Power (www.tatapower.com)

3.14 Handling Hazardous Materials Procedure

This Procedure is developed to provide procedure for recycling and / or safe disposal of used / waste batteries in compliance with all legislation. For complete procedure kindly refer Procedure Document No-TPSMS/GSP/HAZM/003 REV 01 available on official website of Tata Power (www.tatapower.com)

3.15 Material Handling and Storage Procedure



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The purpose of this document is to provide procedures to assist the safe handling of materials (manual handling and mechanical handling). For complete procedure kindly refer Procedure Document No – TPSMS/GSP/MATL/004 REV 01 available on official website of Tata Power (www.tatapower.com)

3.16 Contractor Safety Management Procedure

The purpose of this document is to engage with contractors in a way to create safe work environment for everyone working for Tata Power. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/CSM/015 REV 01 available on official website of Tata Power (www.tatapower.com)

The above procedures will be updated periodically and the updated version of the procedures as well as any additional critical procedure will be available on official website of Tata Power (www.tatapower.com) for your reference.

4. Training and Capability Building

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

4.1 Tata Power Site Safety Orientation

All Tata Power contractor and subcontractor workforce is required to attend Tata Power Site Safety Orientation Training to receive a Safety Training Card, which is required to obtain a Gate Pass to the site, prior to entry.

This Safety Orientation Course will be for duration of minimum half day. The information provided during the orientation will include, but is not limited to following:

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

Appropriate training such as L1, L2 & L3 is given to ensure that a jobholder, either supervisor or worker, is competent to do his/her job safely. The skill training is provided through TPSDI and other agencies authorized by Tata Power on the list of 15 procedures mentioned under safety procedure.

Contractor shall ensure that concerned workmen are provided with adequate training before he/she is allowed to execute the work.



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An evaluation test will be conducted after the completion of the training. Those workmen employee who meet the minimum required competency will be provided with Gold Card which is valid for 3 years, post which the workmen has to reappear for the assessment. If the workman is not able to qualify the assessment, he/she will be given 3 additional attempts to clear in 3 month timeframe failing which he/she will not be allowed to work on high risk jobs.

5. Pre-Employment and Periodic Medical check up

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

- Drivers (Check for Vision & Hearing)
- Equipment Operators (Check for Vision & Hearing)
- Workforce working at Height (Check for Vision, Hearing, Vertigo & Height Phobia)
- Workforce Handling the hazardous substances (Coal, ash and chemicals)
- Workforce in high decibel area (> 90 Decibel, Check for Hearing)
- Workforce, working in specific areas requiring specific medical attention should conduct the medical test as laid down in the respective Site Safety Management Plan.

6. Safety Performance Evaluation and Penalties

A certain percentage of the bill value will be retained against every running bill as safety performance retention. The amount will be released with the last invoice based on "Safety Performance score" attached in CSM-F-3 of CSM procedure. The amount is based on following table

Contract Value	Retention
	Amount (%)
Upto 10 Lakhs	2.5
10 – 50 lakhs	2
0.5 to 10 Cr	1.5
>10 Cr	1

- Safety performance Score will be monitored by the Order Manager every month.
- For the contract value of more than Rs 1 Cr or contract duration more than 12 months, the retention amount shall be released half yearly based on safety performance. For all remaining contracts, the retention amount will be released with the final bill.
- In case of job stoppage due to safety violations/ unsafe observations at the site, no time extension shall be given to the contractor, if such delays are attributable to contractor.



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- In case of fatality, limb loss or loss of property, vendor has to pay for liability, legal, statutory and additional mutually agreed settlement charges imposed by the appointed committee. This charge is over and above the retention amount.
- The committee will finalize an amount between 5 -50 lakes based on factors such as advise by statutory authorities, contract value and impact of accident etc.
- Safety performance bonus 1% (limiting to 50 lakhs) of the invoice value will be considered at the end of the job if the contractual safety performance score is 100%.
- During the progress of the work, concerned Supervisor/Engineer will visit and inspect the work site regularly and evaluate the safety performance of the contractor based on matrix attached herewith.
- Order Manager, divisional chief and SBU head have the authority to terminate the contract in case of three consecutive serious violations.

7. Safety Performance Evaluation - CSM-F-3

S. No.	Lead Indicators	Unit Of measurement	Target	Weightage
1	% of Employee certified in TPSDI/Authorized agency	%	50	10
2 CFSA score (Annexure 6.1)		Average Severity of Violations	1.49	20
3	Monthly inspection completed for Critical Equipments, lifting Tools & Tackles and hand tools used at site	%	80	5
4	Condition of tools, tackles and equipments	%	100	15
	Lag Indicators			
1	Number of Fatalities	No.	0	30
2	Number of Lost work day case (LWDC)	No.	0	10
3	Man-days Lost	No.	0	10

In addition to above evaluation criteria, for specific violations penalty shall be imposed on the contractors under following circumstances:



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Sr No	Description of violation	Severity	Penalty /
1.	Working without Permit	5	5000/-
2.	Untrained (TPSDI) worker on high-risk jobs.	5	5000/-
3.	Unhygienic/Bad condition of PPE	2	250/-
4.	Not following Tata Power Procedure & Standard	4	2000/-
5.	Unsafe Act/Condition of Severity 4	4	2000/-
6.	Unsafe Act/Condition of Severity 5	5	5000/-
7.	No Earthling of Electrical equipment	5	5000/-
8.	Damaged welding cable	5	5000/
9.	Violation of Positive Isolation Procedure (LOTO Not followed)	5	5000/
10.	ELCB of more than 30 mA/ELCB not working	5	5000/
11.	On/Off switch of welding m/c not working	5	5000/
12.	Electric cable tied with metal wire	5	5000/
13.	Leakage found DA hose / cylinder	5	5000/
14.	Use of LPG	5	5000/
15.	Use of Three-wheeler at the work site.	5	5000/
16.	Starting the job without Tool Box Talk	5	5000/
17.	Spatter falling on DA hose / Gas-line/ pathways / Equipment	5	5000/
18.	No safety latch in crane hook	5	5000/
19.	Load raised or swung over people or occupied areas of buildings	5	5000/
20.	Persons standing in swing area of construction equipments.	5	5000/
21.	Using damaged slings.	5	5000/
22.	Unstable scaffolding/non standard Scaffolding in use	5	5000/
23.	Handrails and mid-rails are missing	5	5000/
24.	Safety Harness not anchored with lifeline/fixed structure	5	5000/
25.	Fall arrestor not provided/ Not being used.	5	5000/
26.	Double life line not used for working at height	5	5000/
27.	No rubber mat in DB room	4	2000/-
28.	Water found accumulated in DB room/near welding machine.	4	2000/
29.	Inserting electric cables into socket, without using plug.	4	2000/
30.	Use of damaged electrical cable/two core cables.	4	2000/
31.	Inflammable material found in D.B Room./ welding areas.	4	2000/
32.	Loose material falling into excavated pit	4	2000/
33.	Water logging into excavated pit	4	2000/
34.	No / inadequate Barricade	4	2000/



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Sr No	Description of violation	Severity	Penalty /
35.	Undercut / cave-in found on sides of excavated pits	4	2000/
36.	Grinding wheel/ Coupling/ Piling winch/other rotating parts without guard	4	2000/
37.	The HMV/Mobile Crane operator does not having a valid HMV driving license.	4	2000/
38.	The loading area is not leveled properly.	4	2000/
39.	Ladder not anchored at top	4	2000/
40.	Opening found in working platform of scaffolding/floor	4	2000/
41.	Inadequate illumination at the working area	4	2000/
42.	Loose material lying on Gantry ,platform	4	2000/
43.	Cleaning body with Compressed Air.	3	500/-
44.	Gas Cylinders using without cap.	3	500/
45.	Gas Cylinders stored without securing	3	500/
46.	Bringing inside any other chemicals, apart from approved by Safety dept.	3	500/
47.	Using drum for sitting or accessing height.	3	500/
48.	Misusing emergency facilities like fire hydrant line/ hose box/ spray system/ eye wash etc.	3	500/
49.	No provision of Safety net where falling materials or tools may occurs	3	500/
50.	Taking electrical supply from non designated outlet (other than socket).	3	500/
51.	Restricted gangways due to unwanted materials.	3	500/
52.	Not reporting incident.	3	500/
53.	Entering into restricted area like switch yard/ hazardous storage etc.	3	500/
54.	Work without supervision	3	500/
55.	Parking of vehicle without applying wheel choke at right front-front and left rear-rear wheels other than passengers cars.	3	500/
56.	Vehicle without helper or co-driver.	3	500/
57.	Not wearing florescent safety jacket at site.	3	500/
58.	People travelling in load body of vehicle.	3	500/
59.	Parking of vehicles at non designated area.	3	500/
60.	Shifting heavy materials without guide ropes.	3	500/
61.	Using other than 24V lamp inside the confined space/Use of other than 24V lamps.	3	500/
62.	Angular/ starch loading/ lifting with Crane or hoist.	3	500/
63.	By passing the limit switch/ Safety Interlock.	3	500/
64.	Housekeeping activities on road without proper barricade.	3	500/



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Sr No	Description of violation	Severity	Penalty /
65.	Trying to board or alit from running vehicle.	3	500/
66.	Cylinder Valves of Gas cylinders not closed when not in use.	3	500/
67.	Flash-back arrester not used.	3	500/
68.	Trolley wheel found damaged.	3	500/
69.	Guy ropes of required length on both sides of object are not used during movement with load.	3	500/
70.	Scotch block/wedge not provide when the vehicle is parked.	3	500/
71.	Suitable Trolley not provided to hold the cylinders.	3	500/
72.	Locked First Aid box	3	500/
73.	Caution boards, danger signs (luminescent /red) along with emergency contact number are not found displayed.	3	500/
74.	Person found jumping barricading tape	3	500/
75.	Stacking of pipes, pile casing , drums without chock blocks/wedges	3	500/
76.	The terrain on which Heavy Equipment/Machinery moves is not reasonably hard.	3	500/
77.	Without Safety Helmet at working sites	4	250/-
78.	Without Crash Helmet (on bikes)	4	500/-
79.	Without Full body double lanyard Safety Harness (for work at height)	5	5000/-
80.	Without Hand gloves - Material Handling, Welding, Cutting,	4	100/-
81.	Without Safety goggles/ face shield - Welding/Cutting / Grinding	5	5000/-
82.	Handling Chemical without PVC Apron	5	5000/-
83.	Smoking in prohibited area (Closed Go-downs, Storage of flammable material, Storage of Gas cylinders)	5	1000/-
84.	Sleeping at Work Place	3	100/-
85.	Driving beyond speed limit	3	1000/-
86.	Seat Belt While Driving (for front seat passengers and driver)	3	500/-
87.	Driving without license	4	1000/-
88.	Heavy Commercial vehicles without reverse horn	3	500/-
89.	Non functional Head light/tail light and side indicators	3	100/-
90.	Using Mobile Phone During Driving	5	5000/-
91.	Poor visibility of registration number/ without registration number	3	100/-
92.	Broken/ without Side view mirror	3	100/-
93.	Over speeding above specified limit	3	500/-
94.	Broken/ Without Pressure gauge on Oxygen/ LPG / Acetylene cylinder.	3	500/-



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Sr No	Description of violation	Severity	Penalty /
95.	Without Flash back arrestor on Industrial Acetylene & Oxygen cylinders.	5	5000/-
96.	Spillage of hazardous material/chemicals during transportation	4	2000/-
97.	Electrical equipment without Earthing/ ELCB/ Double Insulation Cable.	5	5000/-
98.	Lifting Tools & Tackles used without/ expired Test Certificates.	5	5000/-
99.	Housekeeping repeatedly not maintained		
100.	First Time	3	Warning
101.	Second Time	4	1000/-
102.	Third Time	5	5000/-
103.	Serious Violation Of House Keeping (after 1st or 2nd warning to be decided		Rs.10000/-
	by Project Manager depending on the severity)		and above
104.	Repeat Violation of same nature	5	5X Violation



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ANNEXURE X TATA CODE OF CONDUCT

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

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

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



TP CENTRAL ODISHA DISTRIBUTION LIMITED

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ANNEXURE XI 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

Date: 15th June, 2018

TATA POWER
Lighting up Lives!





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2nd Floor, IDCO Tower, Janpath Bhubaneshwar, Odisha 751022

NIT No.: TPCODL/P&S/68/2020-21



CORPORATE SUSTAINABILITY POLICY

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

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

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

(Praveer Sinha)
CEO & Managing Director

Date: 15th June, 2018

Lighting up Lives!

TATA POWER

	TPCODL		
	TECHNICAL SPECIFICATION (Annexure-2)		
Doc. Title	SPECIFICATION FOR 11kV MOTORIZED RING MAIN UNIT (RMU)		
Doc. No			Eff. Date: 01.06.2020
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- **15.** TESTING FACILITIES
- 16. MANUFACTURING ACTIVITIES `
- 17. Spares, Accessories & Tools
- **18.** DRAWINGS, DOCUMENTS
- 19. GUARANTEED TECHNICAL PARTICULARS
- 20. SCHEDULE OF DEVIATIONS

ANNEXURE-1

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		TECHNICAL SPECIFICATION		
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1.0 Scope for RMU

150 00074 000

This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at site/store and performance of 11KV motorized Ring Main Units with all accessories for trouble free & efficient performance.

2.0 APPLICABLE STANDARDS FOR RMU

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

IEC 62271-200	: HV switchgear and control gear-AC Metal Enclosed switchgear and control gear
	for voltages above 1kV and upto and including 52kV.
IS 513	: Cold Rolled Low Carbon Steel Sheets and Strips.

IEC 60694 : Common specifications for high voltage switchgear and control gear standards
IEC 62271-102 : HV switchgear and control gear-Alternating current disconnectors and earthing switches

IEC 60265-1 : High voltage switches – Part 1: Switches for rated voltages above 1 kV and less

than 52 kV
IEC 60529 : Degrees of protection provided by enclosures (IP Code)

IEC 62262 : Degrees of protection provided by enclosures for electrical equipment against

mechanical impacts (IK Code)

IEC 60060 : High-voltage test techniques
IEC 60947 /IS 13947 : Low voltage switchgear and control gear

IEC 60439-1 : Low-voltage switchgear and control gear assemblies- Type tested and partially

type tested assemblies

IEC 60255-3 : Electrical relays - Part 3: Single input energizing quantity measuring relays with

dependent or independent time.

IEC 60044-1 / IS 2705 : Current Transformers IEC 60044-2 / IS 3156 : Voltage Transformers

IEC 60376 : Specification of technical grade sulfur hexafluoride (SF6) for use in electrical

equipment

IEC 61958 : High-voltage prefabricated switchgear and control gear assemblies - Voltage

presence indicating systems.

IS 13573-2 : Cable accessories for extruded power cable for Working Voltages from 3.3 kV up

to and Including 33 Kv.

3.0 CLIMATIC CONDITIONS OF THE INSTALLATION OF RMU:

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

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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 OF RMU:

Description	Requirement
Application	Three phase - Three wire
Rated Voltage	12kV
Service Voltage	11kV
System Frequency	50 Hz
Min Gas pressure	0.05 Bar G
Internal Arc test	20 kA for 1 Sec.
Lightning Impulse withstand Voltage	75 kV Peak
Power Frequency withstand voltage	28 kV rms
Rated current of incomer load break switch	630 A
Rated current of Circuit-breaker	630 A
Rated Short time current withstand (3 sec)	21 kA
Rated Short circuit making current	50 kA
Number of operations at rated short circuit current on line switches, earthing switches and CB	5 close
Opening time of breaker (max.)	2.5 cycle
Closing time of breaker (max.)	3 cycle
Breaker Duty Cycle	O-3min-CO-3min-CO
Rated cable charging interrupting current of incomer-	
- Load Break Switch	10 A
Rated cable charging breaking current of breaker	
	25 A
Insulating medium	SF6
Interrupting medium	Vacuum
Temperature Rise	Maximum permissible temperature for bus bar shall not be 90 deg C at an ambient temperature not exceeding 40 deg C, as per IEC 60694 And IEC 62271. However, the temperature rise for accessible enclosures and covers shall not exceed 30K and in case, they are not required to be touched during

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	normal operation, the limit shall be raised by 10K.
Motors	Coupled type DC operated motors shall be suitable for the installation on the indoor type RMU's on the isolator function and to be flitted in/from the LV compartment side. There shall be provision to fit the motor on Circuit breaker also
Technical Details of motors	
Operating Voltage	24 V DC
Max. power rating	240 Watts
Max current drawn	9 Amp (±10%)
Operating time	4-8 seconds
Power Supply	There shall be provision of 230 V AC (maximum 5 Amp current) & 24 V DC

Types of Ring Main Units shall be as under:

i) 1 Way Extension Type (For Outdoor application):

1 No. 630A Load Break Switch along with one incoming and one outgoing cable provision.

ii) 2 Way Extension Type (For Indoor and Outdoor application):

2 Nos. 630A Incomer Load Break Switches along with VPIS (Voltage Presence Indication System) + 1 No. Electronic Fault Passage Indicator per RMU + Extension provision on both sides of RMU for adding 630A circuit Breaker.

iii) 3 Way Extension Type (For Indoor and Outdoor application):

2 Nos. 630A Incomer Load Break Switches + 1 No. 630A Local Feeder/transformer Control Vacuum Circuit Breaker with self powered O/C + E/F relays+1 No. Electronic Fault Passage Indicator per RMU + Extension provision on both sides of RMU for adding 630A circuit Breaker.

iv) 4 Way Extension Type (For Indoor and Outdoor application):

2 Nos. 630A Incomer Load Break Switches + 2 Nos. 630A Feeder Vacuum Circuit Breakers with self powered O/C + E/F relays + 1 No. Electronic Fault Passage Indicator per RMU + Extension provision on both sides of RMU for adding 630A circuit Breaker.

VPI to be provided with all type of RMU of the above combination mentioned.

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5.0 General construction for RMU

5.1.1 The switchgear and bus bar shall be contained in a stainless steel tank filled with SF6 gas and the outer body shall be made of minimum CRCA of 3mm or GI high tensile steel 2mm thick with thick gland plates of 3mm as per IS 513. The sheet steel shall be shot blasted & spray galvanized with minimum thickness of 30 micron and subsequently power coated. The tank shall have SS sheet of 3mm thickness and meet the "sealed pressure system" criteria in accordance with the IEC 62271-200. This is a system for which no handling / refilling of gas shall be required throughout the expected operating life, i.e. 30 years. Sealed pressure systems are completely assembled, filled and tested in the factory. The maximum leakage rate of SF6 gas shall be lower than 0.1 % of the total initial mass of SF6 gas per annum. The filling pressure for the switchgear shall be just above the atmospheric pressure so as to reduce the tendency to leak. SF6 gas used for the filling of the RMU shall be in accordance with IEC 376. It is mandatory to fit an absorption material in the tank to absorb the moisture from the SF6 gas and to regenerate the SF6 gas following arc interruption. The degree of protection for RMU tank (Indoor/Outdoor) shall be IP 67. The mimic board shall be provided with IP2X degree of protection for Indoor RMUs and protection for Outdoor RMUs shall be minimum IP 54 and IP41 (Main door Open).

The RMU shall be suitable for mounting on plinth with provision for cabling through gland plate in the base and trench below. The RMU shall be designed so that the position of the different devices is visible to the operator on the front and operations are also visible. The RMU shall be identified by an appropriately sized label which clearly indicates the functional units and their electrical characteristics. The RMU shall be designed to be tamper proof so as to prevent access to all live parts during operation without the use of tools.

- 5.1.2 The RMU shall be complete with all connection and tinned copper bus bar with continuous current carrying capacity of 630A. The bus bar shall be fully encapsulated by SF6 gas inside the steel tank. There shall be continuity between the metallic parts of the RMU and cables so that there is no electric field pattern in the surrounding air, thereby ensuring the safety of people. The earth bus bar shall be preferably enclosed in an enclosure to prevent theft/tampering.
- 5.1.3 All parts of main circuit to which access is required or provided shall be capable of being earthed prior to becoming accessible. This does not apply to removable parts which become accessible after being separated from the switchgear and control gear. The cables shall be earthed by an earth switch with short-circuit making capacity in compliance with IEC 62271-102. LBS /CB shall not be closed in case Earth Switch is closed. The earth switch shall be fitted with its own operating mechanism and manual closing shall be driven by a fast-acting mechanism, independent of operator action. Mechanical interlocking systems shall prevent access to the operating shaft to avoid all operator errors such as closing the earth switch when the Load break switch is closed or when cable is charged.
- 5.1.4 Any accidental over pressure inside the sealed chamber shall be limited by the opening of a pressure limiting device provided in the rear part of the tank. Gas shall be released to the rear of the RMU away from the operator. Bidder shall provide type test report to prove compliance to the 'Internal fault IAC- A & B as per IEC 62271-200. An anti-reflex mechanism on the operating lever shall prevent any attempts to reopen immediately after closing of the switch or earth switch. All manual operations shall be carried out on the front of the RMU. In case of SF6 gas leakage from gas tank or any kind of repair should be done at site instead of replacement of complete RMU free of cost within guarantee period.

5.1.5 Incomer Load Break Switches (LBS)

Load break switches shall be maintenance-free. The position of the power contacts and earthing contacts shall be clearly visible on the front of the RMU. The position indicator shall provide positive contact indication in accordance with IEC 60265-1. In addition, manufacturer shall prove reliability of indication in accordance with the standard. The switches shall be of the "increased operating frequency" in accordance with IEC 60265-1. They shall have at least 3 positions, open-disconnected, closed, and earthed and shall be constructed in such a way that natural interlocking prevents unauthorized operations. Earthing of the cable shall be either through a three position switch of a separate snap action type or Earth Switch having fault making capacity.

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The switches shall be fully mounted and inspected in the factory. Manual opening and closing will be driven by a fast-acting mechanism, independent of operator action. Each switch shall be fitted with an electrical operating mechanism in an especially reserved location, such that the mechanism is compatible for remote/SCADA operation, without any modification of the operating mechanism and without de-energizing the RMU. The load break switch and earthing switch operating mechanism shall have mechanical endurance of at least 1000 operations.BA should provide Load break switch operation counter. The isolator should have min. 4 NO+ 4 NC auxiliary contacts.

The load break switch shall be compatible for remote operation without any modification of the operating mechanism and without de-energizing the RMU, The LBS shall be fitted with an electrical operating mechanism and can remotely open-disconnected, closed and earthed from a reserved location.

5.1.6 Circuit Breaker For Transformer / Local Feeder Control

The circuit breakers shall be of the maintenance free. The position of the power and earthing contacts shall be clearly visible on the front of the RMU. The circuit breakers shall have at least 2 positions: Open-disconnected and closed and shall be constructed in such a way that natural interlocks prevent all unauthorized operations. They shall be fully mounted and inspected in the factory. Breaker operation counter should be provided. Breaker contact resistance should be <=50 micro-ohms. The various circuit contact resistance should comply with provisions in IEC 62271-200.

The breaker should have min. 4 NO+ 4 NC auxiliary contacts.

An operating mechanism can be used to manually close the circuit breaker and charge the mechanism in a single movement. It shall be fitted with a local system for manual tripping by an integrated push button. There will be no automatic re-closing. The operating mechanism shall be compatible for remote/SCADA operation. The circuit breaker shall be associated with an integrated protection unit that will operate without any auxiliary power supply and shall include three toroid transformers incorporated in the transformer tee-off bushings, an electronic self powered relay, a low energy release, and a "fast-on" test receptacle for protection testing (with or without CB tripping).

The protection system shall ensure circuit breaker tripping as of a minimum operating current which is the rated current of the underground network to be protected. The CT settings shall be adjustable between 200- 400/1 Amp for feeder and transformer .The pickup current of relay should be adjustable as per relay specification.as per the requirement at site. Protection core CT complete details should be furnished as (CT Burden is 5 VA for Feeder and 2.5 VA for Transformer, Class - 5P20).

The circuit breaker shall be provided with Phase protection of Definite time/ IDMT element for overcurrent PSM-0.2 TMS-0.01 having standard characteristics of Standard Inverse, Very inverse, Extremely Inverse as per IEC 60255-3 standard. The Earth Fault Protection shall be provided of Definite time/ IDMT element PSM-0.05 TMS-0.01 having standard characteristics of Standard Inverse, Very inverse, Extremely Inverse as per IEC 60255-3 standard. The breaker shall have the provision of flag Relay for indication to Trip on Fault. High set (DT) for overcurrent and earth fault-min current setting-0.5 In, minimum Time Delay-20 millisecond. The relays shall be self-powered suitable numerical relay with necessary elements or any other relay as per the Purchaser's approval.

There shall be provision for testing of cable without opening the front door by suitable arrangements. In case cables are to be tested with front door open, doors shall have interlocks such that doors can be opened only with earth switch in closed position & a cable test rod shall be provided which can be fixed on the terminations to facilitate testing. Termination boots as approved by the Purchaser's should have a proper opening to facilitate the testing. The opening shall be covered by means of removable protection cap.

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In case of front door opened, it shall not be possible to operate the load break switch / isolator or breaker. All panel covers shall be provided with anti vandal screw bolts so that opening of panel covers is only possible with special tools, which shall be provided by the Bidder. This is required to prevent pilferage. The cable cover door shall be pad lockable and shall be Tamper and Arc proof. There shall be provision of hinged doors in the RMU. The circuit breaker and earth switch shall be lockable in the open or closed positions by 1 to 3 padlocks. Breaker shall have mechanical endurance of at least 2000 operations.

The circuit breaker shall be compatible for remote operation and can close (ON) and open (OFF) by remote operation.

5.1.7 **Bushings and Cable terminations:**

Bushing should be of Epoxy resin .Each cable compartment shall be provided with three bushings of adequate sizes to terminate the incoming and outgoing cables along with a terminal block (TB) located at convenient accessible location so as to wire all inputs & outputs (IOs) up to the terminal block (TB). The bushings shall be conveniently located for proper bend so as to allow easy working and termination of cables. The cable termination shall be done with Heat shrinkable /Push ON termination method so that adequate clearances are maintained between phases & cable shall be held by HDPE (fire retardant) cleat. The Sizes of cable should be 11kV 3 Core 400 sq.mm and 11kV 1CX630 sq.mm (optional) for termination. All the cable secondary wiring should be rooted through marshaling box separately for relay, CT etc.BA should provide bimetallic washer for tightening of cable.

Cable boot for cable termination should be as per IS 13573-2.

5.1.8 Earthing:

The RMU outdoor metal clad, switchgear, load Break Isolators, Distribution Transformer, R.S. Joists, M.S. Channels/M.S. angles etc, shall be equipped with an earth bus securely fixed along the base of the RMU. The size of copper earth busbar should be Min.105 sq.mm or GI Strip earth busbar of 75X12 sq.mm inside the enclosure to withstand short time current carrying capacity. Provision shall be made on end of RMU for connecting the earth bus to the earth grid by erecting suitable 2 earth pipes of 50mm dia. M.S. rod of 3 meter in Pits. Both the earth pipes are also to be connected in a grid formation. Necessary terminal clamps and connectors shall be included in the scope of supply.

5.1.9 Voltage indicator lamps and phase comparators:

Each function shall be equipped with a fixed type voltage indicator box on the front to indicate whether or not there is voltage in the cables. The capacitive dividers will supply low voltage power to the lamps. Three inlets can be used to check the synchronization of phases. These devices shall be in compliance with IEC 61958 standard.

5.1.10 Front Cover

The front cover shall provide a clear mimic diagram that indicates the different functions. The position indicators shall give a true reflection of the position of the main contacts. They shall be clearly visible to the operator. The lever operating direction shall be clearly indicated in the mimic diagram. The bidder shall provide a marking plate showing RMU's main electrical characteristics.

5.1.11 Fault Passage Indicators

Fault Passage Indicators shall be installed on the Ring Main Unit. These devices shall be, electronic devices with their own energy source and connected to Single 3 phase Split Core CTs (CBCT). These shall be provided with bright LED s / flag Indicators, which shall be clearly visible in the day time. These shall have the following resetting facilities:

→ Manual reset

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- → Resetting after a set time duration
- → Electrically reset from remote with at least 2-spare potential free contacts.
- → Resetting on restoration of LV

The unit shall have Short Circuit and Earth fault adjustable to different settings with separate Current transformer. They shall be fully field-programmable and shall have at least 16 settings for Earth Fault + 4 settings for Phase-Phase(O/C setting 200-1000 A and E/F setting 10-150 A). It shall be possible to Test these indicators at site thru "Test" push button. The Fault Passage Indicators shall also be provided with a SCADA output contact. These shall confirm to the following standards:

IEC 60068-2-6, IEC 60068-2-9 : Environmental testing – For Vibration, solar radiations

IEC 60950 : Information Technology equipment - Safety

IEC 1000-2 : Electromagnetic compatibility for low-frequency conducted

disturbances and signaling in public low power supply systems

IEC 1000-4 : EMC - Testing & Measurement

IEC 1000-6 : EMC- Immunity for Residential, Commercial and light industrial

environments

5.1.12 Remote Control of the RMU:

Remote operation of the RMU line switches shall be possible using motors fitted to the operating mechanism for both line switch and circuit-breaker functions. All the necessary accessories shall be supplied separately to stores.

Bidder shall provide detailed instructions for installation to the control mechanism. Auxiliary contacts for remote indication of switch status are also required.

The fitting of the motors to the mechanism must not in any way impede or interfere with the manual operation of the switches. An auxiliary contact to prevent motorized operation of the mechanism while the operating handle is inserted into the operating point shall also be provided.

Preferred Communication protocol for FRTU shall IEC-60870-5-104.

Signal requirement for field RTU (which shall be mounted near RMU) is attached (refer Annexure-1). Bidder shall quote the cost of field RTU (FRTU) separately with all technical details for acquisition of the signal as described in Annexure-1.

5.1.13 **Paint**

All paint shall be applied on clean dry surfaces under suitable atmospheric conditions by seven tank process and powder coating. The overall paint thickness shall not be less than 150 microns. The paint shall not scale off or crinkle or be removed by abrasion during normal handling. The enclosure of the RMU shall be painted with shade Dark Gray, i.e., BS381C or RAL 7032. Sufficient quantity of touch-up paint shall be furnished for application at site.

6.0 NAME PLATE & MARKING: -

All the components and operating devices of the RMU shall be provided with durable and legible nameplates containing all technical parameters. Name plates shall be suitably embossed with" PO no. with date", "PROPERTY OF TPCODL, Odisha' & "CODE NUMBER" along with the following information. A Danger plate of appropriate size shall also be provided on the enclosure.

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- a) Manufacturer's Name
- b) Month and year of supply
- c) PO Number
- d) Rated Voltage
- e) System Frequency
- f) Rated Short time withstand current for 1 sec
- g) Rated Impulse withstand Voltage
- h) Degree of Protection
- i) Type Designation or Serial no.
- j) Year of manufacture
- k) Applicable Rated values
- I) Mass of unit
- m) SF6 gas filling pressure

7.0 TESTS FOR RMU

All the Routine and acceptance tests shall be carried out in accordance with the relevant IS/IEC standards. All routine/acceptance tests shall be witnessed by the purchaser/his authorized representative. All the components within the RMU enclosure shall have been tested for Routine/acceptance and Type tests as per the relevant standards. All Type tests as per latest IS / IEC shall have been carried out on the RMU as a whole as per relevant IS/IEC. Following tests shall be necessarily conducted on the equipment and its components as specified in IEC 62271-200:

TYPE TESTS

- 1. Lightening Impulse test
- 2. Power Frequency Voltage Test
- 3. Temperature Rise Test
- 4. Measurement of Circuit Resistance
- 5. Rated Short Time and Peak Current Withstand test for main and earth circuit.
- 6. Breaking and Making Capacity Test for Breaker & Isolating Switches.
- 7. Operational & Interlock Performance Test
- 8. Internal Arc Withstand Test.
- 9. Degree of Protection (IP Code verification tests)
- 10. Mechanical Endurance Tests for Isolator and Breaker.
- 11. Pressure withstand test & Leakage test on SF-6 Gas chamber
- 12 Dimensional and Visual Checks.

ROUTINE TESTS

Following routine tests are to be done on 100% of the lot quantity

- 1. Power Frequency Withstand Test.
- 2. Dimensional & Visual Checks
- 3. Operational & Interlock Tests of breaker & isolator switches
- 4. Measurement of Circuit Resistance
- 5. Sf-6 chamber pressure withstands/leakage test.
- 6. HV withstand test across isolator distance.
- 7. HV withstand test of control and auxiliary circuits.
- 8. Voltage Indication Tests.
- 9. Breaker Contact Resistance Test
- 10. Test to check the total time taken to clear the faults (relay pick up+ Trip coil pick up + breaker trip) for instantaneous & time delay modes under various settings of relay and trip coil thru primary current injection.
- 11. IR Value.

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Below routine test has to be provided on cable Boot for cable termination:

- a) Visual inspection of the final finished product.
- b) Intactness with Bushing.
- c) Insulation Test.
- d) AC HV test.

ACCEPTANCE TESTS

All the tests specified under Routine Test Clause above shall be carried out as acceptance test on random samples as per sampling plan under IEC/IS for each lot.

Heat Run Test shall be carried out on one random sample/configuration/tender quantity as acceptance test.

Note: Bidder should have all the requisite testing equipment's to carry out routine and acceptance test mentioned above including:

- a. Facility for primary current injection up to 1000amp.
- b. Facility to check total trip timing of breaker along with breaker main contacts through primary current injection.

Pre-commissioning test to be conducted on each RMU before installation and commissioning are as under-

- 1. IR value.
- 2. HV test (AC).
- 3. Primary injection with timer of breaker including relay and CT circuit.
- 4. Contact resistance.

8.0 TYPE TEST CERTIFICATE

The Bidder shall furnish the type test certificates of the 11KV RMU for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI/ERDA or any other International Laboratory as per the relevant standards. Type tests shall have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPCODL, Odisha.

9.0 PRE-DISPATCH INSPECTION

Equipment shall be subject to inspection by a duly authorized representative of the TPCODL, Odisha. 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 is liable to rejection. Supplier shall grant free access to the places of manufacture to TPCODL's representatives at all times when the work is in progress. Inspection by the TPCODL, Odisha or it's 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 TPCODL, Odisha. Following documents shall be sent along with material

- a) Test reports
- b) MDCC issued by TPCODL, Odisha
- c) Invoice in duplicate
- d) Packing list
- e) Drawings & catalogue
- f) Guarantee / Warrantee card
- g) Delivery Challen

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h) Other Documents (as applicable).

10.0 INSPECTION AFTER RECEIPT AT STORE

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

11.0 GUARANTEE

Bidder shall stand guarantee towards design, materials, workmanship & quality of process / manufacturing of items under this contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by the Purchaser up to a period of at least 48 months from the date of commissioning or 60 months from the date of last supplies made under the contract whichever is later, Bidder shall be liable to undertake to replace/rectify such defects at its own costs, within mutually agreed time frame, and to the entire satisfaction of 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 GP failure, BA shall report at site within 48 hours from intimation and arrange for rectification of fault within a mutually agreed time. In case rectification at site is not possible then alternative arrangement (replacement) to be made by BA within 15 days of intimation of failure.

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 equipment covered by this specification shall be prepared for rail/road transport (local equipment) and be packed in such a manner as to protect it from damage in transit. The packing should be in such manner that during storage the RMU and its components should not be damaged.

13.0 TENDER SAMPLE

Not applicable.

14.0 QUALITY CONTROL

The bidder shall submit with the offer, 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 after finishing, bought out items and fully assembled component and equipment including drives. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. The Purchaser's or its nominated representative engineer shall have free access to the manufacturer/sub-supplier's works to carry out inspections.

15.0 TESTING FACILITIES

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

16.0 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 shall 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.

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17.0 Spares, Accessories & Special Tools / Gauges

Bidder shall provide a list of recommended spares with quantity and unit prices for 5 years of operation after commissioning. The Purchaser may order all or any of the spare parts listed at the time of contract award and the spare parts so ordered shall be supplied as part of the definite works. The Purchaser may order additional spares at any time during the contract period at the rates stated in the Contract Document.

The bidder shall provide one no. SF6 gas leak indicator and one no. phase comparator/25 numbers of RMU. Bidder shall also provide 1 nos. FPI and VPIS per 10 nos. of RMU at no additional cost.Auto changeover inbuilt requirement utilization VPI(Voltage Passage indicator) or through separate core of PT proposed on each breaker along with associated circuitry.A list of complete set of special tools and gauges required for erection & maintenance and installation procedure shall be submitted.

Bidder shall give an assurance that spare parts and consumable items will continue to be available through the life of the equipment which shall be 25 years minimum. However, the Purchaser shall give a minimum of 12 months notice in the event that the Bidder or any sub-vendor plans to discontinue manufacture of any component used in this equipment.

Any spare apparatus, parts or tools shall be subject to the same specification, tests and conditions as similar material supplied under the Contract. They shall be strictly interchangeable and suitable for use in place of the corresponding parts supplied with the plant and must be suitably marked and numbered for identification.

Bidder has to provide below spare with one lot of RMU

SL. No.	Name of Spare Parts	Required spares with above 100 No. of RMU	Required spares with above 30 No. up to 100 No. of RMU	Required spares up to 30 No. of RMU
1	Breaker Mechanism	4 No's	3 No's	2 No's
2	Isolator Mechanism	4 No's	3 No's	2 No's
3	Trip Coil	5 No's	3 No's	2 No's
4	Relay	5 No's	3 No's	2 No's
5	CT (All types)	3 Sets (1 Set = 3 Nos.)	2 Set	1 Set
6	Bolt (For cable connection)	5 Sets (1 Set = 3 Nos.)	3 Set	2 Set
7	"L" Key (All Size)	2 Sets	1 Set	1 Set
8	Operating Handle	1 No.	1 No.	1 No.
9	Cable Bushing (If replaceable; Like ABB)	15 (5 Set)	9 (3 Set)	NA
10	VPIs	10 No's	5	NA
11	FPI	10 No's	5	NA
12	Push Button (ON & OFF Both)	10 (5 On & 5 Off)	6	NA
13	Manometer	5 No's	3	NA
14	Washer (S.S.)	20 No's	15	NA
15	Anti vandal Screw (All Size)	20 No's	15	NA
16	Cable Boot	5 sets	3 Sets	NA

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18.0 DRAWINGS & DOCUMENTS

Following drawings and documents shall be prepared based on TPCODL, Odisha 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 RMU
- d) Power flow diagram
- e) Foundation plan
- f) Bill of material
- g) Experience List
- h) Type test certificates

Drawings / documents to be submitted after the award of the contract are as under:

SI. No.	Description	For Approval	For Review/Information	Final Submission
1	General Technical Particulars	V		V
2	General Arrangement drawings	√		V
3	Schematic Diagram	√		V
4	Bill of materials	√		V
5	Foundation Plan & loading details		V	V
6	Installation Instructions		V	V
7	Instruction for Use		V	V
8	Transport/ Shipping dimension drawing		V	V
9	QA & QC Plan	V	√	V
10	Test Certificates	V	V	V

All the documents & drawings shall be in English language.

After the receipt of the order, the successful bidder will be required to furnish five copies of all relevant drawings for NDPL approval.

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 GENERAL TECHNICAL PARTICULARS FOR RMU

S.N.	Description	As specified b	by NDPL	As furnishe d by Bidder
1.0	RMU Category	1Way 2Way 3Way 4Way	– Extensible – Extensible - Extensible - Extensible	
2.0	RMU application	1Way	Extensible	
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		2Way – Extensible	
		3Way - Extensible	
		4Way - Extensible	
3.0	Dielectric medium	SF6	
4.0	Interrupting medium	Vacuum	
5.0	System Frequency	50 Hz	
6.0	Rated Voltage	12 KV	
7.0	Service Voltage	11 KV	
8.0	Rated current -Line Switches	630 A	
9.0	Rated Current-CB	630 A for all type	
10.0	Rated Short time current withstand (3 sec)	21 KA	
11.0	Rated Short time Making capacity	50 KA	
12.0	Rated cable charging interrupting current of incomer load break switch	10 A	
13.0	Rated load interrupting line current	630 A	
14.0	Rated cable charging breaking current of breaker	25 A	
15.0	No. of operations at rated short circuit current on line switches earthing switches and CB	5 Close	
16.0	Opening time of breaker (max.)	2.5 cycle	
17.0	Closing time of breaker (max.)	3 cycle	
18.0	Breaker Duty Cycle	O – 3min - CO - 3min - CO	
19.0	 Mechanical endurance for Isolator & Earth Switch 	Min 1000 Operations	
	ii. Mechanical endurance for Circuit Breaker	Min 2000 Operations	
20.0	Electrical operations of Isolator & E/Switch at rated current	To be provided by bidder	
21.0	Temp rise above ambient	50 Deg C.	
22.0	Min Gas pressure	0.05 BarG	
23.0	SF6 Gas pressure indicator with indicating bars/scale to measure the actual gas pressure (SCADA compatible)	To be provided by bidder	
24.0	SF6 Gas leakage detector	1 per 25 RMUs. Subjected to minimum one number.	
25.0	Guaranteed SF6 leakage per annum	Less than 0.1%.	

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26.0	Degree of protection	on	IP 67 for the tank and IP2X for mimic board and IP54 for Out RMU metal parts shall be grathickness high tensile steel who blasted, spray galvanized thickness of 30 micron ar powder coated. The overall paid be not less than 70 microns.	door RMUs. The reater than 3mm hich must be shot with minimum hd subsequently
27.0	Internal Arc test		20kA for 1 Sec.	
28.0	Lightning Impulse	withstand Voltage	75 KVp	
29.0	Power Frequency	withstand voltage	28 KVrms.	
30.0	SF6 Tank design		Hermetically/robotically sea stainless steel enclosure with a pressure system by Laser we refilling of gas is required for 3 work at site. Complete tamperproof to prevent access gaskets shall be used. No provided	SF6 Gas. Sealed elding so that no 30 years. No gas body shall be to live parts. No
31.0	Earth bus bars		In enclosure to prevent tamperi	ng.
32.0	Material & size		To be provided by the bidder	
33.0	earthed with ear making capacity Moving contacts of be visible in contacts	CCT Cables shall be rth switch with S/C as per IEC 129. If earthing switch shall closed position thrues AND closing shall be in Isolator is open	To be provided by bidder	
34.0	SF6 type with lead have at least 3 post earth with natural	eak switch: Shall be st maintenance. Shall sitions, Open, Close & I interlocks. Fitting of Il be possible & shall nterlock.	To be provided by bidder	
35.0	Circuit Breakers: with minimum ma have at least 2 p Close, Manual o		To be provided by bidder	
36.0			Self- powered relay wit characteristic with minimum PS+E/F IDMT characteristic with 0.05,TMS-0.01 Hi-set setting for O/C + E/F n and delay 20 ms.	SM-0.2,TMS-0.01 minimum PSM-
37.0	37.0 Make of Relay		Suitable numerical relay elements or any other as approval	with necessary per Purchaser's
38.0	Flag indication on	CB for Trip on fault	To be provided by bidder	
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39.0	Testing of Cable- without opening the doors. If doors are opened then earth switch shall be in closed position and cable test rod shall be provided which can be fixed on terminations for testing purpose AND if doors are opened it shall not be possible to operate, Isolator, E/Switch or CB	To be confirmed. If separate test bushing are provided, it shall be covered with suitable antitheft covers with anti vandal screws	
40.0	Protection against theft	Design of RMU shall be tamper & arc proof. Anti vandal screws shall be provided. Cable covers shall be pad lockable. All live parts / test bushings etc. shall be covered with antitheft covers.	
41.0	Doors	Hinged doors shall be provided. The hinges for the doors need to be riveted and shall not have any access from outside. Bolted hinges shall not be acceptable.	
42.0	Voltage indicator box shall be fixed type-This device shall be in compliance with IEC 61958 standard	Capacitive dividers type which will supply low voltage to power the lamps AND 3 inlets can be used to check phase sequence.	
43.0	Phase comparators-	1 per RMU	
44.0	Cable clamps	HDPE (Fire Retardant)	
45.0	Cable termination		
46.0	Туре	Heat/ Cold shrinkable	
47.0	Size	Suitable for cable sizes 11kV 3CX400 sq.mm and 11kV 1CX630 sq.mm cable (optional)	
48.0	Height	Minimum 1200mm Above GL	
49.0	Earth fault passage indicator	One per RMU with make as a part of RMU	
50.0	Operating handle	To be provided by bidder as a part of RMU	
51.0	MIMIC Diagram on Front of panel	To be provided by bidder	
52.0	Bus bar Material	Copper	
53.0	Cross Section	As specified by bidder	
54.0	Opening & Closing times (Max)	To be provided by bidder	
55.0	Current Transformer	Shall be epoxy resin and are mounted around the cable outside SF6 gas compartment. The CTs around the cables shall be supported on the sheet steel bracket base sized for CTs. CTs shall not be kept hanging or put on base frame directly. The CT settings shall be adjustable between 200-400/1 Amp for feeder and transformer. CT Burden is 5 VA for Feeder and 2.5 VA for Transformer, Class - 5P20	

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56.0	SCADA Compatibility-	
00.0	Remote operation of motor fitted with operating mechanism of isolators.	As per motor details furnished
	 Remote operation of motor fitted with operating mechanism of circuit breakers (as per future requirements) 	
	Guarantee- From date of taking over by NDPL	48 months from the date of commissioning or 60 months from the date of last supplies made under the contract which ever is later
	Dimension (LxWxH) (mm x mm x mm)	To be provided by bidder
59.0 T	Total weight	To be provided by bidder
60.0 F	Paint	Dark Gray as per BS381C or RAL 7032
61.0 T	Type test of product	To be provided by bidder as per specification
62.0 A	Availability of spares	Assurance by bidder for 25 years, list of spares as mentioned in specification to be provide along with RMU lot.
63.0 F	FPI & VPIS	Bidder shall provide 1 nos. each/10 RMUs.
64.0 E	Breaker operation counter	Should provide
65.0 L	LBS & Earth Switch operation counter	Should provide
66.0 N	Moisture absorption material	Bidder should provide the detail of the moisture absorption material.
67.0 F	RMU Cable Boot	
а т	Terminal protector	Insulating Boots
b s	System voltage	12 kV
C A	AC High voltage	28Kv For 1 min
d II	Impulse withstand voltage	75kV
e E	Bushing Diameter	Conical bushing as per EN50181, Type C
f E	Bushing Types	Ероху
g C	Cable cross section of cable	150-300 sq.mm
h [Dimensions	45 mm Bushing Entry
i N	Material of the component	ERDM rubber
j T	Thickness of the material	4 mm (min)
k T	Tensile Strength	10 N/mm²
Ι	Ultimate elongation	200% min
m [Dielectric strength	20 KV/mm
n (Operating Temperature	(-5 to 130) degree C
0 V	Water absorption	0.5% (Max.)
p L	Leakage Current	0.05 mA
9 5	Shelf life	Min. 3 years.

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68	Technical Details of motors	
а	Operating Voltage	24 V DC
b	Max. power rating	240 Watts
С	Max current drawn	9 Amp (±10%)
d	Operating time	4-8 seconds
е	Power Supply	There shall be provision of 230 V AC (maximum 5 Amp current) & 24 V DC

20.0

SCHEDULE OF DEVIATIONS

(TO BE ENCLOSED WITH TECHNICAL BID)

All deviations from this specification shall be set out by the Bidders, clause by Clause in this schedule. Unless specifically mentioned in this Schedule, the tender shall be deemed to confirm the purchaser's specifications:

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

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

Seal of the Company:

Designation Signature

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<u>ANNEXURE - 1</u> SIGNAL LIST FOR AUTOMATION

Description		Analog Inputs(AI)					Status(DI)	
Туре	Amp. Loading-R ph	Amp. Loading-Y ph	Amp. Loading-B ph	Phase Voltage	Power factor	Switch close	Switch Open	Reset Element
RMU Switch	0	0	0	0	0	1	1	
Breakers *	1	1	1	1	0	0	0	
FPI							1	1
Pressure Gauge (manometer)							1	

FRTU SIGNAL LIST

Description	Analog Inputs (AI)					
Type	Amp. Loading-R ph	Amp. Loading-Yph	Amp. Loading-B ph	Phase Voltage	Power factor	
Switch						
*	0	0	0	0	0	
Breakers						
*	1	1	1	1	1	
Fault passage						
indicator						
*	0	0	0	0	0	

Note: 0 indicate functionality not req. for that element, 1 indicate functionality required for that element

Additional IOs

<u>rtaaitional 100</u>
RMU switch Control Command
Earth Sw. 1 Status Input
Earth Sw. 2 Status Input
FPI Reset
FRTU Local/Remote Position
FRTU Door Open
FRTU Battery Charger Faulty
FRTU Battery Faulty
FRTU SwitchGear Supply Off
FRTU Aux Supply Off
FRTU Fault
Relay operation
CB OFF status
CB ON status
CB ON/OFF Command

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^{*} Denotes the nos of switches/ Breaker s in RMU based on the type of RMU (3way, 4way, 5way & 7way).

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ANNEXURES- 1

1.0	SCOPE	This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading supply at stores of self-powered relay for RMU feeder protection with all accessories and necessary training for trouble free & efficient performance.				
		It is not the intent to specify completely herein all the details of tech design and construction of material. However, the material shall conform in all respects to high standards of engineering, design and workmanship and shall be capable of performing in continuous commercial operation in manner acceptable to the TPCODL, Odisha, who will interpret the meanings of drawings and specification and shall have the power to reject any work or material which, in his judgment is not in accordance				
		their effective and	red material shall be complete with all components necessary for trouble free operation. Such components shall be deemed to be f Bidder's supply irrespective of whether those are specifically			
		brought out in this s	specification and/or the commercial order or not.			
2.0	APPLICABLE STANDARDS	manufactured and te	red by this specification shall unless otherwise stated, be designed, sted in accordance with latest editions of the following Standards /IEC			
			the regulations of local statutory authorities.			
		Standards	Title			
		IEC 60255-1	Measuring relays and protection equipment – Part 1: Common requirements.			
		IEC 61000 Electromagnetic compatibility (EMC) - Part 4-18: Testir measurement techniques - Damped oscillatory wave immun				
		IEC 60068-2-1	Environmental testing- Cold Test			
		IEC 60068-2-2	Electronic Equipment & Product Standards – For Dry Heat			
		IEC 60068-2-30 Electronic Equipment & Product Standards - Damp hear				
		IEC 60529	Degree of Protection.			
		IEC 60255-26 Measuring relays and protection equipment- Electromagnetic compatibility requirements.				
		IEC 60255-27	Measuring relays and protection equipment - Product safety requirements			
		Note- In case of any conflict on any technical particular in the specification, the stricter				
		requirement mentioned in the relevant standard shall be valid.				
3.0	CLIMATIC	The service conditions shall be as follows:				
	CONDITIONS AT	1. Maximum altitude above sea level 1,000m				
	INSTALLATION	2. Maximum ambient air temperature 50°C3. Maximum daily average ambient air temperature 35°C				
	INGIALLATION	4. Minimum ambient air temperature 35°C				
		5. Maximum relative humidity 95%				
			thunderstorm days per annum (isokeraunic level) 70			
		7. Average number of	rainy days per annum 120			
		8. Average annual rain	fall 150cm			
			tensity in horizontal direction - equivalent to seismic acceleration of 0.3g			
			intensity in vertical direction - equivalent to seismic acceleration of 0.15g (g			
		being acceleration due	to gravity)			

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		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	SNo	Parameter Description	Requirement	As offered by Bidder	
	REQUIREMENTS	1	Offered Model no. or type of Relay for RMU along with Make	Bidder to submit followings, a. Make b. Model no./Type	., 2.0001	
		2	Application	Product shall be suitable for application on RMU for protection and reclosing features.		
		3	Power	a. Self- powered for normal functioning without external auxiliary power b. Should also work on auxiliary power supply.		
		4	Auxiliary Supply voltage rating	Universal suitable for 12 V To 300 V external power supply AC and DC		
		5	Power Frequency	50Hz		
		6	IP 54 Tested enclosure	IP54		
		7	Sensing elements	4 sensing element 3 O/C and 1 E/F		
		8	Re-chargeable internal battery	Battery should be rechargeable. Bidder to mention offered size and rating.		
		9	Relay Burdon	<2.5VA (Bidder to mentioned the offered models Burdon)		
		10	Conformal coating	The relay PCB should have conformal coating		
5.0	GENERAL CONSTRUCTION	2. Th cu 3. Ro 4. Th cc 5. At th da 6. Do 7. Fa	Self-power relay designed to meet demand of Ring Main Unit (RMU) type switchgear where auxiliary voltage supplies not required. The relay takes power from CT's and continuously monitors all 3 phases and earth current, through CT connection. Relay shall have add-on optional function of remote trip through binary input with selection of auxiliary power version. The relay is buffered by a battery for feeding the LCD display and SCADA communication. After tripping operation relay should maintain fault indication on LCD display. During his time, the relay uses power through internal rechargeable battery. Reading of fault data and setting of relay to be done on battery. During normal condition battery should be continuously charged on CT current. Failure of the battery has no effect on the protection function of the relay. The relay should be used for outdoor purposes and should be IP54 protected.			

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5.1	RELAY PROTECTION	5.1.1	The relay should have inverse time over current and earth fault function along with instantaneous protection for both over current and earth faults.
		5.1.2	The relay should have 4 sensing element 3 O/C and 1 E/F.
		5.1.3	The tripping current Setting Range with pick up current: 0.1 up to 32 x In in steps 0.001. These settings should be available on display.
		5.1.4	Separate curve selection for Phase and Earth Fault required.
		5.1.5	The relay should have following range of curves: Separate operating curve can be programmed for phase and EF.
			DEFT/ EINV/NINV3.0/NINV1.3/LINV,HV FUSE, RI.
		5.1.6	The unit should have - Time Multiplier Setting (TMS) from x0.01 to x1.0 in steps of x0.01 (separate for phase and EF) for IDMT delay multiplication.
		5.1.7	Operate time delay (DMT) of relay should be: 0.0364 s in steps of 0.01. Operational Accuracy of Relay: \pm 2.0% of set value or \pm 30 ms.
		5.1.8	The high speed low per CPU continuously monitors all four current inputs and compares with IDMT as well as instantaneous setting. If anyone current is above instantaneous setting, the relay should provide immediate trip command bypassing IDMT delay.
		5.1.9	If input current is less then instantaneous setting but more than IDMT setting, CPU should calculate IDMT delay as per selected IDMT characteristic, multiply it with TMS setting and issue trip command if fault is persist even after this time delay.
		5.1.10	If the relay is live, Tripping time should not beyond the stipulated value as mentioned above (even in case of battery discharge, no auxiliary supply).
5.2	ADDITIONAL PROTECTION FEATURES	5.4.1	Other than Over Current, Earth Fault protection, relay should have cold Load protection, thermal Overload, Inrush Blocking Protection (second and fifth harmonic), broken conductor, negative phase sequence (46) and Auto reclosing function.
		5.4.2	Relay should be universal type with all protection cards as mentioned above.
		5.4.3	High-set stage should have selectable definite time / Instantaneous element.
		5.4.4	The relay should have fast power up time which shall ensure fast operation during switch on to fault. Bidder to mention power up time of offered relay.
		5.4.5	Relay need to be operated from protection function and any other relay function (like Remote operation, DI, Remote Trip etc.)
		5.4.6	Fault data, setting, Disturbance Recorder –DR with oscilloscope waveforms should be stored in relay memory in any condition (in case of battery discharge, no auxiliary supply) and the same can be downloaded through Laptop. Breaker trip test facility will be provided in the Relay.
		5.4.7	DR should capture breaker opening time calculated after trip command given by relay and current zero. The resultant breaker opening time should reflect over relay display.
5.3	FAULT / EVENT / DISTURBANCE	5.3.1 T stampi	The relay should have Latching of fault current data up to last 5 faults with time ng.

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	RECORD OF		Latching of pick up current up to last five occurrence with time stamping.
	RELAY	status	The Relay should have actual waveform of current along with logical and physical are captured and saved in the built-in memory, with date time stamping for analyzing ondition.
5.4 MEASUREMENT AND COMMUNICATION FUNCTION		5.4.1	In normal condition the relay should give on display all the settings. Using the front keyboard the display can be programmed to show the actual current flowing through the relay.
		5.4.2	The type of the fault is to be displayed on LCD display. During the fault condition, the relay should measure the fault current and stores it in non-volatile memory. The fault current can be read using keyboard on LCD display.
		5.4.3	All settings shall possible to be done locally as well as remotely via communication port and saved in non-volatile memory.
		5.4.4	The relay communication should compatible with Modbus or IEC -60870-5-103/104 or MQTT protocol. For MQTT and IEC-104 separate Ethernet (minimum data transmission rate 10/100Mbps) port to be provided at the front side of the relay to report the data to SCADA through external modem.
		5.4.5	SPD is mandatory to use in communication port in all cases to avoid any damage to external automation device communicating with relay through communication port.
5.5	5.5 SELF- DIAGNOSTIC FUNCTION		The relay should keep continuously track on its internal hardware and the moment it detects any failure of component, a message is displayed on LCD display.
			This feature is required to get pre information to avoid mal operation & message to be communicated to connected server.
		5.5.3	In case of failure of internal hardware component, relay should use default setting and remains in protection mode. Watchdog contact to be provided.
5.6	DI/DO	5.6.1	Minimum 3 DI (Universal supply (i.e. DC/AC)), 4 DO (Other than tripping, Flag).
	REQUIREMENT	5.6.2	The relay should be provided with extra status input that can be connected to any contact to be monitor such position of isolator switch etc.
		5.6.3	DI /DO should be configurable through software and simple logic can be developed using functional blocks. The status of this hardware is to be transmitted to remote SCADA station.
		5.6.4	The status of DO contact should be operable with the help of CT current itself and without battery as well as without any auxiliary supply. DI: 3 No, Universal supply (i.e. DC/AC), DO: 4 no. Make and carry continuously: 5 A, Make and carry continuously: 30 A, for 2 second.
5.7 IMPULSE OUTPUT FOR		5.7.1	Low Energy tripping coil of the circuit breaker can be connected to the coil terminal marked as (COIL+ and –) at back terminal.
	THE TRIPPING COIL	5.7.2	The trip energy (12 - 24 V DC \pm 0.1 W/sec) is required to be provided by a capacitor in the protection relay. Length of the trip impulse shall be 30 to 40ms and pause between the individual pulses depends on the impedance of the tripping coil and the current level.

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		5.7.3	Pulsing should be continued until the Circuit Breaker operates and the fault current becomes zero.
5.8	Voltage indicator	5.8.1	Relay shall take power from internal battery supplied by bidder along with relay.
	lamps and phase comparators		Relay shall be equipped with minimum of 3.6V / 600mAH - Rechargeable battery
		5.8.3	The battery should be standard size such that should be available easily in local market.
		5.8.4	Battery should be located in the battery box on the Front Plate such that it can be easily replaced by removing the screws.
		5.8.5	Battery power shall be used only for relay setting, indication and internal clock purpose.
		5.8.6	Battery is not used for protection purposes such that its backup time & life shall be high.
		5.8.7	Battery life minimum 5 years and battery shall be rechargeable type.
5.9	SOFTWARE SUPPORT	5.9.1	Software and related drivers to be provided to down load, view and analyze the DR and FDR free of cost along with relay.
		5.9.2	Hence front end USB is required.
		5.9.3	In the software operator should be able to arrange setting in different files and maintain as per feeder or bay level. The setting file can be downloaded offline.
		5.9.4	USB port is required at front side for local testing and downloading relay data analysis.
		5.9.5	RS485 port is required at the back side of relay for permanent SCADA connectivity.
		5.9.6	Using RS485 port Fault data, Online Measurement, live event monitoring & Disturbance record analysis etc. can be downloaded.
		5.9.7 5.9.8	Lead to be provided with every relay free of cost for data downloading. No Software license fees to be charged for software updating after supply. Bidder should provide all software updates free of cost till the life of relay.
		5.9.9	Active power, reactive power, harmonic analysis should be possible through the software.
		5.9.10	Every kind of simulation like DI, DO and protection function should be easily done through the software.
		5.9.11	Provision for time synchronization need to be provided.
		5.9.12	Each DI/DO should be able to independently programmed through software.
		5.9.13	Number of user should not be restricted based on license requirement of the software.
5.10	RELAY BURDEN	The rel	ay burden should be : <2.5 VA. Relay should compatible with 5P10 CT.
1	1		· · · · · · · · · · · · · · · · · · ·

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	LED	I ED Ind	ligation abouted be	provided for E/E	Configurable	e) and O/C (Configurable) . One
5.11	LED INDICATIONS	LED should be for relay on, one for relay trouble shooting and 3 LED (Configurable) for DI.				
5.12	OUTPUT FOR FLAG RELAY	Impulse Output for Flag Indicator or Auxiliary Relay, 12 V - 24 VDC (Energy <= 0.03 J)				
5.13	RELAY AUX POWER SUPPLY	Relay Auxiliary power supply should support 12 V To 300 V external power supply AC and DC. So it should be universal in range.				
6.0	NAME PLATE & MARKING	The relay shall be provided with durable and legible nameplate sticker containing all parameters. The box of relay shall be provided with legible name plate sticker on box with minimum following information: Manufacturer name & address, Model No. PO number & date 'Property of TPCODL, Odisha' The relay ticker shall be provided with durable and legible nameplates containing all technical parameters. Manufacturer's Name/Logo Manufacturing year (YYYY)				
		Type/Model System Frequency				
7.0	TESTS	Auxiliary Supply voltage All the Routine and acceptance tests shall be carried out in accordance with the relevant IS/IEC standards. All routine/acceptance tests shall be witnessed by the purchaser/his authorized representative. All the components within the relay enclosure shall have to be tested for Routine/acceptance and Type tests as per the relevant standards. All Type tests as per latest IS / IEC shall have been carried out on relay as a whole as per relevant IS/IEC. Following tests shall be necessarily conducted on the equipment and its components. Note- In case of any conflict on any technical particular in the specification, the stricter requirement mentioned in the relevant standard shall be valid.				
7.1	TYPE TESTS					
		-				& type tested accordingly.
			ctromagnetic Co			
		Sno 1.	Standard High Frequency Disturbance Test	IEC 61000- 4-18	Relay Contact out DM	upply, CT inputs, Binary inputs, tputs: 2.5KV in CM and 1KV in ation: 1KV in CM.
		2.	Electrostatic Discharge Test- Direct Application	IEC 60255- 26 and IEEE C37.90.3	6KV, 8KV. : Contact dis 8KV.	charge on conductive surface: charge on coupling planes: 6KV, ge: 8KV, 15KV.
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	3.	Fast Transient Disturbance Test	IEC 60255- 26 and IEEE C37.90.1	: 2KV at Power supply, CT inputs, Binary inputs, Relay contact outputs in common mode and Differential mode. : Communication (CM): 2KV : Communication (DM): 0KV : Functional earth port (CM): 4KV
	4.	Surge Immunity Test	IEC 60255- 26 and IEC 61000-4-5	: At Power supply, CT inputs, Binary inputs (LL), Relay contact outputs: up to 2KV in between line to earth and Up to 1KV in between line to line. : Communication port: up to 1KV in between
	5.	Power Frequency Immunity Test	IEC60255- 26, IEC60255-1	line to earth : Class-A : Common mode: 300VAC : Differential mode: 150VAC : Duration: 30sec
	6.	Radiated Electromagneti c Field Disturbance Test	IEC 60255-1, IEEE C37 90.2 and IEC 61000-4-3	: Electromagnetic field strength: 10 V/m : Frequency range: 1– 2.7 GHz : Modulation AM: 80% @ 1 KHz : Electromagnetic field strength: 20 V/m : Frequency range: 80 - 1000 MHz : Modulation AM: 80% @ 1 KHz : Spot frequencies: 80,160,380,450,900,1850,2150 MHz : Modulation AM: 80% @ 1 KHz
	7.	Conducted Disturbance Induced By Radio Frequency Field	IEC60255- 26 and IEC 61000-4-6	: Power supply Level: 10 V : Frequency range: 0,15 to 80 MHz : Spot frequencies: 27,68 MHz : Modulation AM: 1 KHz, 80%
	8.	Power Frequency Magnetic Field Immunity Test	IEC61000- 4-8, IEC 60255-1 and IEC60255- 26	: Frequency: 50 Hz : Continuous: 5 m : Field Level: 30 A/m : Short time: 3 s : Field Level: 300 A/m
	9.	Power Supply Immunity Test	IEC60255- 11 & IEC60255- 26	: DC voltage dip: : Resi-Self Voltage: 0% for 10 to 1000 ms, 40% for 200 ms, 70% for 500 ms : AC voltage dip:

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				: Resi-Self Voltage: 0% for 0.5 to 25 cycles,
				40% for 10/12 cycles,
				70% for 25/30 cycles.
	10.	Conducted &	IEC60255-	: Conducted
		Radiated	26	At Auxiliary Power Supply Port as per,
		frequency		: IEC- 60255-26
		Emission Test		: CISPR 22 Class A
				At Communication Port as per,
				: CISPR 22 Class A
				Radiated
				IEC- 60255-26
				: CISPR 22
	Insula	ation Tests:		,
	11.	High Voltage Test	IEC60255- 27	: Power Supply, C.T., and Binary Input terminal: 2KV
				: Impulse output terminal: 0.5KV
	40		IE COOREE	: Communication Port: 0.5KV
	12.	Impulse Voltage Test	IEC60255- 27	: Test voltage: For All terminal 5KV (peak) 1.2 / 50us,
		voltage rest	21	For Comm. port 1KV (peak) 1.2 / 50us
				: Energy :0.5 J,
				: Polarity : + ve and – ve
				: Nos. of impulses : 3 positive and 3 negative impulse
	- 10		15000055	
	13.	Insulation Resistance	IEC60255- 27	: >500MΩ @ 500V DC
	Enviro	nmental tests:		
	14.	Cold test	IEC 60255-	Operational
			1, IEC	: Operational temperature: -10°C
			60068-2-1 Ab	: Maximum rate of change: 1°C/min
			Ab	: Duration of exposure: 16 hrs.
				Storage
				: Operational temperature: -20°C
				: Maximum rate of change: 1°C/min
				: Duration of exposure: 16 hrs.
				Operational
			IEC 60255-1,	: Operational temperature: +65°C
	15.	Dry heat test	IEC 60068-2-	: Maximum rate of change: 1°C/min
			2 Bb	: Duration of exposure: 16 hrs.
				Storage

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				: Storage temperature: +80°C
				: Maximum rate of change: 1°C/min
				: Duration of exposure: 16 hrs.
	16.	Damp heat test, steady	IEC 60255-1, IEC 60068-2-	: Temperature: +40°C : Humidity: 93%
		state	78	: Duration of exposure: 10 Days
	17.	Change of Temperature	IEC 60255-1, IEC 60068-2- 14 Nb	: Lower temperature: -10°C : Upper temperature: +55°C : Ramp rate: 1°C/min : Dwell time: 3 hrs. : Duration of exposure: 5 cycles
	18.	Damp heat test, cyclic	IEC 60255-1, IEC 60068-2- 30	: Lower temperature: 25°C : Humidity at lower temperature: 97% : Upper temperature: 40°C : Humidity at upper temperature: 93% : Duration of exposure: 6 days
	19.	Enclosure Protection Test	IEC 60255-1 : 2009, IEC 60259	: IP54 for Outdoor purpose
	CE co	mpliance		
	20.	Immunity	IEC-60255- 26	
	21.	Emissive Test	IEC- 60255- 26	
	22.	Low voltage directive	EN-50178	
	Mech	anical tests		
	23.	Vibration Endurance Test	IEC; 60255- 21-1 Class 1	: Frequency range: 10 to 150 Hz : 1g : Number of sweep cycles per axis: 20
	24.	Vibration Response Test	IEC; 60255- 21-1 Class 1	: 10 to 60 Hz : 0.035mm : 60Hz to 150Hz : 0.5g : 2 Sweep Cycle in each axis
	25.	Bump Test	IEC 60255- 21-2 Class 1	: Peak acceleration: 10 g : Pulse duration: 16 ms : 1000 pulse per direction
	26.	Shock Withstand Test	IEC 60255- 21-2 Class 1	: 15g , 11 ms : 3 Shocks in both direction

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		27.	Shock Response Test	IEC 60255- 21-2 Class 1	: 5 g , 11ms dur 3 shocks in bo	
		28.	Seismic Test	IEC 60255- 21-3 Class 1	X-axis, frequence Hz / 3,5 mm	cy range / displacement 1 – 9
					X-axis, frequence Hz / 1 g	cy range / acceleration 9 – 35
					Y-axis, frequence Hz / 3,5 mm	cy range / displacement 1 – 9
					Y-axis, frequence Hz / 1 g	cy range / acceleration 9 – 35
					Z-axis, frequence Hz / 1,5 mm	cy range / displacement 1 – 9
					Z-axis, frequence Hz / 0,5 g	cy range / acceleration 9 – 35
					Number of swee	eps per axis 2 sweep cycle
7.2	ROUTINE TESTS	Following	routine tests are	e to be done on	100% of the lot qu	uantity
			2. I 3. I	Visual Inspectio Electric strength Dimensional & \ Functional Test	or AC voltage tes	st
7.3	ACCEPTANCE	Following	test shall be cor	nducted at facto	ry acceptance of i	in presence of our inspectors.
	TESTS	SNo.	Test	Method		Requirement
		1	Insulation Resistance Test	IEC 60950-1	, IEC 60255-27	Withstand & value >100MOhm
		2	Electric Strength (2kV)	IEC 60950-1	, IEC 60255-27	Withstand without any damage/flash.
		3	Visual Checks	As per specs documents.	s and approved	Should meet requirements
		4	Functional Test	As per approand specification requirements		Should meet requirements
8.0	TYPE TEST CERTIFICATE	bid for the be condu standards during th	e tests as mention acted at CPRI/EI s of IS and IEC. T e period not exce	ned above as pe RDA or any oth ype tests shall heeding 5 years	er the correspondi ner International L nave been conduc from the date of c	ay of same model as offered in ng standards. All the tests shall aboratory as per the relevant ted in certified Test laboratories opening the bid. In the event of acceptable or any/all type tests

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		(including additional type tests, if any) not carried out, same shall be carried out without
		any cost implication to TPCODL, Odisha.
0.0	DDE DIODATOU	Bids without all type test reports shall stand disqualified.
9.0	PRE-DISPATCH INSPECTION	Equipment shall be subject to inspection by a duly authorized representative of the TPCODL, Odisha. 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 is liable to rejection. Supplier shall grant free access to the places of manufacture to TPCODL's representatives at all times when the work is in progress. Inspection by the TPCODL, Odisha or it's 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 TPCODL, Odisha. Following documents shall be sent along with material
		a) Routine Test reports b) MDCC issued by TPCODL, Odisha c) Invoice in duplicate d) Packing list
		e) Drawings
		f) Delivery Challen
		g) Installation and maintenance Manual soft copy h) Other Documents (as applicable)
40.0	luca a a a a a a a a a a a a a a a a a a	The masterial respired at TDOODL Odisha Otana will be inspected for according a suit shall
10.0	INSPECTION AFTER RECEIPT AT STORE	The material received at TPCODL, Odisha Store will be inspected for acceptance and shall be liable for rejection if found different from the reports of the pre-dispatch inspection. If any deviation or anomaly observed at this stage same need to be rectified by bidder at bidders own cost at earliest.
11.0	GUARANTEE	1. Bidder shall stand guarantee towards design, materials, workmanship & quality of process / manufacturing of items under this contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by the Purchaser up to a period of at least 48 months from the date of commissioning or 60 months from the date of last supplies made under the contract whichever is earlier, Bidder shall be liable to undertake to replace/rectify such defects at its own costs, within mutually agreed time frame, and to the entire satisfaction of 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.
		 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 equipment covered by this specification shall be prepared for rail/road transport (local equipment) and be packed in such a manner as to protect it from damage in transit. The packing should be in such manner that during storage of relay and its components should not be damaged. No single use plastic to be used in packing material. Packing should be done with environment friendly recyclable materials.

Initiator	Approver	

		TPCODL			
	TECHNICAL SPECIFICATION				
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13.0	TENDER SAMPLE	Bidders to submit one sample of relay at TPCODL, Odisha Protection Department for verification of all desired features. Bidders to provide all required support for this testing and only successful model of relay shall be qualified for further processing.			
14.0	TRAINING	The bidder shall arrange to provide the installation and operating training at TPCODL, Odisha offices as and when required for better installation and usage of the product.			
15.0	QUALITY CONTROL	The bidder shall submit with the offer, 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 after finishing, bought out items and fully assembled component and equipment including drives. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. The Purchaser's or its nominated representative engineer shall have free access to the manufacturer/sub-supplier's works to carry out inspections. To ensure proper functioning of relay the bidder shall provide onsite training of TPCODL, Odisha teams as and when required. To ensure quality of installations bidder shall provide supervision support during impartation.			
16.0	TESTING FACILITIES	Bidder shall have adequate in house testing facilities for carrying out all routine tests, acceptance tests and special test as per this document and accordance to relevant International / Indian standards as mentioned.			
17.0	MANUFACT- URING ACTIVITIES	 The successful bidder will have to submit (after placement of RC) technical compliance document and drawing of cable as per RC line items for getting approval before mass manufacturing. Manufacturing mass quantity to start only after getting CAT-A approved drawings 			
40.0	0	or as per intimation from TPCODL, Odisha.			
18.0	SPARES, ACCESSORIES	The communication cable to be provided as spare for data downloading from relay.			
19.0	DRAWINGS & DOCUMENTS	Following drawings and documents shall be prepared based on TPCODL, Odisha specifications and statutory requirements and shall be submitted with the bid: a) Completely filled in Technical compliance document for all clauses b) Any deviation sheet or No deviation c) General description of the equipment and all components including brochures. d) Experience List e) All set of Type test certificates & detailed reports			
		Drawings / documents to be submitted for approval after the award of the contract are as under:			
		 a) Completely filled in Technical compliance document for all clauses b) General Arrangement drawing c) Type test reports if any pending. 			
		All the documents & drawings shall be in English language.			
		After the receipt of the order, the successful bidder will be required to furnish all detailed drawings of components for TPCODL, Odisha approval.			
		Instruction Manuals: Bidder shall furnish softcopies and one hard copy manuals of Relay (In English language) covering erection and maintenance instructions and all relevant information and drawings pertaining to relay.			

Initiator	Approver	

TPCODL			
TECHNICAL SPECIFICATION			ON
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20.0	GENERAL TECHNICAL PARTICULARS	Bidder to submit compliance to all above clauses and sub-clauses and shall furnish all desired details as technical compliance document.				
21	SCHEDULE OF DEVIATIONS	(TO BE ENCLOSED WITH TECHNICAL BID) All deviations from this specification shall be set out by the Bidders, clause by Clause in this schedule. Unless specifically mentioned in this Schedule, the tender shall be deemed to confirm the purchaser's specifications: S.No. Clause No. Details of deviation with				
					justifications	
		We confirm that there are no deviations apart from those detailed above. Seal of the Company: Designation Signature				

Initiator	Approver	

	TPCODL			
	TECHNICAL SPECIFICATION			
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Annexure-1 Inspection & Quality Test Plan

Sr. No.	Test	Method	Requirement
1	Insulation Resistance Test	IEC 60950-1, IEC 60255-27	Withstand & value >100MOhm
2	Electric Strength (2kV)	IEC 60950-1, IEC 60255-27	Withstand without any damage/flash.
3	Visual Checks	As per specs and approved documents.	Should meet requirements
4	Functional Test	As per approved documents and specification requirements	Should meet requirements

TPCØDL	TP CENTRAL ODISHA DISTRIBUT	ION LIMITED
IPCODE	WORK INSTRUCTION /OPERATING	GUIDELINES
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1.0 ORGANIZATIONAL VALUES

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

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

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

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

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

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

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

2.0 ETHICS

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

The main objective of the Ethics Management Team is to:

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

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

3.0 CONTRACT PARAMETERS

3.1 Issue/Award of Contract

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

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

3.2 Contract Commencement Date

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

3.3 Contract Completion Date

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

3.4 Contract Period/Time

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

3.5 Contract Execution Completion Date

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

3.6 Contract Price /Value

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

3.7 Contract Document

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

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

3.8 Contract Language

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

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

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

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3.9 Reverse Auction

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

4.0 SCOPE OF WORK

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

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

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

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

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

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

5.0 PRICES/RATES/TAXES

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

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

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

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

5.1 Changes in Statutory Tax Structure

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

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

6.0 TERMS OF PAYMENT

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

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

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

6.1 Quantity Variation

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

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6.2 Full and Final Payment

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

7.0 MODE OF PAYMENT

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

8.0 SECURITY CUM PERFORMANCE DEPOSIT

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

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

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

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

(Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of the new SPBG to TPCODL. Alternatively, Associate may extend the validity of original SPBG only till the requisite period, i.e. Guarantee Period plus one month.

9.0 STATUTORY COMPLIANCE

9.1 Compliance to Various Acts

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

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9.2 SA 8000

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

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

9.3 Affirmative Action

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

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

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

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

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

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

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

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

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

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

10.0 QUALITY

10.1 Knowledge of Requirements

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

10.2 Material/Equipment/Works Quality

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

10.3 Adherence to Rules & Regulations

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

10.4 Specifications and Standards

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

Brand names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Associate shall not change the brand name and

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qualities of the bought out items without the prior written approval of the TPCODL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TPCODL. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

11.0 INSPECTION/PARTICIPATION

11.1 Right to Carry Out Inspection

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

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

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

11.2 Facilitating Inspection

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

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

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

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

The Associate and TPCODL shall jointly document all the observations, comments and action points after completion of inspection and it shall be binding on the Associate to provide

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compliance on all the points requiring compliance and furnish the compliance report to the designated authority of TPCODL for receiving clearance for dispatch of materials

11.3 Third Party Nomination

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

11.4 Waiver of Inspections

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

11.5 Incorrect Inspection Call

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

12.0 MDCC & DELIVERY OF MATERIALS

12.1 Material Dispatch Clearance Certificate

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

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

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

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

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

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

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

- i) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.
- ii) Take such actions as may be necessary to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

Timelines for inspection and MDCC is as below:

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

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

12.2 Right to Rejection on Receipt

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

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

12.3 Consignee

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

12.4 Submission of mandatory documents on Delivery

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

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

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12.5 Dispatch and Delivery Instructions

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

13.0 GUARANTEE

13.1 Guarantee of Performance

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

13.2 Guarantee Period

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

13.3 Failure in Guarantee Period (GP)

If the equipment and material supplied under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied within time frame specified in the SCC or elsewhere in the contract documents at associate's cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and

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intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied rendered under the contract, failed in Guarantee Period, TPCODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPCODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.

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

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

13.4 Cost of repairs on failure in GP

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

13.5 Guarantee period for Goods Outsourced

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

13.6 Latent Defect

Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects. Associates shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Company.

13.7 Support beyond the Guarantee Period

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

14.0 LIQUIDATED DAMAGES

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

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

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

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

14.1 LD Waiver Request

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

15.0 UNLAWFUL ACTIVITIES

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

16.0 CONFIDENTIALITY

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

16.1 Documents

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

16.2 Geographical Data

Maps, layouts and photographs of the unit/plant including its surrounding regions showing vital installation for national security of country or those of TPCODL shall not be published or

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disclosed to the third parties or taken out of the country without prior written approval of the TPCODL and upon execution of confidentiality agreements satisfactory to the TPCODL with such third parties prior to disclosure.

16.3 Associate's Processes

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

16.4 Exclusions

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

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

16.5 Violation

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

17.0 INTELLECTUAL PROPERTY RIGHTS

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

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

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18.0 INDEMNITY

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPCODL and its officers, directors, employees, affiliates, agents, successors and assigns against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any infringement of patent, trade mark, registered design, copy rights and/or industrial property rights by manufacture, sale or use of the equipment supplied by the Associate whether or not the TPCODL is held liable for by any court judgement. In this connection, the TPCODL shall pass on all claims made against him to the Associate for settlement.

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

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

19.0 LIABILITY & LIMITATIONS

19.1 Liability

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

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

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

19.2 Limitation of Liability

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

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20.0 FORCE MAJEURE

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

"Force Majeure" shall mean any event or circumstance or combination of events or circumstances referred below and their consequences that wholly or partly prevents or unavoidably delays any Party in the performance of its obligations under this Agreement, but only and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided even if the Affected Party had taken reasonable care:

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

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

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

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

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

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

21.0 SUSPENSION OF CONTRACT

21.1 Suspension for Convenience

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

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

 Immediately discontinue further supply of material/goods specified in the suspension notice for supply contracts

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- Immediately discontinue further service/work and supply of materials of those services/materials/work specified in the suspension notice for service /composite contract
- Promptly make every reasonable effort to obtain suspension, upon terms satisfactory to TPCODL, of all orders, outsourcing arrangements, and rental Contracts to the extent that they relate to performance of the portion of Work suspended by the notice.
- Protect and maintain the portion of the service/Work already completed, including the portion of the Work suspended hereunder, unless otherwise specifically stated in the notice.
- Continue delivering/carrying out the supply/service/work items as per contract conditions, which do not fall under purview of the suspension notice.

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

21.2 Suspension for Breach of Contract conditions.

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

21.3 Compensation in lieu of Suspension

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

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

22 TERMINATION OF CONTRACT

22.1 Termination for Default/Breach of Contract

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

- a. Withdrawal or intimation by the Associate of its intent to withdraw or surrender the execution / completion of the contracted work /PO or failure in ensuring adherence to any delivery schedules, in deviation of the contract/PO.
- b. Refusal or neglect on the part of the Associate to supply material/equipment of quantity or quality as specified by TPCODL and within the timeframe as specified in the contract document or refusal or neglect to execute the services/work in terms of the agreed standards of quantity or quality and/or within the timeframe specified in the contract/PO.

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- c. Failure in any respect to perform any portion of the Work contracted with promptness, diligence, or in accordance with the terms of the contract.
- d. Failure to furnish guarantees as specified and /or failure to comply with the terms thereof.
- e. Failure to furnish such relevant documents or information within the time specified which may be necessary for due execution / completion of the works and documentation.
- f. Liquidation, bankruptcy either voluntary or involuntary OR entering into any composition or compromise with its creditors, or Insolvency.
- g. In case any reasonable information has been received by TPCODL that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.
- h. Failure to comply with applicable statutory provisions as contained in the contract or failure to comply with the applicable laws.
- i. Failure to comply with safety regulations/clauses stipulated in the contract or as may be generally instructed by TPCODL.

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

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

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

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

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

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- d) It shall be open for TPCODL to conduct a joint assessment with the associate of the material, supplies, equipment ,works or in general as to the subject matter of the contract in regard to which the associate claims having completed its obligations before or during such termination.
- e) It shall be open to TPCODL to seek invocation of the performance bank guarantee or any other guarantee or other security deposit by whatever name called submitted by the associate, which shall not be objected to or protested against by the associate.

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

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

In the event of such termination, TPCODL may finish the Work by whatever method it may deem expedient, including the hiring of services and /or purchase of material equipment from such third parties as TPCODL may deem fit or may itself provide any labor or materials and perform any part of the Work. The associate undertakes to bear the incremental costs if any paid by TPCODL in such a case attributable to failure on the part of the associate. The Associate in such a case shall not be entitled to receive any further payments and any sums found payable to it may be adjusted by TPCODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPCODL under law against the associate.

Upon the termination of any of the contract due to occurrence of any circumstances provided in clauses stated above and constituting repeated breach or misconduct, TPCODL shall be entitled to bar the associates its agents, affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TPCODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPCODL.

22.2 Termination for Convenience of Associate

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

22.3 Termination for Convenience of TPCODL

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

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23.0 DISPUTE RESOLUTION & ARBITRATION

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

23.1 Governing Laws and Jurisdiction

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

24.0 ATTRIBUTES OF GCC

24.1 Cancellation

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

24.2 Severability

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

24.3 Order of Priority

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

25.0 ERRORS AND OMISSIONS

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

26.0 TRANSFER OF TITLES

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

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

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27.0 INSURANCE

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

- a) The value of the policy shall cover the total value of all the items till they are handed over to TPCODL.
- b) TPCODL shall be the principal holder of the policy. The Associate shall be the loss payee under the policy. Associate / Sub-contractor of the Associate shall not be holders or beneficiaries in the policy nor shall they be named in the policy. TPCODL reserves the exclusive right to assign the policy.
- c) While the payment of premium may be phased in agreement with the insurance company, at no time shall goods and services required to be provided by the associate shall remain uninsured in accordance with (a) above.
- d) A copy of the Insurance policy shall be made available to TPCODL prior to first dispatch lot of any Equipment and policy shall be kept alive and valid at all times up to the stage of final acceptance.
- e) TPCODL reserves the right to take out whatever policy that is deemed necessary by him if the associate fails to keep the said policy alive and valid at all times and/or causes lapses in payment of premium thereby jeopardizing the said policy. The cost of such policy(s) shall be recovered / deducted from the amount payable to the associate.
- f) The policy shall ensure that the TPCODL's decision regarding replacement of goods damaged, lost or rendered unusable shall be final.

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

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

28.0 SUGGESTIONS & FEEDBACK

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

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

- · Suggestions for us
- Feedback form
- Knowledge Sharing/ Experience with TPCODL

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• Any issues with TPCODL.

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

29.0 CONTACT POINTS

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

30.0 LIST OF ANNEXURES

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

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ANNEXURE-A

PROFORMA FOR BID SECURITY BANK GUARANTEE

The TP Central Odisha Distribution Limited Bhubaneswar

WF	HEREAS	, (Name	of the	Bidder)					
(he	reinafter	called	"the	BIDDER	") has	submitted	his bid	dated	for the
(Na	ame of C	contract)						_ (hereinafte	er called "the BID").
KN	OW Bank)					presents	we of	(Name (Name	of the of the
	Countr office a	• .					colled "	_ having ou	registered re bound unto The
TP						_(neremaner PCODL) in			ire bound unto The
					•	,			ds himself, his
suc	cessors	and ass	igns l	by these	presen	ts.			
SE	ALED w	ith the C	ommo	on Seal c	of the sa	aid Bank this	s	_ day of	20
The	e COND	ITIONS	of this	obligation	on are:			·	
i)	If the Bi of Bid o		hdraw	s his Bid	l during	the period o	of bid va	lidity specifie	ed in the Proforma
ii)	period o	of bid va	lidity 1	fails or re	efuses t		e Contra	ct Performan	FPCODL during the nce Bank
dei to i	mand, pı	rovided t	hat in	its dema	and the	TPCODL w	/ill note	that amount	ot of its first writter claimed by it is due ccurred condition or
ten Bic Ba	der enqu I or as e	uiry) day extended hereby	s afte by y waive	r the closou ou at an ed, and a	sing da y time	te of submis prior to this	sion of b date, n	oids as state otice of whi	ays as mentioned in d in the Invitation to ch extension to the reach the Bank not
DA	TE				SIG	NATURE O	F THE E	BANK	
WI	TNESS				SE	AL			
(Si	gnature.	Name &	Addr	ess) (At	least 2	witnesses)			

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

PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

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

	(On NS. 100/- Stamp Paper) Note.
a) b) c)	Format shall be followed in toto Claim period of one month must be kept up The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee
	The TP Central Odisha Distribution Limited Bhubaneswar
	CP cum EP BG No
	Order/Contract Nodated
•	You have entered into a Contract No with M/s
2	(hereinafter referred to as "the Vendor") for the supply cum erection / civil work of (hereinafter referred to as" the said Equipment") for the price and on the terms and conditions contained in the said contract. 2. In accordance with the terms of the said contract, "the Vendor" agreed to furnish you with an irrevocable, unconditional and acceptable bank guarantee for 10% of the value of contract and to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment performance". For this purpose you have agreed to accept the guarantee.
3	B. In consideration thereof, we, hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs only) being%

4. You shall have the right to file / make your claim on us under the guarantee for a **further period of one month** from the date of expiry.

non-fulfillment and "the Vendor" shall have no right to question such judgment.

Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such

percent) of the total value of the contract on receipt of your intimating that "the

5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by

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your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

- 6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
- 7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
- 8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Bhubaneswar branch and claim will also be payable at Bhubaneswar Branch (to be confirmed by Bhubaneswar Branch by a letter to that effect in case BG is from the branch outside Bhubaneswar).

9.	Notwithstanding anything	g herein contained,	our liability under this	guarantee is limited to
	Rs	(Rupees	<u>C</u>	
	only and the guarantee			
	shall be extended from t	ime to time for suc	h period or period as	may be desired by "the
	Vendor".			
10	. Unless a demand or cla			•
	months fromend date), we shall be di			
	end date), we shall be di	scriarged from all il	abilities under this gua	irantee thereafter.
Da	ted at	this	day of	20
	all			
	Alt.	Bank's rub	bber stamp	
1.	Banks full address			
			Do	signation of Signatory

Bank official number

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ANNEXURE-C

PROFORMA FOR "NO DEMAND CERTIFICATE" BY ASSOCIATE

(On Company's Letter head or with Company Seal)
(To be submitted by the Associate to TPCODL Accounts Department at the time of receipt of full and final payment)

(Certificate No. CCP/002)

Name of the Project Order/	
Contract No.	167
Dated	
Name of the Associate Scheme	60,
No. / Job No.	7,0
We, M/sacknowledge and confirm that we have received the to us from TPCODL, in respect of our afordated including amendments, if any satisfaction and we further confirm that we have no clunder the said contract / W.O. Notwithstanding any protest recorded by us in	oresaid Order No, issued by TPCODL to our entire aim whatsoever pending with TPCODL
measurement books and / or final bills etc., we wait protest in future under this contract.	•
We are issuing this "NO DEMAND CERTIFICATE" in and with our free consent without any undue influence	
Place	Name
	(Company Seal)

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ANNEXURE-D

$\frac{\text{PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS}}{\text{CERTIFICATE}}$

To be printed on the letterhead

To so printed on the localitical
To,
The TP Central Odisha Distribution Limited,
Bhubaneswar
Sub: Application for issuance of Consolidated TDS Certificate for the FY
Dear Sir,
I / we hereby request / authorize you to issue me / us a consolidate TDS Certificate for the financial year against tax deducted at source by you from my / our payments / bills during the said year from time to time under Chapter XVII – B of the Income Tax Act, 1961. For and on behalf of
Signature
Name
Address
Contact No. (Land Line)
(Mobile)
PAN #
Assessing authority

ATTACH THE COPY OF PAN CARD

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ANNEXURE-E

BUSINESS ASSOCIATE FEEDBACK FORM

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

You are associated with us as			
☐ OEMs ☐ Service Contractor ☐ Material Service	uppliers	☐ Material & Manpower	Supplier
		,0,5	
You are associated with us for			
☐ Less than 1 year ☐ More than 1 year but le	ess than (3 years \square More than 3 y	ears
Your office is located at	<		
☐ Bhubaneswar ☐ Within 200 kms from Bhub	oaneswa	r □ More than 200 Bhubaneswar	kms from
Your nearly turnover with TPCODL	7		
☐ Less than 25 Lacs ☐ 25 Lacs to 1 Crore	,	☐ More than 1 Cr.	
Additional Information			
Your Name			
Your Designation			
Your Organization			
Contact Nos.			
Email			

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

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SECTION - A

(Please $\sqrt{}$ mark in the relevant box and give your remarks / suggestions / information for our improvement).

	vernent).						
		1	2	3	4	5	
S. No.	Parameters	Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	Remarks/ Suggestion
1	You receive all relevant queries / tenders from us in timely manner.						
2	We provide you enough lead time to respond to our queries / tenders.						
3	We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements.					57	þ.
4	All following elements of our contract / purchase order are rational:						
4.1	Scope of Work						
4.2	Delivery / Execution Schedule						
4.3	Payment Terms						
4.4	Liquidated Damages						
4.5	Performance Guarantee						
5	Our purchase orders / contracts are simple, specific & easy to understand						
6	TPCODL demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
8	TPCODL representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	TPCODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						
10	TPCODL Engineer-in-Charge timely certifies the jobs executed/ material supplied						
11	TPCODL Engineer-in-Charge efficiently supervises the job execution for timely completion of job						
12	BIRD (Bill Inward Receipt Desk) initiative has improved payment disbursement process						

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		1	2	3	4	5	
S. No.	Parameters	Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	Remarks/ Suggestion
13	Our approach for Inspection and Quality Assurance effective to expedite project completion?						
14	TPCODL never defaults on contractual terms						ζΟ`
15	In TPCODL Contracts closure is done within set time limit						25
16	Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience					N	
17	Bank Guarantees are released in time bound manner					<u>)</u> ,	
18	Our processes related to payment / account settlement are effective.						
19	You get payments on time						
20	TPCODL Employees follow Ethical behaviour		C				
	SENERAL						

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SECTION - B

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

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
1	How do you rate courtesy/ empathy/ attitude level and warmth of TPCODL employees you interact with from following team?						
1.1	Project Engineering						
1.2	District / Zones						. ()
1.3	Projects/HOG (TS &P)						
1.4	Inspection & Quality Assurance						
1.5	Stores						
1.6	Metering & Billing				Ų.		
1.7	Accounts / Finance						
1.8	Administration						
1.9	IT & Automation	,(
2	How would you rate TPCODL in comparison to your other clients in terms of fairness of treatment and transparency with its Business Associates?	26					
3	How would you rate TPCODL in comparison to your other clients in terms of processes and systems to manage partnership with its Business Associates						
4	How would you rate TPCODL in comparison to your other clients in terms of building long term & mutually relations hip with its Business Associates						

SECTION - C

Please $\sqrt{}$ mark in the relevant box and give your remarks / suggestions / information for our improvement.

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

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

SECTION - D

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

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

SECTION - E

Please $\sqrt{}$ mark in the relevant box and give your remarks / suggestions / information for our improvement.

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

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

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

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5	Inspection & quality assurance support for
3	timely job completion

We thank you for your time and courtesy!!

ANNEXURE-F

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

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

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

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

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

Signature & Seal of the Bidder

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ANNEXURE-G

То,		
DGM (Finance) The TP Central Odisha Distribution Limi Bhubaneswar	ted	d
Sub: e-Payments through National I Gross Settlement System (RTG		ectronic Fund Transfer (NEFT) OR Real Time
Dear Sir,		
We request and authorize you to affect as per the details given below:-	э-ра	payment through NEFT/RTGS to our Bank Account
Vendor Code	:	
Title of Account in the Bank	:	
Account Type	:	
		(Please mention here whether account is Savings/Current/Cash Credit)
Bank Account Number	:	
Name & Address of Bank	•	
Bank Contact Person's Names	:	
Bank Tele Numbers with STD Code	:	
Bank Branch MICR Code	:	
	L	(Please enclose a Xerox a copy of a cheque.
		This cheque should not be a payable at par cheque)
		cheque)
Bank Branch IFSC Code	:	
	L	(You can obtain this from branch where you
		have your account)
Email Address of accounts person: (to send payment information)	:	

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Name of the Authorized Signatory:	
-----------------------------------	--

Contact Person's Name:

Official Correspondence Address:

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

For
(Authorised Signatory)
(Signature with Rubber Stamp)

Thanking you,

Certification from Bank:

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

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

(Manager's/ Officers Signature under Bank Stamp)

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ANNEXURE-H VENDOR APPRAISAL FORM

VF	NDOR:		
1.0		AILS OF THE FIRM	
1.0	1.1		
		NAME (IN CAPITAL LETTERS) TYPE OF CONCERN (PROPRIETARY)	
	1.2	Partnership, Pvt. Ltd., Public Ltd. etc.	: ()
	1.3	YEAR OF ESTABLISHMENT	: 5
	1.4	LOCATION OF OFFICE POSTAL ADDRESS TELEGRAPHIC ADDRESSES, TELEX NO. FAX NO.	ZIK.
	1.5	LOCATION OF MANUFACTURING UNITS	:
		i) UNITS 1	:
		ii) OTHER UNITS	:
2.0	PROD	DUCTS MANUFACTURED	:
3.0	VERI	IOVER DURING THE LAST 3 YEARS (TO BE FIED WITH THE LATEST PROFIT & LOSS EMENT).	:
4.0		IE OF FIXED ASSETS	:
5.0	NAMI	& ADDRESS OF THE BANKERS	:
6.0	BANK	GUARANTEE LIMIT	:
7.0	CREE	DIT LIMIT	:
8.0	TECH	INICAL	
	8.1	NO. OF DESIGN ENGINEERS (INDICATE NO. OF YEARS EXPERIENCE IN RELATED FIELDS)	:
	8.2	NO. OF DRAUGHTS MEN	:
	8.3	COLLABORATION DETAILS (IF ANY)	:
O		8.3.1 DATE OF COLLABORATION	:
		8.3.2 NAME OF COLLABORATOR	:
		8.3.3 RBI APPROVAL DETAILS	:
		8.3.4 EXPERIENCE LIST OF COLLABORATOR	:
		8.3.5 DURATION OF AGREEMENT	:
	1	AVAILABILITY OF STANDARDS / DESIGN	

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	1		
		DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT	
	8.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	:
	8.6	QUALITY OF DRAWINGS	:
9.0	MAN	UFACTURE	
	9.1	SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC.	: (
	9.2	POWER (KVA)	
		MAINS INSTALLED	
		UTILIZED	7:
		STANDBY POWER SOURCE	:
	9.3	MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENT AS APPLICABLE)	:
		9.3.1 MATERIAL HANDLING	:
		9.3.2 MACHINING	:
		9.3.3 FABRICATION	:
		9.3.4 HEAT TREATMENT	:
		9.3.5 BALANCING FACILITY	:
		9.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC.	:
	9.4	SUPERVISORY STAFF	:
	9.5	ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.)	:
	9.6	NO. OF SHIFTS	:
	9.7	TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.)	
	9.8	WORKMANSHIP	:
O	9.9	MATERIAL IN STOCK AND VALUE	:
	9.10	TRANSPORT FACILITIES	:
	9.11	CARE IN HANDLING	:
10.0	INSPI	ECTION / QC / QA / TESTING	
	10.1	NUMBER OF PERSONNEL (INDICATE NO. OF YEARS OF EXPERIENCE)	:
	10.2	INDEPENDENCE FROM PRODUCTION	:

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		AVAILABILITY OF BROOFBURN WRITE	
	10.3	AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN	:
	10.4	INCOMING MATERIAL CONTROL AND DOCUMENTATION	:
	10.5	RELIABILITY/REPUTATION OF SUPPLY SOURCES	:
	10.6	STAGE INSPECTION AND DOCUMENTATION	:
	10.7	SUB-ASSEMBLY & DOCUMENTATION	:
	10.8	FINAL INSPECTION AND DOCUMENTATION	:
	10.9	PREPARATION OF FINAL DOCUMENTATION PACKAGE	: (0)
	10.10	TYPE TEST FACILITIES	:05
	10.11	ACCEPTANCE TEST FACILITIES	
	10.12	CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST)	
	10.13	STATUTORY APPROVALS LIKE BIS, IBR, ETC.(AS APPLICABLE)	:
	10.14	SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL	:
	10.15	DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNIZED LABORATORIES	:
		i) FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED	:
		ii) CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	:
11.0	/ CO	RIENCE (INCLUDING CONSTRUCTION / ERECTION MMISSIONING) TO BE FURNISHED IN THE FORMAT CATED IN APPENDIX)	:
12.0	SALE	S, SERVICE AND SITE ORGANIZATIONAL DETAILS	:
13.0		TIFICATE FROM CUSTOMERS (ATTACH COPIES OF UMENTS)	:
14.0	POW	ER SITUATION	:
15.0	LABO	OUR SITUATION	:
16.0 *		ICABILITY OF SC/ST RELAXATION (Y/N) S, SUPPORTING DOCUMENTS TO BE ATTACHED	
	ORG	ANIZATIONAL DETAILS PENO	
17.0	2. E 3. I 4. E 5. I 6. S	ESI NO NSURANCE FOR WORK MAN COMPENSATION ACT NO ELECTRICAL CONTRACT LIC NO TCC / PAN NO SALES TAX NO NC TAX REG. NO	:
18.0		JMENTS TO BE ENCLOSED:	
10.0	5000	JIILITIO IO DE LITOLOGED.	

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1. FACTORY LICENSE	
2. ANNUAL REPORT FOR LAST THR	EE YEARS
3. TYPE TEST REPORT FOR THE ITE	EM
4. PAST EXPERIENCE REPORTS	
5. ISO CERTIFICATE –QMS, EMS, OF	IAS, SA
6. REGISTRATION OF SALES TAX	
7. COPY OF TIN NO.	
8. COPY OF SERVICE TAX NO.	
9. REGISTRATION OF CENTRAL EXC	CISE
10. COPY OF INCOME TAX CLEARAN	CE.
11. COPY OF PF REGISTRATION	
12. COPY OF ESI REGISTRATION	
13. COPY OF INSURANCE FOR WORK	(MAN
COMPENSATION ACT NO	
14. COPY OF ELECTRICAL CONTRAC	T LIC NO
15. COPY OF PAN NO	
16. COPY OF WC TAX REGISTRATION	
17. DOCUMENTS IN SUPPORT OF SC	/ST RELAXATION
AT S.NO.16.0	
18. GSTN CERTIFICATE	

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

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

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

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ANNEXURE-I MANUFACTURER AUTHORIZATION FORM

(To be submitted on OEM's Letter Head)

Date:		
Tender Enquiry No.:		
То,		
•		
Chief (Procurement & Stor	·	
The TP Central Odisha Dis Bhubaneswar	stribution Limited,	2 P
Sir,		
factories at [address of Ol	of OEM], who are official manufactur EM] do hereby authorize M/s [<u>name of lange of lange)</u> or Bids indicated above, the purpose of tured by us	<pre>bidder] to submit a Bid in f which is to provide the</pre>
to subsequently negotiate	and sign the Contract.	and
Conditions of Contract or	full guarantee and warranty in accor as mentioned elsewhere in the Tender e above firm in reply to this Invitation fo	Document, with respect
services as per the Tende standard warranty on the r inclusion / exclusion of pa	in case, the channel partner fails to er Document referred above, M/s <i>[nam</i> materials supplied against the contract. rts in the warranty shall remain same a rtner against this tender enquiry.	ne of OEM] shall provide The warranty period and
Yours Sincerely,		
For		
Authorized Signatory		